

V 274944

REALIST METHODOLOGY AND THE ARTICULATION OF MODES OF
PRODUCTION: AN ANALYSIS OF PALESTINIAN PEASANT HOUSEHOLD
PRODUCTION IN THE NORTH JORDAN VALLEY OF THE OCCUPIED
WEST BANK/THE CENTRAL HIGHLANDS OF PALESTINE

BY

ALEX POLLOCK

THESIS IN SUPPORT OF AN APPLICATION FOR THE DEGREE OF:
DOCTOR OF PHILOSOPHY
UNIVERSITY OF STRATHCLYDE
SOCIOLOGY UNIT

JULY 1987

**PAGE
NUMBERING
AS
ORIGINAL**

ABSTRACT

This thesis outlines the main features of empiricist and positivist epistemology and looks at the critique of this position developed by conventionalist philosophers of science. It then attempts to present the basis of an alternative realist epistemology. This realist alternative is then used as a means of laying down a set of methodological protocols for reinterpreting the anti-empiricist debate in development theory over "the articulation of modes of production". This debate was concerned with producing an alternative paradigm to explain the causes of poverty and underdevelopment in such a way that the internal determinations of poverty in nation-states would be part of the explanatory structure, rather than treating poverty and underdevelopment as a phenomenon which was essentially generated through relationships of exploitation between the countries of the "developed" and Third World. Having outlined the basic concepts of this debate in a manner which is compatible with the research protocols of methodological realism, the concepts - social formation, modes of production and articulation - are applied to the concrete context of peasant relations of production in the north Jordan Valley of the Occupied West Bank/the Central Highlands of Palestine. The last section considers some of the major strategic models designed to resolve the problem of Third World poverty and underdevelopment, viz. Community Development, the Green Revolution and Basic Needs. Finally, a radical democratic approach to development intervention is suggested as a

background to development action in the context of settler-
colonialism and military occupation.

TABLE OF CONTENTS

Preface	1
1. An Outline of Empiricism and Positivism, the Conventionalist Critique and a Realist Alternative	7
2. Methodology, Subject, Theory and Methods	69
3. Modes of Production, Agrarian Social Classes and Landholding	124
4. Merchant Capital and the Subordination of Non-Capitalist Forms of Production	197
5. Household Subsistence Production and, Labour Organisation and Labour Supply in the Commodity Producing Sector	248
6. The Pattern of Crop Production, Exports and Irrigation Use	311
7. Squatting, Housing and the Ownership of Consumer Durables	354
8. Illiteracy in the West Bank with Special Reference to the North Jordan Valley Peasantry and Some Aspects of Functional Literacy and Freirian Literacy Strategies	399
9. Some Aspects of Selected Strategies for Rural Development and an Outline of a Socialist Alternative	436
Conclusions	470

APPENDICES

1. Computer Code Book	476
2. Arabic Questionnaire	499
3. Tables on Crop Production, Exports and Irrigation	529
4. Water Sources and Water Resources	542
Bibliography	560

LIST OF MAPS, DIAGRAMS AND TABLES

MAPS

1. Israel and the Occupied Territories	viii
2. The West Bank	ix
3. The Villages Studied and the Surrounding Area	x

DIAGRAMS

1. Empiricist Ladder of Abstraction	19
2. Shift of Aspect Phenomena	37

TABLES

1. Dunumage of Crop Production and Agrarian Class	75
2. Forms of Landholding by Agrarian Class (in Dunums)	76
3. Village by Agrarian Class	77
4. Village Adult Population by Sex	78

5. Imports and Exports Between the West Bank and Israel	97
6. Type of Contract Sharecropper has with Landlord	135
7. Period of Share Lease	136
8. Cumulative Period of Share Lease	137
9. Services Provided by Landlord as Part of the Contract	138
10. Services Provided by Sharecropper as Part of the Contract	140
11. Juridical Ownership of the Means of Production (Sharecropping)	141
12. Economic Ownership of the Means of Production (Sharecropping)	144
13. Percentage of Net Yield Paid by Sharecropper as Rent	146
14. Period of Cash Tenants Leasehold	154
15. Cumulative Period of Cash Tenants Leasehold	155
16. Does Landlord Provide Water?	155
17. Does Landlord Provide Water Pump?	156
18. Juridical Ownership of the Means of Production (Cash Tenancy)	157
19. Type of Landlord by Number of Tenancies and Number of Tenants	166
20. Landlords of Sharecroppers	168
21. Landlord Families by Number of Sharecroppers	169
22. Sharecroppers Landlords Place of Residence	170
23. Does Your Landlord Farm?	171
24. Name of Cash Tenants Landlord by Number of Tenants	173
25. Location of Cash Tenants Landlord	174
26. Farming Status of Cash Tenant's Landlord	174
27. Village by Landholding Form	177

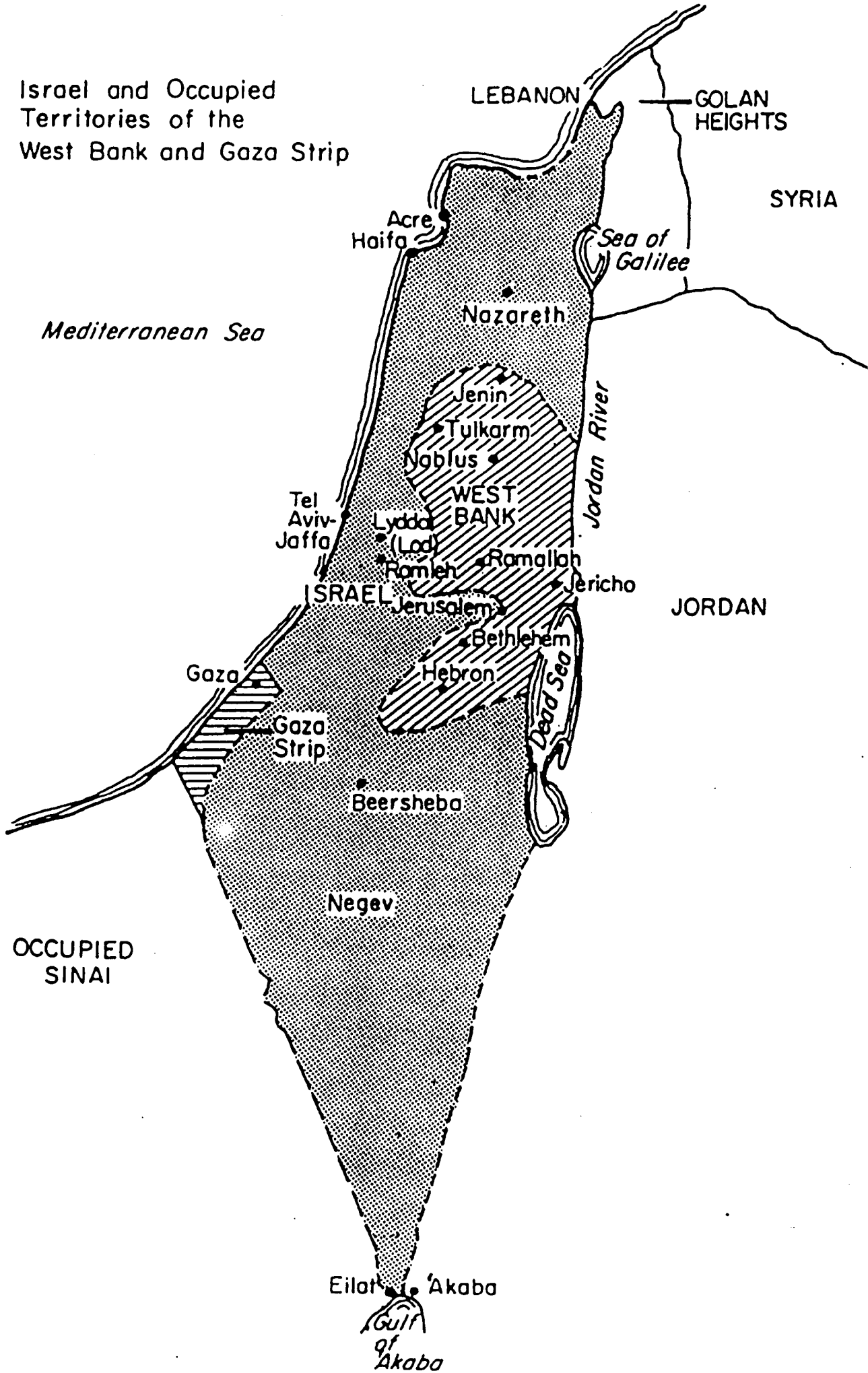
28. Forms of Landholding by Agrarian Class	181
29. Forms of Landholding by Dunumage	183
30. Forms of Landholding (under 50 dunums) by Dunumage	184
31. Landholding by Parcelization	188
32. Landholding Category by Number of Parcels	189
33. Source of Certificates of Origin by Agrarian Class	214
34. Problems of Marketing in Jordan by Agrarian Class	217
35. Do You Pay Double Commission When You Market Your Crop in Jordan by Agrarian Class?	218
36. Do You Sell Through a Commission Agent by Agrarian Class?	220
37. Name of Commission Agent by Agrarian Class	221
38. Percentage of Cash Sale Paid to Commission Agent by Agrarian Class	222
39. Do You Purchase Insecticides and Pesticides From Commission Agent by Agrarian Class?	226
40. Do You Purchase Seeds/Seedlings From Commission Agent by Agrarian Class?	226
41. Do You Get Loans From Commission Agent by Agrarian Class?	227
42. Crops Produced Mainly For Household Consumption by Agrarian Class	256
43. Origins of Foods Consumed Daily - 'Ain al Beda	257
44. Origins of Food Consumed 2-4 Times a Week - 'Ain al Beda	259
45. Seasonal Work Cycle	283
46. Agricultural Work Population	289

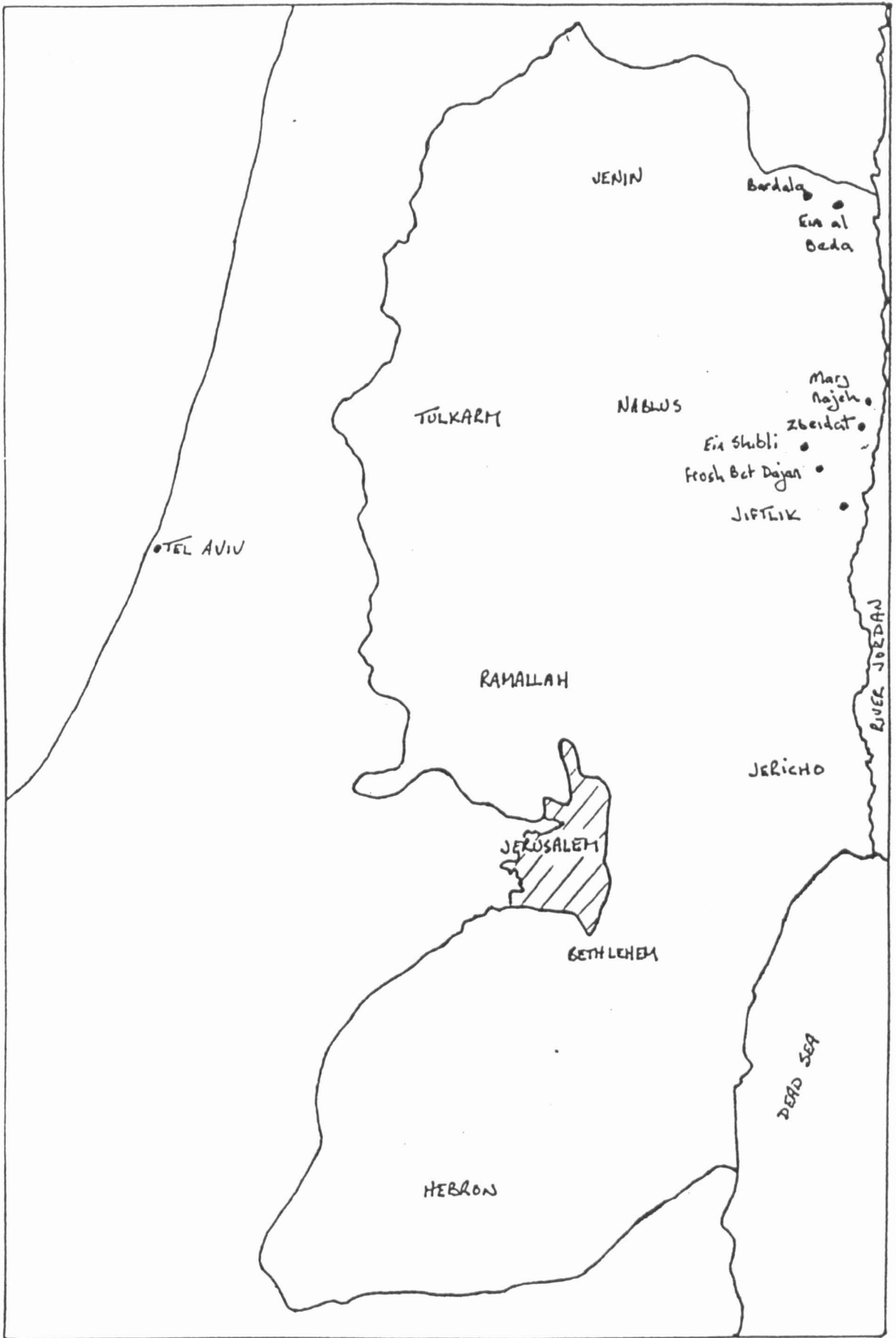
47. Full-Time Family Workers by Sex and Agrarian Class	294
48. Part-Time Family Workers by Sex and Agrarian Class	298
49. Full-Time Day Labourers by Sex and Agrarian Class	299
50. Part-Time Day Labourers by Sex and Agrarian Class	299
51. Period of Employment of Seasonal Workers by Agrarian Class	301
52. Residence of Day Labourers by Agrarian Class	302
53. Methods of Labour Recruitment by Agrarian Class	302
54. Total Regional Dunumage of types of Crops by Agrarian Class	312
55. Dunumage of Different Vegetable Crops by Agrarian Class	316
56. Dunumage of Fruit by Agrarian Class	318
57. Dunumage of Field Crops by Agrarian Class	320
58. Dunumage Double Cropped by Agrarian Class	321
59. Number of Farmers Double Cropping by Agrarian Class	322
60. Number of Dunums of Tomato by Agrarian Class	324
61. Number of Dunums of Eggplant by Agrarian Class	326
62. Number of Dunums of Courgette by Agrarian Class	327
63. Number of Dunums of Cucumber by Agrarian Class	328
64. Number of Dunums of Broad Bean by Agrarian Class	330
65. Number of Dunums of Sweet Corn by Agrarian Class	330
66. Number of Dunums of Hot Pepper by Agrarian Class	331
67. Number of Dunums of Bean by Agrarian Class	332
68. Number of Dunums of Melon by Agrarian Class	332
69. Number of Dunums of Jews Mallow by Agrarian Class	334
70. Number of Dunums of Sweet Pepper by Agrarian Class	334
71. Number of Dunums of Potato by Agrarian Class	335

72. Number of Dunums of Onion by Agrarian Class	336
73. Number of Dunums of Garlic by Agrarian Class	336
74. Number of Dunums of Other Vegetables by Agrarian Class	336
75. Number of Dunums of Corn by Agrarian Class	340
76. Number of Dunums of Wheat by Agrarian Class	341
77. Number of Dunums of Barley by Agrarian Class	342
78. Number of Dunums of Other Field Crops by Agrarian Class	343
79. Percentage of Tomatoes Exported by Agrarian Class	344
80. Percentage of Eggplants Exported by Agrarian Class	346
81. Number of Months Residence on Farm Per Year by Agrarian Class	358
82. Alternative Residence by Village	361
83. Housing Tenancy Status by Village	367
84. Number of Rooms by Accommodation	369
85. Number of Rooms by Tenancy Status	371
86. House/Shelter Construction by Village	373
87. Form of Kitchen by Village	375
88. Form of Kitchen by Housing Tenancy Status	375
89. Latrine Facility by Village	380
90. Latrine Facility by Housing Tenancy Status	380
91. Source of Drinking Water by Village	381
92. Electricity Source by Village	384
93. Ownership of Consumer Durables by Village	387
94. Illiteracy Rates of the West Bank Adult Population (14+)	404

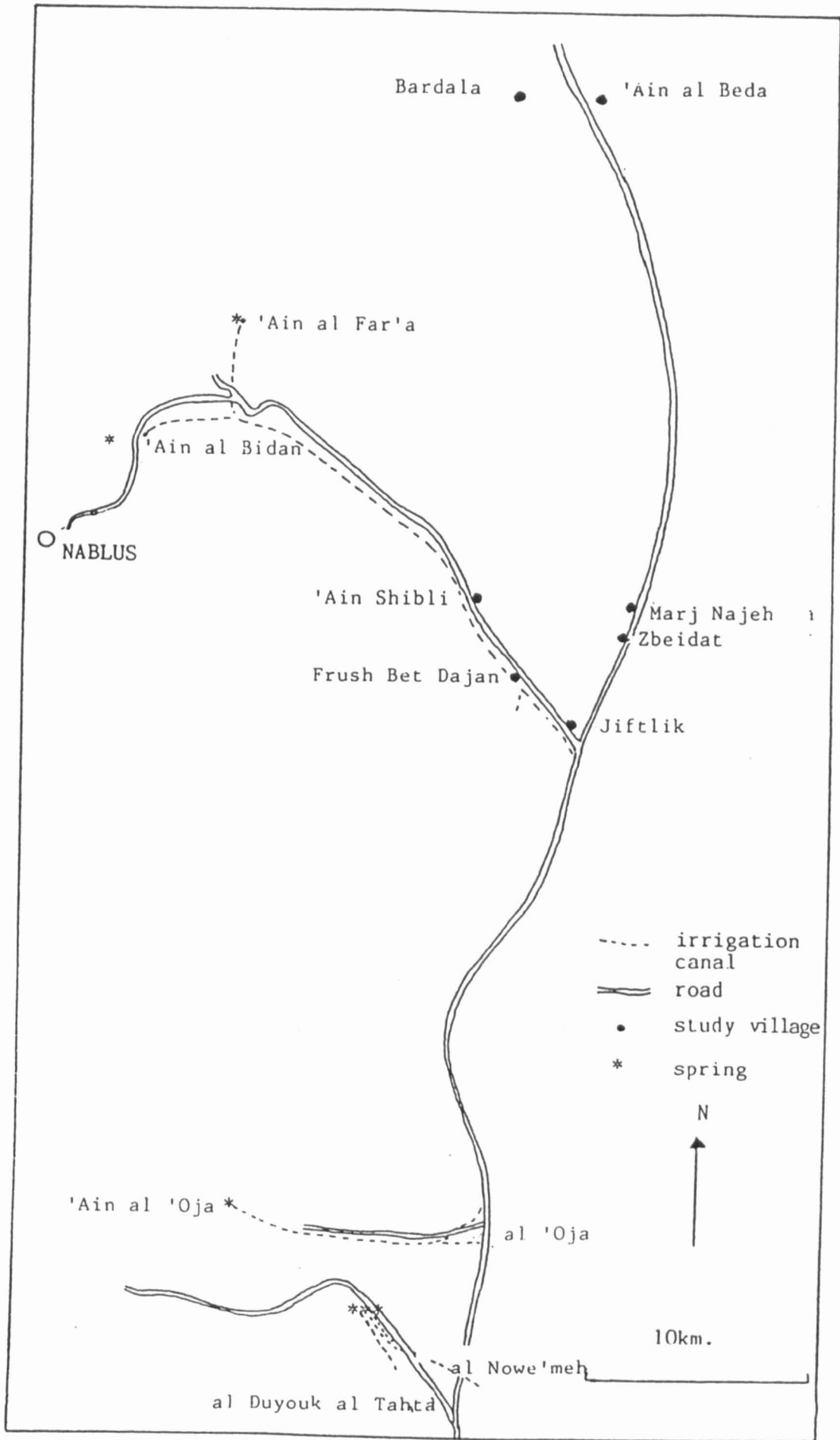
95. Subjective Literacy by Sex	408
96. Subjective Literacy by Village	409
97. Objective Literacy by Sex	410
98. Place of Learning to Read and Write Outside School by Sex	412
99. Objective Literacy by Village	413

Israel and Occupied
Territories of the
West Bank and Gaza Strip





THE WEST BANK



THE VILLAGES STUDIED AND THE SURROUNDING AREA

PREFACE

This thesis largely has its roots in three contingent academic and political interests which influenced my life and future research orientation as a student of sociology. These were: first, a perplexed interest in the traditional philosophies of science and social science and a constantly increasing doubt about their ability to explain or even comprehend the real problems of scientific practice; second, an equally perplexed concern as a communist "militant" with the problems of Marxist theory, methods and explanations of social change in contemporary societies and; third, a Third Worldist political commitment to "solidarity" with the anti-imperialist and anti-colonialist struggles of the peoples of the underdeveloped southern continents. These seemingly disparate concerns have finally been drawn together into a theoretically articulated and descriptive discourse which attempts to develop the methodological protocols for analysing one contemporary Third World peasant community (in the north Jordan Valley of the Occupied West Bank of Jordan/the Central Highlands of Palestine) and its location in the wider social formation by means of the categories and concepts of a branch of academic Marxism.

The first chapter presents an outline and critique of empiricist epistemology, ontology, causality and methodology in an endeavour to demonstrate that it cannot sustain an adequate and non-contradictory account of science nor propose a relevant methodological foundation for scientific research.

I then propose the basic parameters of a realist alternative to the empiricist account of science which operates with a different set of epistemological, ontological, causal and methodological assumptions from those developed by both empiricism and positivism. Where empiricist epistemology is based on a simple concept of experience, viz. immediate sense-perception, realism develops a concept of experience which is theoretically and experimentally mediated; where empiricism presents a simple atomistic ontology based on the concept of the empirical, realism presents a theory of ontology which is stratified into the realms of the real, the actual and the empirical; where empiricism presents a theory of causality based on closed systems and regularity determinism, realism grounds the account of causality on the basis of open systems and the causal interplay of multiple generative mechanisms; where empiricism and positivism develop inductive and deductive methodologies, realism develops a set of retroductive methodological protocols which are at once theoretically and empirically grounded.

In Chapter 2 I undertake to reinterpret the concepts which evolved from "the articulation of modes of production debate" within the context of realist methodological protocols. In order to achieve this, I describe and criticise the major sources of the debate: the Indian mode of production debate; the Althusserian school's rationalist/formalist reading of Marx and; the Laclau-Frank debate. The key concepts of the debate are "social formation", "modes of production" and "articulation". I argue that the concept of mode of

production should be interpreted in a restricted sense and that we should consider the social formation as composed of a multiplicity of causal structures and their interaction. I also eschew any attempt to develop a globally structuralist model of modes of production where the contours of the social formation are seen as being largely determined by one law of motion or one motor force in the system.

Chapter 3 demonstrates that the prevalent mode of production in the region of the study is sharecropping which is largely involved in petty commodity production, although other forms of non-exploitative modes of petty commodity production (smallholding and farming-landlordism) coexist alongside this mode of production. In this chapter I outline the different modes of production in terms of their specific forms of exploitation and juridical and economic ownership of the means of production. I also look at the forms and extent of landlordism in the region and the different patterns of landholding.

In Chapter 4 I demonstrate that all forms of production are articulated to the national and international economy through their formal subsumption to merchant/usurer capital. This chapter also presents the position that exploitation through unequal exchange is the form of exploitation most systematically developed in the regional economy, i.e. exploitation of peasant producers is most intensive in the spheres of the realisation of value/surplus product and the circulation of commodities. In Chapter 5 I explain how

household subsistence production can operate as a means of increasing the level of exploitation in the different non-capitalist modes of production through reducing the "costs" of the reproduction of labour in the petty commodity production sector of the family farm. Chapters 2-5 are the most important chapters in terms of my attempt to reinterpret the debate over the articulation of modes of production within the parameters of a realist methodological orientation.

Chapter 6 is a largely descriptive account of the patterns of crop production, exports and irrigation use. This chapter is included since the empirical data contains much of the information necessary to sustain the hypotheses I pose about vegetable crop specialisation, export market dependency and commoditisation of productive consumption in the peasant economy under the impact of the "Green Revolution".

Chapter 7 highlights the conditions of poverty and relative deprivation among the different village communities in the region by focusing on the problem of squatting and the housing question. This chapter shows that the living conditions of the region's peasantry are generally squalid and overcrowded. The comparative level of regional poverty and social deprivation is more marked than in the West Bank as a whole.

Chapter 8 refers to one very specific development issue: the problem of illiteracy. This chapter explores the

methodologically empirical possibilities of reconstructing official statistics to measure the extent of illiteracy in the West Bank. It also examines the problem and extent of illiteracy in the north Jordan Valley. The final section considers two different strategic approaches to the eradication of illiteracy: functional literacy and Freirian literacy campaigns. This chapter explores some of the problems of such campaigns and the potential for conducting such strategies in the West Bank.

Finally, Chapter 9 attempts to move beyond the explanations of poverty and underdevelopment generated from my realist reinterpretation of the articulation of modes of production debate to make some concrete suggestions about the form a non-statist socialist development strategy could adopt under the context of settler-colonialism and military occupation. In order to approach this issue I look first at the political and economic limitations of development strategies which have been pursued by international agencies and NGO's in Third World countries, viz. community development, the Green Revolution and Basic Needs or Basic Human Needs.

In undertaking this project I have incurred a wealth of intellectual, material and personal debt. While it is not possible to mention all those who have influenced me, I would like to thank Graeme Hyslop, Jim Taylor, Jim McGoldrick, Jamie McGoldrick and Irene Kay in Glasgow for their stimulating discussions and criticisms during the earliest phase of this project. On the West Bank I would like to thank

Salim Tamari. Kathy and Pandeli Glavanis. Ibrahim Daqqaq, Rita Giacaman and Khalil Mahshi for helping me to understand and appreciate the Palestinian reality more fully. I would finally like to extend my deepest feelings of sorority and fraternity to my extended West Bank "family" - Rosemary, Madeleine, Adnan. Maher, Alison, Libby, Chris and Christina - for the succor and sustenance which made the many phases of this work mildly pleasurable when not festive. Finally, I should add the conventional juridical proviso that no one apart from the author is legally responsible for the views and ideas expressed in this study.

CHAPTER 1: AN OUTLINE OF EMPIRICISM AND POSITIVISM, THE
CONVENTIONALIST CRITIQUE AND A REALIST ALTERNATIVE

"... all science would be superfluous if the outward appearance and the essence of things directly coincided." (1)

In this chapter I will attempt to outline and critique the general features of the empiricist theory of knowledge (2) and consider its most entrenched philosophical form; namely, positivism. Where empiricism is paradigmatically inductive in the form of its methodology, positivism constructs a logically deductive methodology from this basic premise. (3) I will then present an outline of the main themes in the conventionalist/rationalist critique of empiricism. Finally, I will attempt to outline the main principles of a realist alternative to the empiricist methodological position. This final section will lay the methodological protocols for re-interpreting a number of debates around "modes of production" and the "articulation of modes of production" which constitutes the basic theoretical and substantive kernel of this thesis.

I. EMPIRICISM

The empiricist account of scientific knowledge has been the prominent account since it was first articulated in the weltanschauung and popular ethos of the emergent manufacturing-industrial bourgeoisie of seventeenth century Britain. (4) This credo and philosophy has, of course,

changed in many ways which are for present purposes of no more than scholastic interest. Empiricism's main tenets are still intact although they are increasingly the subject of challenge. It is now a commonplace complaint to state that the pedagogy and research orientation of mainstream social science has been dominated by the empiricist epistemological tradition. (5) The main challenge to empiricist pedagogic and research domination has come in the main from two philosophical fronts. These are rationalism and realism, to apply very loose terms to the two most important critical trends.

The rationalist interrogation of empiricism can be traced to Kant and Spinoza in its modern form, and to Plato in its ancient form. (6) In truth it goes even further back in the ancient Greek philosophical tradition, e.g. to Parmenades. Contemporary variants of the rationalist critique of empiricism are to be found in the works of Althusser, Bachelard, Kuhn and Lakatos. (7)

The realist interrogation of empiricism, on the other hand, has a less extensive geneology. Contemporary variants are presented under a barrage of amorphous terms, e.g. "realism" (R. Harre and, R. Keat and J. Urry), "materialism" (T. Benton), "transcendental realism" (R. Bhaskar) "empiricism-rationalism" (N. Hanson) and "post-empiricism" (M. Hesse). (8) Realism is not without some important historical antecedents and may be "discovered" in a modern form in the work of Marx and in an ancient form in the works of

Aristotle. (9)

Although there have been serious challenges to empiricism as the principle paradigm of scientific epistemology and method, it is without doubt the ubiquitous "knowledge-form" of our subjective experience of the world. This knowledge-form is more extensive than scientific knowledge and is a "formal" conception of knowledge construction which grounds common sense and practical understanding of the events, phenomena and actions of both the social and natural world. It is a laypersons knowledge which is often "correct" but is just as often wrong. (10)

To summarize what is subsequent, I shall consider empiricism from a number of points through the prism of certain concepts which are critical to its logical coherence. These are: the manner in which empiricism conceives experience or observation; its inductivist model of explanation; its ontology of atomic events/facts; and, finally, its notion of causality.

The Empiricist Concept of Experience

Empiricist epistemology has its principium in the concept of observation, experience, sensation or any surrogate for these basic terms. (11) The empiricist theory of knowledge begins with the sound Lockean and materialist principle that knowledge of any particular external reality is possible only if we have some type of experiential or observational

purchase on that reality. (12) The context in which Locke registered this particular point was in order to combat forms of a priorism which attempted to argue that we could have knowledge independent of, or prior to, experience which could simultaneously be informative about the world. However, in the vulgar empiricist variant, there is an elision of this sound judgement and it is argued that since knowledge of any particular external reality must have an experiential or observational datum then observation, experience or sensation is the singular determinant of knowledge and by extension science. (13)

Observation/experience/sensation is the principal concept of the empiricist account of scientific knowledge. The vulgar empiricist conception of experience differentiates it from other accounts of scientific knowledge. (14) This account is grounded in the Humean maxim which asserts that: "...there is nothing in our intellect which has not entered through the senses." (15) An elementary reading of child psychology or cultural anthropology unequivocally demonstrates that the observation/experience of objects is not an immediate experience but is, by and large, mediated through a socio-biographical-historical socialization process. A process through which the observational and experiential mode of relating to phenomena is learned. (16) Vulgar empiricists take no cognisance of this established fact. S/he works with a very simple model of wo/man as a passive receptor of sensations - i.e. observation/experience is conceived in a very restrictive manner - from external objects, i.e. events,

phenomena, actions, etc. In this model wo/man receives the "given" through her/his senses. (17) Here perception is not apperception. This model requires a correspondingly naive psychological theory of perception which does not take us very far from a restrictive behaviourist psychology which postulates human actions and thoughts as responses to external stimuli. Here the relation of epistemology to ontology is projected through the filter of an associationist psychology. This type of psychology links the external object to the experience of a passive subject uncontaminated by preconception. The reception is determined by the nature of the object and not by cultural forms "embedded" in the receiver. (18) This particular epistemology logically entails a particular ontology, i.e. one in which there is a one-to-one correspondence between sensations and objects. (19) Thus, in order for objects to be perceived passively in the form of sensations the objects themselves must be simple or at least compounded of simple or atomistic elements which can be related directly in the form of the sensations of a receptive subject. (20) We shall not dwell on this for the moment as we shall discuss the implicit atomist ontology of empiricism in the following section. Suffice for the moment to bear in mind that, for the empiricist, the world is made up of simple elements which can be received as given to experience. One particular form of this doctrine can be found in the work of Ernest Mach - one of the group active around the Vienna Circle - who argues that all objects, whether physical or psychological, can be broken down into complexes of sensational elements, and thus the ultimate reduced means of

knowledge are elements of simple sensations and science is predicated on the positing of relations between these reduced elements. (21)

Although most modern empiricists have long ago abandoned this naive associationist psychology they have done so without seeing that it was to the everlasting merit of the associationists that their theory of perception attempted to resolve a critical problem for empirical science. It provided a necessary methodological linkage between thought and being and attempted to substantiate this linkage on a solid empirical foundation. Latter day empiricists, such as Carnap, have displaced this very real problem for one which searches for logical links between the meaning of terms, sentences or whole systems of sentences and possible confirming or disconfirming theories. (22) This solution has created a terrain of ambiguity and paradox which the psychological theory of perception was purposely constructed to avoid. How do we distinguish theoretical (a priori) statements from observational (sensational) ones? In other words, how do we distinguish analytic from synthetic statements? (23)

Empiricism as a type of epistemology logically implies a particular conception of how best to go about the process of scientific research. It implies a specific methodology. This methodology is one of gathering the "facts" of given experiences. In social statistics this methodology has led to a conception of the "open-minded" collection of data and the unbiased discovery of facts as the key to objective and

value-free knowledge about the social world. (24) Data-gathering in this schema is not seen as a selective process, only the object or problem to be studied is selected. Data-gathering is determined by the holism of the atomistic field selected and the field itself is bound by the collective closure of the facts in that field. As a research programme it lays singular stress on the unbiased collection of data and the analysis of facts. The form this analysis takes is empirical inductivism. It is to the analysis of inductivism which we now turn.

Inductivism

Inductivism, or "epagoge" as it was known to Aristotle and Cicero, is a method for the production of knowledge which states that general knowledge of the world can be derived from the facts of particular experiences. (25) Inductivism is essentially dyadic in structure consisting of the experience of a personified subject from typified objects. The concept of experience is the relational component which binds the elements of subject and object into an epistemological unity. Empiricist gnoseology is implicitly, if not explicitly, committed to a sensationalist ontology of perception which is non-rationalist and a posteriori in form. This ontology is by implication one in which the perceptability, or possible perceptability, of objects is unequivocal, i.e. it is an ontological theory which posits the features or elements of objects as manifest. (26)

The French philosopher Louis Althusser makes this point in a critique of the empiricist problematic where he states:

The whole empiricist process of knowledge lies in fact in an operation called abstraction. To know is to abstract from the real object its essence, the possession of which by the subject is called knowledge. Abstraction (which ever its variant) defines an invariant structure, which constitutes a specific index of empiricism. Empiricist abstraction which abstracts from the given real object its essence, its real abstraction, leaving the subject in possession of its real essence. What does real abstraction actually mean? It accounts for what is to be called a real fact... Knowledge is an abstraction, in the strict sense, i.e. an extraction of the essence of the real which contains it. (27)

Now, although Althusser's critical target is much broader than the philosophical empiricism which we would wish to denote - i.e. the British empiricist tradition from Hume to the Logical Positivists - it should be clear that the process that Althusser depicts, by the category "empiricist abstraction", is nothing other than the method of induction. Induction refers to an empirical a posteriori sorting procedure. The concept of induction is the definitive concept of this process and not the concept of "abstraction" or "empiricist abstraction". Althusser's appellation "abstraction" is in this context ambiguous since in latter stages of the same text he applies the concept abstraction to denote a method which is distinct in logical form from induction. Abstraction is a method through which we link observable terms to rational connectives, e.g. the concepts electron, atom, capitalist mode of production, surplus value, etc. are all abstract concepts and not empirical terms. (28)

The classical empiricist forcibly argues that both scientific and practical knowledge is gained through the factual observation of the world in such a manner that it can be "seen", "heard" or "touched", whether by wo/man or machine and the facts of which are recorded in a systematic manner and free from any a priori rationalism. (29) This is clear from H. D. Anthony's comments on Galileo where he states:

It was not so much the observations and experiments which Galileo made that caused the break with tradition as his attitude to them. For him, the facts based on them were treated as facts, and not related to some preconceived idea... The facts of observation might, or might not, fit into an acknowledged scheme of the universe, but the important thing, in Galileo's opinion, was to accept the facts and build the theory to fit them.
(30)

We should point out one crucial ambiguity in this text. It is inconceivable that one could conduct an experiment without having preconceived ideas, for it is exactly the function of an experiment to test our hypotheses about some aspect or other of the world. Leaving this aside for the moment the import of Anthony's comments are that science begins a posteriori. It begins with the observation of particular phenomena or events which are stated in the form of factual statements. However, as every schoolgirl/boy knows, science is a theoretical discipline which does not refer to particular instances but rather to particular instances of universal cases, i.e. cases where we can invoke the operation of a scientific "law". Thus, the problem to be explained is: How do we move from the observational statement (read "fact") "The book on Popper fell from my desk" to the Newtonian law

of gravity which subsumes this particular event and which is universal in form?

From strictly Humean prescriptions we cannot proceed according to some more or less rational or a priori connection. According to Humean criteria it is illegitimate to attribute mental (rational) connection to phenomena or events. (31) In other words, events and phenomena must be related to one another at a purely observational level. This logically entails that the universal statements of science are not rational-theoretic statements - i.e. statements linked by rational connectives - but empirical statements connecting observables. (32) Concomitant with this view is the notion that "scientific laws" are not what we would generally call theoretical statements but empirical statements of a general character. This bequeaths a concept of "laws" as general empirical statements which correlate constant conjunctions of events. (33) These empirical statements take the form: all A's are B, etc. Thus, according to Humean criteria, laws take the form of empirical generalisations which are constructed by means of the repetitious observation of recurrent phenomena, e.g planets moving in ellipses around the sun or the mortality of all people, etc.

Hume himself has shown the logical limits of this conception of knowledge. (34) The movement from particular observations to general empirical statements can never contrive to achieve universality since there are no justifiably sufficient reasons to assume that because a certain series of events has

always had a particular form in the past then it will continue to have the same form in the future. The logical structure of the contending argument is: if general scientific laws are composed from the repeated observation of events of which we have had experience then we cannot logically assume that events of which we have not had experience will continue to follow the same pattern of behaviour as the past events which we have experienced. (35) We have no warrant, in empiricist criteria, to reason from phenomena we have observed to phenomena of which we have had no experience. This results in a particular paradox for empiricism. For if reasoning is restricted to a posteriori forms of argument then these forms must also necessarily be ex post facto. Empiricism is concerned with the past and cannot legitimately, according to its own criteria, predict the outcome of future events. This is a critical indictment of empiricism from within the limits of its own problematic. If experience is the singular determinant of knowledge then it is a form of discourse which remains caged in the past. For Hume himself, to speak in future terms about the possible outcome of events would be a move from the realm of scientific factuality to the realm of "beliefs". For others it would imply the operation of discourse which has a rational or theoretic warrant.

No less a figure than Bertrand Russell has argued that once we come up against the logical limits of induction then:

...every attempt to arrive at general scientific

laws from particular observations is fallacious, and Hume's scepticism is inescapable for an empiricist. (36)

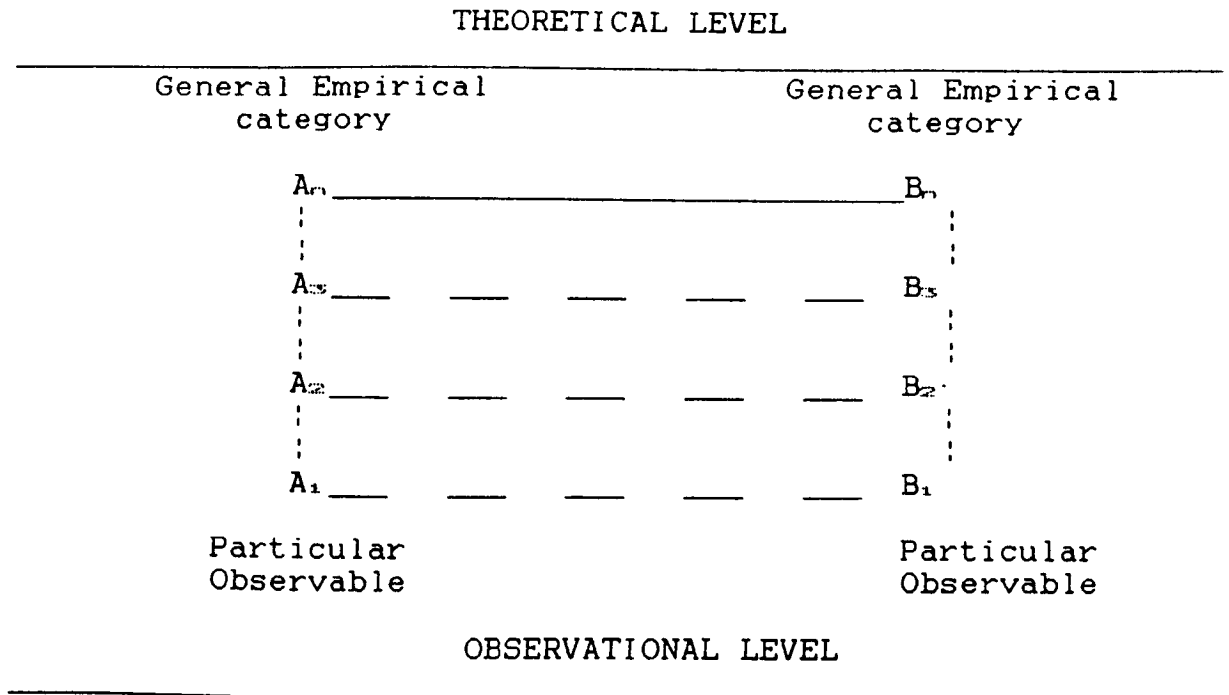
More humorously, yet no less logically incisive, David and Judith Willer have shown how empiricism:

...is logically identical to magic, but our greater powers of observation, measurement and manipulation often mean that our empiricism is more effective. (37)

This identity of magic and empiricist science is premised on the notion that one object has the power or ability to cause another. In other words, primitive tribesmen when they perform a dance in order to precipitate the rains are being consistent empiricists. (38)

It is a special feature of empiricism that it does not operate with concepts but rather with empirical categories. Concepts are, in a minimal sense at least, rational or independent of experience - if not wholly a priori - insofar as they are theoretical. Empiricism works not with general concepts, such as magnetic field, atom, surplus value, etc., but with general categories which incorporate particular observations in a "ladder of abstraction" based on the method of induction. (39) The general model of empiricist explanation takes the following form:

Diagram 1: Empiricist Ladder of Abstraction (40)



From the table we can see that particular conjunctions of events A₁ - B₁, A₂ - B₂, etc. are worked up into general empirical correlations between constant conjunctions of events of a similar form. Thus, falling apples, falling books, falling aeroplanes, etc. are all particular cases of a summarising general principle, namely the Newtonian Law of Gravity. We shall bring this particular point out in a formal manner when we consider positivism. Suffice, for the moment, to note that the categories are general and not universal.

Empiricist Ontology

In this section I shall consider the metaphysical - in the real sense of both "meta" and "physical" - or the ontological assumptions implicit in the empiricist account of science.

This ontology is generally common to all variants of empiricist epistemology. These variants share a set of common ontological assumptions.

At the simplest level empiricism conceives the object knowledge being constituted from independent atomistic events and their constant conjunction. Through the detection of the existence of events we can begin to comprehend the facticity of the world in the form of statements asserting the nature of their existence or behaviour. Further, the identification of constant conjunctions of events enables us to construct law-like general statements. (41)

Post-Humean empiricism opines the proposition that constant conjunctions of events are the only veracious model of construction of natural necessity or theory of causality. Implicit in this conception is a metaphysic of a "shallow" surface ontology. (42) In this model of ontology, knowledge of the world is discovered as in a mirror. Statements about events constitute the facts of a field and the constant conjunctions of events which we discover within this field enable us to construct law-like statements about manifest empirical phenomena. With this view, science does not have to be rationally worked for but is a kind of epiphenomena of the given-ness of nature which is virtuously imposed on the act of vision by the "given". The act of discovery, in this account, is nothing other than seeing that which we failed to see in the past. This model designates a passive process and not an apperceptive one. We discover immediately the ultimate

constituents of scientific knowledge which are manifest events and their constant conjunction. Furthermore, the requisite methodology for the discovery of the ultimate constituent objects of science is, as we saw previously, the act of "sensing", or, the use of a metering device which is analogous to sensing. This methodology is not conceived as an interactive construction or production of knowledge of a real object but, rather, a reception from the manifestness of the object.

This view is constructed in the belief that the essence of "reality" is such that events are experienced as atomistic and discrete. Thus, the objects of science are discovered in an extensively empirical world. That is, a world where things and events are manifest and observable; a world which is translucent, opalescent and transparent. (43)

What the empiricist has done in this model is to reduce being to knowledge of being, i.e. to reduce ontology to epistemology in such a manner that they form an indissoluble unity in the category of experience. The ultimate outcome of this is that logical necessity and natural necessity are interbedded and the reduction of natural necessity to epistemological connection is complete. This closed circle of empiricist epistemology and its guarantee to particular empiricist forms of knowledge determines its methodological protocols and research strategies. These are procedurally distinct, viz. the methodology isolates/discovers atomic events which are then computed and collated in the form of

constant conjunctions of these events. These collations and computations of constant conjunctions are then arranged in a hierarchical order which moves from the particular to the general. (44) We can title this ontology empirical atomism. In this model of ontology "experience" and "the empirical" are not merely co-terminal but reduced to a singular identity. In other words, ontology is reduced to the empirical which is premised on the epistemological category "experience". The result of this combination of atomism and reductionism is a theory of causality which conceptualises causal laws in the form of empirical statements about the correspondence of constant conjunctions of events. This whole procedure is based on the methodological "tapping" of the manifest surface phenomena of the world. (45)

Empirical Theory of Causality

The concept of causality, as it was developed and utilised in empiricism, can be traced directly to David Hume. In its modern form this notion of causality has been accurately termed the regularity theory of causality. (46) The Humean tradition asserts that a constant conjunction of events is a necessary if not sufficient condition for the establishment of a causal law. Radical Humeans would argue that it was also a sufficient condition for the assertion of a causal law. The regularity theorists of causality argue that since a constant conjunction of events is necessary to establish causal laws then there are, by definition, also such relations in the world per se, i.e. the world is constituted of atomistic

events or states of affairs and their constant conjunction. If this were not the case then the doctrine of epistemological-ontological atomism would collapse and knowledge of the objects of the world would not be possible - at least not in an atomistic form. (47)

The empiricist conception of causality is predicated on the atomic-empirical concept of ontology in which events are atomistic and the constant conjunction of atomistic events allows the systematic empiricist to formulate causal laws based on the regular concurrence of similar conjunctions of events. Hence the notion of regularity determinism.

Rom Harre has defined regularity determinism as:

...the doctrine that the empirical content of a statement of a causal relation is no more than a statement that the events, states, etc. of the type of effect. The experience of the manifestation of the productive power of potent things in causal production and the apparent necessity of their effects are alleged to be psychological phenomena, produced by experiencing the regularity of the concomitance. (48)

In other words, the ontological identification of constant conjunctions of events gives rise to a concept of constant concatenation of causes which has the form:

For every event Y there is a cause X
= For every Y then X
= If Y then X

This concept of cause is irreducibly empirical and does not

refer to some further superior or essential unobservable element which is producing event Y. The whole notion of cause is centred around a cause as a temporal sequence in which one event of a specific form is invariably followed by another event of a particular type. (49) This is distinctly Humean in character and complementary with Hume when he states that:

...a cause [is] an object followed by another, and when all the objects similar to the first are followed by objects similar to the second. (50)

Humean regularity determinism conceives causality as a nexus of constant sequential relations between repeated events. However, in order for this model to be intelligible it requires that the empirical world must in some way be closed such that a cause X is both a necessary and sufficient condition for the effect Y to occur. A closed system is one where there is a necessary symmetry between explanation and prediction. (51)

Having outlined the essential components of empiricism, i.e. its concepts of experience, induction, ontology and causality, we will now turn to the composition of these elements in positivist epistemology.

II. POSITIVISM

The term "positivism" often denotes a number of different conceptual, theoretical and philosophical positions. (52) From Auguste Comte in the nineteenth century to logical

empiricism in the twentieth century. (53) In general, it is useful to differentiate between "positivist philosophy" - in particular that of Comte - and "positivist epistemology". (54) When we use the term positivism we shall be referring to epistemological positivism, unless we state differently.

R. Keat and J. Urry, in their book Social Theory as Science, outline four essential features of epistemological positivism we can usefully utilise as a typology of epistemological positivism. These are:

1. Scientific theory is evaluated by reference to empirical evidence.

2. The real objects of science are independent of theories and it is these objects which science aims to apprehend and describe.

3. The data of experience is empirical and given directly to experience and observation.

4. The notion that universal statements may be articulated about regular and contingent relationships occurring in nature. (55)

The anti-theoreticism of this mode of epistemology should be clear from the typology. For the positivist we have adequately explained an event or phenomenon once we have shown it to be an instantiation of a general empirical law. The positivist model of scientific activity is a deductive one. (56) The locus classicus of deductivism can be found in the work of Ernest Nagel. (57) Nagel's view of science is

commonly referred to as the "covering-law model", the "hypothetico-deductive" or the "deductive-nomological" model of explanation. (58) I shall refer to this model, following Mary Hesse, as deductivism. (59) According to this model of science, an explanation of an event which does not conform to the prescribed rules of deductivism is not a veracious scientific explanation but a pseudo-explanation. For deductivism, a constitutive scientific explanation is a function of the formal properties of empirical statements and the coherence of their posited mutual relations. (60) In this model, statements of a particular content may be said to be entailed or subsumed in statements of a general form which "cover" a given field of phenomena or branch of a discipline.

This model of explanation is best shown ostensively: Imagine the traditional picture of Descartes sitting by his cosy well-stacked fire, insulated from the trepidations of the winter chill, when suddenly his fire begins to go out. If one were asked to explain this phenomenon we might reply that a blocked chimney flue and lack of oxygen in the unventilated room caused the fire to die. Now, the deductivist would inform us that this explanation entails the formulation of a general empirical law, viz. all fires go out when starved of oxygen. The deductivist would further argue that this statement can be structured in the form of a deductive argument, such that:

COVERING LAW - All fires de-combust when starved of oxygen.

ANTECEDENT CONDITIONS - The chimney is blocked and the room is air-tight.

CONCLUSIONS - Therefore the fire de-combusted.

Or:

PREMISES - Always if A then B. [covering law]
A occurred. [antecedent condition]

CONCLUSION - Therefore B occurred. [explanandum event]

(61)

In the deductive model of explanation we can deduce the event to be explained from an empirical law of a general form and a set of initial conditions usually referred to as the cause. In this model the truth of the conclusion is logically derived from the truth of the premises of the argument, i.e. from the covering law and antecedent conditions. Hence, the argument is logically deductive.

For reasons outlined by the Willers' in their critique of the empiricist "ladder of abstraction", general laws can never be universal in form if we remain bound by empiricist criteria of the observational definition of laws. (62) We can never legitimately make the move from the observation of particulars to the construction of universal laws - we can never logically jump from the finite to the infinite. Now one way for the deductivist to unburden her/himself of the terrible dilemma of empiricism is to follow the lead of Karl Popper and propose that empirical laws must necessarily be

hypothetical in form since they are incapable of complete proof according to rigid empiricist criteria, i.e. it is not possible to experience every case in the universe past, present and future. Thus, scientific explanations are said to be hypothetico-deductive. (63)

Most scientists would want to explain why it is that under certain conditions fires go out and why, for instance, an apple always falls to the ground, i.e. they will want to explain the empirical laws themselves. This route is not open to the positivist. If s/he wishes to explain why it is that apples always fall to the ground then s/he would impute this as a particular case of the Newtonian theory of gravity which consists of empirical laws of a high degree of generality which are applicable to all bodies which fall. From these laws it is possible to deduce an enormous range of "lower" level empirical laws about such objects as apples, billiard balls, the movement of the planets, etc. These laws are all deductively interconnected from the higher to the lower level in a declining hierarchy of generality. (64) For the positivist, a scientific theory is defined as just such a network of sets of laws.

Concomitant with this account of empirical laws, the positivist arrogates a distinct historiography of science in which scientific progress is seen as a developmental process of extending and subsuming empirical laws, such that the "known" empirical laws are continually subsumed under more extensive laws of a higher-order of generality. This process

of subsumption simultaneously extends their functional domain of application. (65) Thus, Einsteins theory of relativity "covers" or subsumes Newtonian physical theory.

However, no matter what their covering qualities may be, "theories" are classifications of highly general hypothetico-universal laws whose truth or falsity can be determined solely by way of observation and empirical experiment, i.e. it is only observation which provides the objective basis for the theorisation of empirical laws. Although a number of the earliest positivists claimed that theories could be known to be conclusive and shown to be true, most modern positivists would generally assent that laws in scientific theories have the status of hypotheses. Thus, laws are hypothetical in form because any claim to universal truth transcends the bounds of actual experience. (66)

One version of positivism, verificationism, claims that empirical or observational evidence is utilised to provide varying degrees of support to the truth of scientific theories, and, further states, that rival theories can be critically assessed in terms of their relative degree of empirical confirmation of their respective theoretical structure. (67)

In a somewhat similar current, although reversing the polarity, Karl Popper has formulated the notion that scientists proceed, not by way of verification, but, by way of a method of theoretical conjecture and empirical

refutation. (68) Contrary to the verificationist position, Popper argues that science does not proceed by way of empirical tests of verification but, on the contrary, methodologically endeavours to empirically falsify theoretical conjectures by observational means. This methodological position has been appropriately called falsificationism. (69)

Both, falsificationism and verificationism, assume that the empirical observations used to evaluate our theories can ultimately provide an objective basis for science and that entrenched "theoretical" disputes can be resolved by reference to the consonant observed facts. This issue, as we shall argue shortly, is far from simple since facts are not in themselves intrinsically theoretically neutral as verificationism and, to a lesser degree, falsificationism assume. (70)

So far we have identified the term "theory" as a classification for a set of hypothetical/universal empirical laws of a deductive form. Now, a number of positivists, notably, verificationists and phenomenologists, argue that the term "theory" should only be utilised in a very restricted metaphysical sense. The term theory, they argue, should only be applied to "theoretical" laws which employ non-observational entities, e.g. law-like empirical statements which utilise the concepts magnetic field, electron, atom, etc. (71) These theoretical entities are not uncommon in scientific discourse and their application in both theory and

experimental activity has been exceedingly efficacious in scientific practice, as one of the leading ideologues of positivist epistemology, Carl Hempel, has pointed out:

It is a remarkable fact... that the greatest advances in science have not been accomplished by laws referring explicitly to observables... but rather by means of laws that speak of various hypothetical or theoretical entities, i.e. presumptive objectives which cannot be perceived or otherwise directly observed by us. (72)

The positivist does not conceptualise these "theoretical entities" as depicting real phenomena which causally activate the empirical phenomena we observe, rather s/he conceives "theoretical entities" as "logical constructions" which heuristically order the phenomena of the empirical world. (73) This ordering procedure is a mental ordering of fact and not a real ordering of events. This is a result of the basic assumptions of positivist epistemology, which it shares with empiricism in general, namely, concepts which transcend the domain of experience of the empirical world have no legitimate causal function. This has resulted in a critical dilemma for those positivists, such as Hempel, who are quite clearly aware of the efficaciousness of "theoretical entities" to the advancement of scientific knowledge. (74)

One potential applicant for the resolution of the dilemma, which theoretical entities present to positivist and empiricist epistemology, is operationalism. (75) Operationalism, while taking the basic tenets of empiricist epistemology as incontrovertible, attempts to resolve the

problem of theoretical entities in terms of observational categories by means of correspondence rules or bridging principles which ultimately enable the positivist to link theoretical entities with empirical categories. (76) Operationalism claims that it is possible to distinguish "observational terms" from "theoretical terms" and the entities these terms denote are denoted in palpably different languages, i.e. observational language and theoretical language. These languages, so it is claimed, are apparently epistemically discrete.

This technically analytic bifurcation of scientific discourse has been rigorously attacked and analytically dissected by conventionalist philosophers of science. Conventionalists have shown that the language used in both scientific and ordinary discourse are not epistemically discrete. (77) We shall return to this point in greater detail in the next section.

In their account of causality the positivist restricts the existential realm to the realm of observational. This is in effect a disavowal of a world in which causal necessity is efficacious. This is because, as for the empiricist, the Humean notion of causality is central to their account of causality. For Hume, we may believe a sequence of events to be causally connected, however, no amount of observational evidence can show them to be necessarily connected. (78) The positivist fully subscribes to the empiricist concept of causality, which we termed regularity determinism. (79)

Positivism is faced with a real problem in attempting to reconcile the utilisation of "theoretical entities" in scientific practice and its ongoing commitment to a theory of causality based on regularity determinism. This problem stems largely from the uncritical acceptance of empiricist epistemology which is grounded in the axiomatic category "experience" or "observation", which is a pure uncontaminated realm of "sense-experience", and, which can be described in a "theory-neutral" manner. This is fundamental to epistemological empiricism in all its variant forms: empiricism, logical empiricism, logical atomism, phenomenism, confirmationism, operationalism and verificationism. The essence of this epistemology is that the truth or falsity of observation statements can be empirically demonstrated without reference to a priori, rational or theoretical elements.

However, anyone with a passing acquaintance with Kant will find this epistemological position disingenuous and contentious. (80) Kant has shown that the observation of an object is never completely free from conceptual and theoretical assumptions and presuppositions. For language, the very form in which we communicate knowledge, is irreducibly conceptual and not an intrinsically perceptual datum. The belief that science is grounded on a pure, uninterpreted or theoretically-neutral plane is fundamentally misconceived, since modern linguistics - from Saussure to Chomsky - points out that there is no perceptual base which is not simultaneously interdependent on a conceptual

superstructure.

Karl Popper, who works with a strong empirical framework, has consistently affirmed the necessity for science to be objectively controlled by observation. However, for Popper, observation has no absolute guarantee associated with it. Observation is one logistic base among others through which we affirm scientific practice. Popper is adamant that there is no possibility of a "theory-free language" of observation which can function as the apodectic ground of scientific knowledge. He argues:

The empirical basis of objective science has nothing absolute about it. Science does not rest on a rock bottom. The bold structure of theories rises, as it were, upon a swamp. It is like a building erected upon piles. The piles are driven down from above into the swamp, but not to any natural or "given" base; and when we cease our attempts to drive our piles into deeper layer it is not because we have reached firm ground. We simply stop when we are satisfied they are firm enough to carry the structure, at least for the time being.
(81)

Although he is a long way from the cruder versions of both empiricism and positivism, Popper is still located within the positivist problematic. When he describes as "observational" all those terms whose valid or invalid application can be "commonly" agreed upon by the "community of scientists" working in the field he is still in the arena of the positivist epistemologist. According to Popper, science still has to be controlled by observation, i.e. by the objective consensus of the scientific community as to what the observable facts actually are. Popperian falsificationism

assumes that theoretical disputes can be, more or less, uncontentionally resolved by the reference to the consensual observation of disputed facts by the scientists involved. However, this voluntaristic "political" position does not help us to resolve the theory/observation or fact/theory dilemma of empiricist epistemology, it merely shrouds it under an ill-concealed political veneer which does not take into account the very real personality and political disputes which are an integral part of scientific research and research funding process.

If we focus more critically on both empiricism and positivism we can perhaps begin to overcome certain of their more entrenched problems and begin to move out of the empiricist epistemological and ontological ghetto.

III. THE CONVENTIONALIST CRITIQUE

In this section I shall attempt to outline what I consider to be the most serious inadequacies of the empiricist and positivist account of science. I shall outline these deficiencies without immediately resolving them, since I believe that their resolution is to be found in an alternative account of science, namely the realist account. I shall consider the realist account in the following section of this chapter.

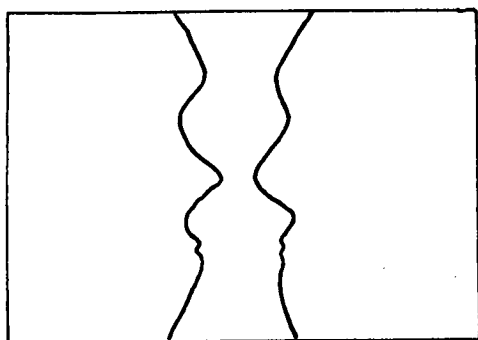
The first point I wish to discuss is the manner in which empiricism unifies epistemological and ontological categories

in an uncritical modality which is referenced through the concept of "experience". Here epistemology and ontology are not considered as analytically distinct entities or analysed on their own terms as necessary components in a complex combination of "natural" and "social" elements which are structured in a determinate manner to form "knowledge". Rather, knowledge is considered as a type of epiphenomenon of nature, in which atomistic events are received by a passive sensory apparatus; which then unproblematically enables statements to be constructed about events and the constant conjunction of such events facilitates the construction of general laws. The real analogue for this conception of knowledge is "the mirror of nature" which reflects the empirical world in the head of the passive receiver. This conception reduces being to knowledge of being, i.e. it reduces ontology to epistemology. This requires, as a legitimation of its methodological strategy, the belief that the empirical world is the extensive domain of science. In other words, the phenomena of the world are immediately observable; all phenomena are surface phenomena; all scientific facts refer to observable phenomena. This notion applies not just to empiricism but to positivism, particularly in verificationism where being and knowledge of being are indissoluble; where logical necessity and natural necessity are sub-species of the same genus, i.e. natural and epistemic necessity are identical. Only on the logical ground of this paradigm is deductivist methodology coherent.

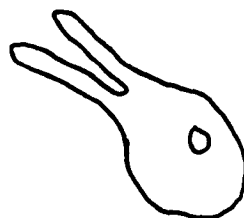
Recent critiques of empiricism have focused on the inadequacy of the empiricist concept of experience. (82) It has been consistently argued, from within both the rationalist and realist tradition, that experience is never direct or immediate and thus never comes to us without filtration through concepts or theories which, in their simplest forms, are deeply embedded in our common-sense and scientific languages. (83)

Norwood Hanson, in his book Patterns of Discovery, made the now elementary point that: "There is more to seeing than meets the eyeball." According to Hanson, a "subject" is conceptually interpellated in the act of vision. This point can be illustrated with examples from Gestalt psychology called "shift of aspect phenomena". These are illustrated below:

Diagram 2: Shift of Aspect Phenomena



Goblet/faces



Duck/rabbit

If we consider Kohler's drawing of the goblet and/or faces. This drawing can be seen as either two faces or a goblet, yet it is always constituted by the same retinal sense-datum. The

same configuration of lines can be seen as different objects and in fact we can pulsate our vision backward and forward, between faces-goblets-faces-goblets etc, yet nothing purely optical or sensational has changed. We see different things alternatively. The same result can be seen with the duck/rabbit. What does in fact change is the organisational form of what is objectively experienced. This "organisation" is not an element in the visual field, it is not empirical, but is a mental or conceptual element which constructs what we see. (84)

It is claimed, by Thomas Kuhn, that an analogous phenomenon occurs within scientific practice. This is highlighted in the transformation from the phlogiston theory of combustion to the oxygen theory of combustion in the latter part of the eighteenth century. Where Priestley, who was researching the "air" given off by the heating of red oxide of mercury, saw "de-phlogisticated air", Lavoisier, working with quite different theoretical assumptions saw a new species of gas, namely oxygen. Thus Kuhn argues:

At the very best, as a result of the discovery of oxygen, Lavoisier saw nature differently. And in the absence of some recourse to the hypothetical fixed nature that he "saw differently", the principle of economy will urge us to say that after the discovery of oxygen Lavoisier worked in a different world. (85)

It is immediately obvious that what both Kuhn and Hanson are saying are complementary. Hanson further argues, that, this throws into relief the belief, so fundamental to

verificationism and falsificationism, that competing theories can be assessed by reference to agreed upon facts, since rival theories will see different things and "uncover" different facts. So, facts do not after all speak for themselves; facts are not conceptually or theory-neutral. The factual world is not one of atomistic description but one which is, in a minimal sense, produced by our theories and concepts. In other words, there is no perception without conception and experience or observation is, therefore, necessarily apperceptive.

I have said enough at this juncture to register the point that there is something seriously wrong with the empiricist and positivist concept of experience and their construction, from this uncontaminated empirical base, of inductive and deductive methodological strategies.

The second critical point is an analysis of empiricist ontology. The empiricist account of ontology is fused with its account of epistemology, which reduces knowledge to atomistic events apprehended in empirical experience. These events are identified as the real or ultimate components of the world. In this account, science is reduced to a surface ontology in which immediate experience is possible in the form of atomistic facts. However, as we saw previously, positivists like Hempel realize that this ontology imposes extremely restrictive limitations on scientific advance. Hempel has himself argued, that when scientific development has been revolutionary it has, in general, utilised concepts

which referred to unobservable entities, e.g. atoms, magnetic fields, electric currents, etc. This brings us to a point of departure with the empiricist problematic, either we can interpret unobservables as "logical constructs" which economically facilitate the organisation of the empirical phenomena of the world or we can conceptualise these unobservables as being "existentially real". If we accept the second thesis, then it follows that the whole of empiricist atomistic ontology is grounded on a misplaced concreteness. I shall argue in the following section that this is one of the crucial, but completely understandable, errors of empiricism.

Last, if we look at the empiricist concept of causality viz. regularity determinism. This concept of cause is grounded in the atomistic ontology of empiricism in which a constant conjunction of empirical events is necessary, if not sufficient, evidence for the establishment of causal laws. Now, if the empiricist account of ontology is itself undermined then its concept of regularity determinism, which is articulated on the ground of this ontology, may be found to be wanting. Regularity determinism is only coherent if the world is constituted of atomistic empirical events and if these discrete phenomena constitute the particulars of the world per se. If there are deeper ontological levels which substantiate the world as more extensive than the empirical then the Humean account of causality will have to be rethought on the basis of a new concept of ontology.

In summary, the coherence of the empiricist and positivist

epistemology is grounded on an ontological substratum which reduces knowledge to experience and experience itself is fused with the object experienced. In the following section I will attempt to bring out a realist alternative which does not fall prey to the criticisms raised against empiricism.

However, I should end this section by bringing out some of empiricism's more pertinent points, since much recent philosophy of social science practice has been over-eager to criticise everything which is empirically grounded as empiricist. (86) What is sound reasoning in the empiricist tradition? Empiricism is veracious when it posits the existence of an empirical world where atomistic phenomena do occur, and when it argues it is possible to classify these phenomena in the form of constant conjunctions. There is absolutely nothing contentious in this. In fact it constitutes good common-sense as well as being an important part of scientific activity. What is erroneous is to reason that this order of phenomena exhausts the plenitude of the world. I will argue that the world is empirical but it is not reducible to the empirical; it is not empiricist. Further, it is certainly uncontentious to perceive the co-variance of constant conjunctions of events as bringing out real patterns of determination, but it is fundamentally misconceived to argue, as the regularity determinists do, that the articulation of these empirical patterns is the only apodectic theory of causality, since this would not permit the articulation within the empirical frame of such unobservable elements as atoms, magnetic fields, etc. In

other words, empiricist aetiology does not bring out the real causes of the empirical patterns of determination that we do observe.

IV. THE REALIST ALTERNATIVE

In this section I will focus attention in trying to draw out the main methodological elements of a realist alternative to empiricism and positivism. The main methodological protocols of both empiricism and positivism, which still accounts for their continuing longevity and intellectual appeal, state that it is possible to construct a rigorous theory of knowledge based on a synthesis of empirical epistemological and empirical ontological elements. In the previous sections of this chapter, I attempted to show that, for all their logical merits, both empiricism and positivism were theoretically inadequate in terms of their theory of perception and their theory of causality. However, it is to the merit of the empiricist account of science that it tried to solve the basic methodological problem of how to adequately resolve the combination of epistemology and ontology. The empiricist has consistently argued that although it is analytically possible to separate methodological, epistemological and ontological issues, it is only when they are combined in the practice of scientific activity as a whole that we produce fundamental knowledge of the world. The main problem of the empiricist account is that it is reductionist rather than synthetic.

This methodological relation between epistemological and ontological issues has often been obfuscated in much of the recent discussions taking place in the philosophy and methodology of the social sciences. (87) In reality, knowledge is a methodological Janus consisting of both an epistemological and an ontological face. Substantive (as opposed to formal) knowledge is a combination of two elements; first, as Kuhn and Althusser have pointed out, the construction of knowledge is a social production carried out in the social practice of scientific endeavour (88) and, second, scientific knowledge is a knowledge of things which are independent of our knowledge of them.

In this section I will attempt to show how a realist methodology attempts to take account of this relation and distinction by constructing a radically different set of methodological protocols from those established by classical empiricism and positivism. In attempting to elucidate these protocols I will rely quite heavily on the work of the British realist Roy Bhaskar, who has set out the issues with a methodological rigour and clarity which lends itself most efficaciously to dealing with the theoretical and substantive issues which I attempt to resolve and explain in the concrete theoretical and empirically grounded study which I will undertake in the following chapters of this thesis. (89)

Bhaskar refers to two major elements in the production of scientific knowledge. These are, on the one hand, "the transitive objects of knowledge" and, on the other, "the

intransitive objects of knowledge". (90) The transitive objects of knowledge consist of those socially constructed elements which constitute the means of epistemological production; these include, "antecedently established facts and theories", paradigms and models, and the basic methods and techniques of scientific inquiry. The process of the epistemological production of knowledge refers to the social side of knowledge production. The intransitive objects of knowledge, on the other hand, refer to the ontological side of knowledge and refers to real "things", "structures", "mechanisms", "processes", events and possibilities which science attempts to discover and explain. The methods of scientific inquiry and endeavour result in the intransitive objects of science being discovered through the transitive objects of knowledge. Scientific discovery is a complex process of the social production of knowledge of the material things which necessarily operate independently of scientific knowledge.

Ontological Realism

While a great deal of recent meta-theoretical discourse in the social sciences has been overwhelmingly concerned with epistemological issues to the almost complete emaciation of ontological issues, the realist position is that both these dimensions have to be jointly confronted and theoretically squared with each other. One way to achieve this is to begin with the basic materialist presupposition which is unique to ontological realism. This states that the objects of

scientific knowledge are real structures and mechanisms which generate the phenomena experienced on the empirical level. Thus, according to this presupposition, empirical phenomena are not in themselves the transitive objects of science but rather it is the mechanisms and structures which generate the empirical events and phenomena which we experience which are the proper intransitive objects of scientific knowledge. (91)

For the realist, the world can be ontologically analysed at three distinct levels. First, there is the level of the empirical, where we are able to experience events and phenomena. It is important to bear in mind the conventionalist position, when dealing with the empirical world, that this level is both technically and discursively conditioned and that empirical observation may be false or erroneous. Second, there is the level of the actual, where all events and phenomena occur, including those of which we have no empirical experience. And third, there is the level of the real, where generative mechanisms generate the events and phenomena which occur on the level of the actual and of which we often have empirical experience. (92)

The manner through which we lay epistemological purchase onto the intransitive objects of science is not through empirical experience of the world per se but through the transitive objects of knowledge, i.e. models, concepts and paradigms of science. Models, concepts and paradigms are functional attempts to express in thought the real structures and mechanisms of the world which generate the empirical events and phenomena of which we have experience. Models, concepts

and paradigms are not merely utilitarian conventions for ordering empirical phenomena, but more or less adequate reconstructions of real structures and causal mechanisms. Without this materialist commitment to theory construction and concept formation, the social production of models and paradigms becomes nothing more than an architectonic aesthetics. (93) Thus, for the realist, iconic and representational forms are an important aspect of scientific activity, but only inasmuch as these imagined forms putatively refer to real or hypostatized real objects, mechanisms or structures.

This position takes us well beyond the bounds of both empiricism and positivism since they do not envisage such epistemological or ontological possibilities. Empiricism and positivism discuss neither structure nor mechanism still less their theoretical hypostatisation, rather the ontological currency of both empiricism and positivism is empirical events and their constant conjunction. However, the realist does not dismiss the events and constant conjunction of events of empiricist ontology but rather attempts to locate them in their place in the actual practice of scientific activity. Thus, the realist looks at events and their constant conjunction as a necessary starting point in the methodological process of experimental investigation and discovery. The point of departure for the realist is to attempt to get behind the level of empirical experience and constant conjunctions of events to the real structures and mechanisms which cause them to occur.

This is the point where the ontological commitment of the realist can be distinguished from that of the empiricist. Empiricism conceives the world as an empirical one structured by atomistic events and their constant conjunction, while the realist conceives the world as structured and differentiated by three distinct ontological layers. It is the job of substantive scientific inquiry to bring out the actual structures and forms of differentiation in the world. Thus, ontological realism does not view the world from the perspective of a simple visible surface ontology pace empiricism. Rather, ontological realism posits a level underlying perceptible empiricism where it is possible to discover generative structures and mechanisms which are forms of causal agency which largely determine the pattern of empirical phenomena which we experience on the empirical level. Thus, the realist accepts the empiricist and positivist postulation of the empirical level of analysis as fundamental to scientific activity, but unlike the empiricist and positivist argues that the empirical level is predicated upon a further deeper ontological level of structure and mechanism. It is on this level that the most fundamental discoveries of science are located. (94)

The Concept of Experience in Realism

In order to comprehend the level of mechanism and structure, realism posits two dimensions to experience in scientific research. These are first, as empiricism points out, through sense perception and second, through experimental activity.

The concept of perception presupposes that there is an object independent of our perception of it. In order for scientific investigation to be possible the intransitive world of objects must be distinct from our perception of these objects. Any serious analysis of scientific activity presupposes that the objects of science are ontologically, although not epistemically, distinct from our experiences of that object. This is a relatively straightforward statement and not one that anyone would seriously challenge, although there are likely to be major differences of opinion over how the human cognitive apparatus actually apprehends the world of things.

Science normally perceives and comprehends the objective world through experimental activity. Both empiricism and realism agree on this point, although they differ on the actual role experimentation plays in the process of scientific investigation. For the empiricist, experimental activity allows the scientist to identify causal laws in the form of constant conjunctions of events and to frame these causal laws in empirical statements. While for the realist, the role of experimental activity is to identify causal laws which are not reducible to constant conjunctions of events, since the scientist is her/himself a causal agent in bringing these constant conjunctions of events into being in experimental activity. Thus, the realist accepts the empiricist postulate that we can identify causal laws through constant conjunctions of events but s/he does not accept that causal laws can be reduced to constant conjunctions of

events. Since the realist views the role of experiments in science as being designed to bring about a situation of experimental closure of the world so that we can identify causal mechanisms operating independently of exogenous causal factors. (95) Thus, it is normally only under conditions of experimental closure that scientists discover and identify causal laws (or mechanisms) and constant conjunctions of events. In other words, the realist asserts that once we have identified causal laws and mechanisms under the conditions of experimental closure it is necessary to assume that these causal laws and mechanisms operate in open-systems where exogenous causal factors intervene and thus cause a different course of events to emerge than those established under the conditions of experimental closure. (96) In the interaction of different causal structures and mechanisms in the real world causal laws are often out of phase with the patterns of events which we can empirically detect. Thus, causal laws are not empirical statements about constant conjunctions of events but are statements about the behaviour of structured mechanisms.

Realist Theory of Causality

For the realist, causal laws are ontologically independent of constant conjunctions of events. Experimental activity only makes sense if it allows us to move beyond regularity determinism and develop a theory of ontology based on the concepts of structures, generative mechanisms and active powers. To develop a concept of causality which allows us to

analyse open-systems, where the world is not made up of constant conjunctions of events, we need the concept of generative mechanism. While model building is a contingent aspect of scientific activity the realist argues that scientific models can come to be known to have a real material basis. It is only if causal structures and generative mechanisms are treated as real entities or hypostatized real entities that we are able to separate ontologically causal laws from patterns of events.

This leads us to examine again the role of experimental activity in scientific discovery. It is the role of experiments to isolate integral factors from outside causal interference. In order to do this, experimental design attempts to isolate patterns of events which can be re-established in a recurrent manner, so that the scientist can hypostatize and identify causal structures, powers and mechanisms. The role of the experiment is to allow the scientist to establish these entities as real in-themselves and not merely reducible to constant conjunctions of events. Experimental activity allows the scientist to identify the real mechanisms, powers and structures which exist in the world independently of the constant conjunctions of events which allowed their initial discovery under the ideal experimental condition of causal closure. In the world of everyday causality the underlying mechanisms still continue to operate, but they most often do so in a manner which produces no constant conjunctions of events, since the causal mechanism in question will interact with other generative

mechanisms which will interfere with the inherent tendencies of the mechanism in question and produce a pattern of events which may be random but still causally generated.

Thus, the interaction of generative mechanisms in open-systems will bring about patterns of events which are not the same as those brought out under ideal experimental conditions, since these events will often be caused by a complex interplay of a network of different generative mechanisms. The major methodological problem in open-systems is to identify which real mechanisms are operating at any one time and then to analyse the nature of the causes which are bringing about the pattern of events which we are able to observe empirically. Because of the complexity of causal analysis in open-systems we cannot read off from a distinct pattern of events to a generative structure. In open-systems there is very seldom a one-to-one correspondence between cause and effect; between a constant conjunction of events and a causal mechanism.

In order to make sense of the notion of a causal law we have to understand it as referring to "tendencies of things" (i.e. generative mechanisms, structures and powers) which may or may not be realised in open-systems. Causal laws are not empirical statements about particular events but about the tendencies of generative mechanisms, structures and powers which may or may not be actualised in open systems. (97)

To take account of these different aspects of causality in

open systems the realist argues that we have to work with three distinct ontological levels. These are: (i) the empirical, (ii) the actual, and (iii) the real. Experience is located on the level of the empirical, events are located on the level of the actual, and generative mechanisms are located on the level of the real. In the scientific experiment all of these levels are brought into phase under the conditions of experimental closure in such a manner that the tendencies of generative mechanisms are allowed to occur without external interference and thus the scientist can establish a recurrent pattern of events which are empirically experienced. However, in order to bring about this contingent set of conditions into being in the experimental situation, it is necessary for the scientist to construct theoretical concepts which adequately depict the real generative mechanism and, also, to set up operational test conditions which will allow him to bring into being the patterns of events which will allow him to identify the tendencies of the generative mechanism. This is quite clearly a theoretical and social production which is not given ad libitum from nature.

The essence of causal laws then are that they are normic or transfactual statements about the tendencies of things. (98)
In open-systems these tendencies may be off-set by the countervailing tendencies of other generative mechanisms. The main point, however, is that if we know a generative mechanism is in operation and we know that other generative mechanisms are also in play then we should be able to explain

why the tendencies of one generative mechanism were not actualised due to countervailing tendencies in the other mechanism. This is exactly the realm of applied science which differentiates it from pure experimental science.

Retroduction

In order to take account of this distinction, the realist argues that it is necessary to conceive the world of the interaction of generative mechanisms as stratified. It is by treating laws as normic or tendency statements about the behaviour of real mechanisms or structures operating on the level of the real that we are able to explain the events which actually occur and which we experience randomly in open-systems. The phenomena we experience on the empirical level are the effects of operational structures and mechanisms. However, the realist cannot assert a priori that one particular mechanism or structure is operative, s/he needs to be in a position to identify and corroborate that a set of antecedent conditions have been instantiated before s/he can claim that a generative mechanism or structure has been set in motion. The criteria for the identification and corroboration must necessarily be empirically grounded. The stratification of the world requires that scientific laws take the form of normic or tendency statements and the ultimate referents of science are the tendencies of things and not empirical generalisations. Scientists make use of the domains of the empirical and the actual to discover these referents and to explain their interaction in concrete causal

contexts.

When the scientist applies law statements in open-systems s/he is not attempting to "confirm" or "falsify" theories but is attempting to explain phenomenon with the aid of an existing body of scientific theory. The method the scientist uses is neither an inductive nor a deductive analytic but is in fact a retroductive analytic. By the retroductive method the scientist applies relevant theories to antecedent events and states of affairs which s/he wishes to explain, i.e. s/he identifies her/his explananda and reasons towards her/his explanans. (99) Retroduction involves the scientist in utilising relevant independently confirmed theories in order to reconstruct the phenomena and events s/he wishes to explain within an explanatory format. Retroduction is essentially a form of conjunctural analysis. The application of theories in conjunctural analysis means that the scientist has to isolate the number and types of mechanisms and structures which are operative, their articulation and their effects. (100) In conjunctural analysis the scientist is applying theory to a set of events which s/he sees as causally relevant and s/he is not normally constructing new theories. Conjunctural analysis is the analysis of causal events in open-systems and not experimental situations. This is exactly the division between pure and applied science. These are two distinct types of theoretical activity. Thus:

The applied scientist must be adept at analysing a situation as a whole, of things at different levels at once, recognising clues, piecing together diverse bits of information and assessing the

likely outcomes of different courses of action. The pure scientist, on the other hand, deliberately excludes, whereas the applied scientist seeks always to accommodate, the effects of intervening levels of reality. He holds to the object of inquiry. The applied scientist is an instrumentalist and a conservative, the pure scientist is a realist and a revolutionary. (101)

Retroduction in conjunctural analysis involves four distinct methodological steps. These are; (i) a causal analysis of events or phenomena in which each event or phenomenon is broken down into its components, (ii) a theoretical redescription of the component causes of these events and phenomena so that the different types of mechanism and structure generating these events and phenomena can be theoretically introduced to explain the events and phenomena in question, (iii) a retroduction through normic and tendency statements to possible antecedent states which produced the operation of the mechanism and structure, and, (iv) an elimination of alternative causes of the event. (102)

It should be clear from the methodological protocols of retroduction that any attempt at conceptual system building in the form of a general theory which attempts to offer a comprehensive explanation of all of the phenomena in a particular concrete situation must be rejected as a theoretical Utopia. No single theory is likely to comprehend or explain the totality of determinations and causal factors which are operative in a concrete situation. This theoretical Utopianism amounts to "conflating the determinancy of the real world with determinancy as a property of a given theoretical system, thereby aiming to explain the former in

terms of the latter." (103) Thus, in any concrete analysis we need to engage in an analysis of the many causal determinations which are combined in the concrete situation and to theoretically describe how they are connected as antecedent conditions in the particular contingent structure of causation. This involves applying antecedently established theories to explain particular aspects of different generative mechanisms in the concrete situation. It also involves explaining the different effects and counter-effects the different generative mechanisms have upon each other in terms of the tendencies of these mechanisms. This methodological approach rules out of court any attempt to apply a global theoretical explanation to the concrete situation. Rather, an adequate theoretical explanation requires the connection of a number of theoretical explanations which comprehensively "cover" and explain the mechanisms and events in any particular concrete situation. The formation and articulation of theoretical explanations in such a context becomes exceedingly complex but it is a complexity which must always be empirically, actually and really grounded.

SUMMARY

In this chapter I attempted to provide an analysis of the methodological protocols of the empiricist and positivist theory of knowledge. I demonstrated that where empiricism is essentially inductive in character, positivism attempts to substantiate empiricist epistemology in a logically rigorous

manner by reconstructing the inductive tenets of empiricism in a logically deductive form. I showed how both methodological strategies were subject to critique on three elements central to their coherence: Firstly, conventional and rationalist philosophers of science have shown the concept of experience to be theory-laden rather than theory-neutral as the empiricists claim. Secondly, I demonstrated how the empiricist theory of ontology, which perceives the world as made up of simple immediate empirical elements, cannot account for elements in scientific discourse which are not themselves empirical referents. Finally, I showed how the empiricist account of causality can only explain events and their concurrence in closed-systems on the basis of sequential relations. According to this account there was a necessary correspondence between explanation and prediction.

I then outlined the main themes in a realist alternative to the empiricist account of knowledge which addressed the issues raised in the critique of empiricism. I showed how the realist develops an alternative theory of ontology which enables realism to account for theoretical entities such as electrons and atoms etc. in a materialist rather than a formalist manner. Ontological realism conceptualises the world as consisting of three ontological layers: the empirical, the actual and the real. Our experiences of the world occur at the empirical level, events occur at the level of the actual and the generative mechanisms which generate these events are operative at the level of the real. Realism defines scientific experience as being socially structured in

the context of experimental activity where scientists test their theories under ideally controlled conditions which bring all three distinct ontological levels into phase with each other. It is only under this condition of experimental closure that these ontological levels are normally in phase. In the normal working of cause and effect in nature these levels are out of phase.

The realist theory of causality takes causal order into consideration in open-systems by maintaining that events are caused by generative mechanisms and maintaining that causal laws are nothing other than the tendencies of these generative mechanisms. In order to apply causal analysis to open-systems the realist operates with a retroductive analytic. This method allows the realist to isolate the different mechanisms operating in causal conjunctures and to explain events by taking into account the operation of countervailing and intervening tendencies from different generative mechanisms.

In the remainder of this thesis I will attempt to apply the retroductive analytic to the conditions of poverty and underdevelopment which are prevalent in the north Jordan Valley of the occupied West Bank of Jordan. In attempting to utilise this methodology, I propose to re-interpret a number of debates which have taken place around the notions of "social formations and modes of production" and "the articulation of modes of production" within the framework of the methodological protocols established by realism. This is

important for a number of reasons. first, it allows us to re-interpret these debates in a non-essentialist and non-reductionist manner which can do justice to the multiplicity of causal factors. second, it allows us to move beyond structuralism and global model building to the plurality of structural factors and tendencies and, finally, it lays down the basis for an empirically grounded alternative to rationalism.

NOTES AND REFERENCES

1. Quoted in Norman Geras, "Marx and the Critique of Political Economy", in Robin Blackburn Ed., Ideology in the Social Sciences. (Glasgow, 1972). p.286.

2. David and Judith Willer argue that empiricist forms of knowledge are one type of knowledge and it can be differentiated from other types of knowledge forms, namely rational and abstractive knowledge. Empirical knowledge articulates connections between elements on an observational level. Rationalism articulates logical connections between unobservables on a theoretical level. Abstractive thought connects the theoretical to the observational level. Science, they argue, synthesises all three forms of knowledge. See, Systematic Empiricism: Critique of Psuedoscience, (New Jersey, 1973).

3. For an account of the former see, R. Harre and E. H. Madden, Causal Powers, (Oxford, 1975). Also, A. F. Chalmers, What is This Thing Called Science?, (Milton Keynes, 1976). For an account of deductivism see, inter alia, M. Hesse, "Models Versus Paradigms in the Natural Sciences", in L. Collins Ed., The Uses of Models in the Social Sciences, (London, 1976). B. Hindess, Philosophy and Methodology in the Social Sciences, (Sussex, 1977). E. Nagel, The Structure of Science, (London, 1961) R. Keat and J. Urry, Social Theory as Science, (London, 1975). T. Benton, The Philosophical Foundation of the Three Sociologies. (London, 1977).

4. For the historical background to empiricism see, C. Hill, The Intellectual Origins of the English Revolution, (Oxford, 1965) and L. Kolakowski, Positivist Philosophy, (Harmondsworth, 1972).

5. Hindess, op cit., Willer op cit., also, P. Anderson, "Components of the National Culture", in A. Cockburn and R. Blackburn Eds., Student Power, (Harmondsworth, 1969). G. Steedman-Jones, "History: The Poverty of Empiricism", in R. Blackburn Ed., Ideology in the Social Sciences, (Glasgow, 1972).

6. For Plato see, F. M. Cornford, Plato's Theory of Knowledge, (London, 1933). For Kant see, I. Kant, Immanuel Kant's Critique of Pure Reason, (New York, 1966). For Spinoza see, S. Hampshire, Spinoza, (Harmondsworth, 1951).

7. See, L. Althusser, For Marx, (London, 1970), Lenin and Philosophy and Other Essays, (London, 1971) and Politics and History, (London, 1972), L. Althusser and E. Balibar, Reading Capital, (London, 1970). G. Bachelard, The Psychoanalysis of Fire, (Boston, 1964). P. Feyerabend, Against Method, (London, 1975) and Science in a Free Society, (London, 1978). T. S. Kuhn, The Structure of Scientific Revolutions, (Chicago, 1970). I. Lakatos and P. M. Musgrave, Criticism and the Growth of Knowledge, (Cambridge, 1970).

8. Benton, op cit., Keat and Urry op cit., Harre and Madden, op cit., R Bhaskar, A Realist Theory of Science, (Sussex, 1975). R. Harre, Principles of Scientific Thinking, (London, 1970) and Philosophies of Science, (Oxford, 1972). N. Hanson, Patterns of Discovery, (Cambridge, 1963) and Observation and Explanation, (London, 1972). M. Hesse, In

Defense of Objectivity, (Oxford, 1973) and Models and Analogies in Science, (Indianapolis, 1966).

9. For Marx see, in particular, "The 1857 Introduction" to Grundrisse, (Harmondsworth, 1973) and "1859 Preface" to A Contribution to a Critique of Political Economy, (London, 1971). For Aristotle see, Metaphysics, (Oxford, 1924).

10. I do not at this stage want to bring up the hoary dilemma which once again seems to haunt the social sciences, i.e. the dilemma of science versus common-sense. I believe that the polarisation and dichotomisation of the problem is misconceived. Common-sense may be established in such a manner that it reflects, albeit simplicistically, scientific knowledge (but it is not in itself scientific knowledge), e.g. most people understand that if they do not eat food or drink over a sustained period of time then they will eventually die. This requires a minimum knowledge of the dietary and energy requirements of the human body without necessarily being well grounded in knowledge of human physiology or biology. Clearly this type of knowledge has a scientific basis without itself being that basis.

11. See, Hindess op cit pp. 114-33, Benton op cit pp. 21-22.

12. See, J. Locke, An Essay Concerning Human Understanding, (Oxford, 1975), p. 122.

13. Willers' op cit p.7.

14. See, inter alia, Chalmers op cit pp. 2-3, Benton op cit p.21, Hindess op cit pp. 123-29.

15. Popper has quite accurately called this theory the "bucket theory of mind", see, Objective Knowledge, (Oxford, 1972), pp. 7-8

16. See, inter alia. J. Piaget, The Child's Construction of Reality. C. Levi-Strauss, The Savage Mind.

17. I would concur with Hampshire when he says:

The deepest mistake in empiricist theories of perception, descending from Berkley to Hume, has been the representation of human beings as passive observers receiving impressions from "outside" of the mind, where the "outside" includes our own bodies. In fact I find myself from the beginning able to act upon objects around me. In this context to act is to move at will my own body, that persisting physical thing, and thereby to bring about perceived movements of other physical things. I not only perceive my body I also control it: I not only perceive external objects, I also manipulate them... it is therefore wrong to represent experiences of the external world as some synthesis of impressions of each of the five senses. A physical object is recognised as a potential obstruction, or as something to be manipulated, occupying a definite position in relation to me at the moment of perception. (Thought and Action, (London, 1965) pp. 47-48)

18. Benton op cit p.22.

19. I shall consistently argue that all epistemology requires an ontology and vice versa. There has been a recent tendency, in debates in the social sciences, to forget that to explain is not merely to construct a theory but to construct a theory which explains something.

20. See, Harre and Madden op cit pp. 3-4, 40-42, 54-56, 109-131, also, Bhaskar op cit pp. 75-82, 105-118.

21. See, Hindess op cit pp. 125-26.

22. See, Benton op cit pp. 46-53.

23. ibid. pp.73-75.

24. Willers' op cit pp. 13-14, 33-87.

25. See, Chalmers op cit pp. 1-10.

26. Bhaskar op cit pp. 26-29.
27. Reading Capital p.30.
28. Willers' op cit pp. 14-32.
29. Hindess op cit pp.115-116.
30. Science and its Background p.145.
31. See, Benton op cit p.22
32. Willers' op cit pp. 14-16.
33. See, Chalmers op cit pp. 2-3.
34. D. Hume, Treatise on Human Nature Book 1, (Oxford, 1978) p.91.
35. ibid.
36. B. Russell, A History of Western Philosophy, (London, 1961), p. 689.
37. op cit p.17
38. ibid. pp.16-18.
39. ibid. pp.28-32.
40. ibid. p.31.
41. Bhaskar op cit p.18.
42. ibid. pp. 41-42.
43. ibid. pp. 56-62.
44. Willers' op cit pp. 30-31.
45. See, Harre (1972) op cit pp. 27-43.
46. ibid.
47. See, Bhaskar op cit pp. 45-50.
48. op cit p.27.
49. ibid.
50. An Inquiry Concerning Human Understanding p.17.
51. See, Keat and Urry op cit pp. 13-14, Benton op cit pp. 60-61.

52. For a useful introductory account of positivism see, Harre (1972) pp. 53-60.

53. For the distinction between nineteenth and twentieth century positivists see, Benton op cit.

54. Positivist philosophy is largely associated with the work of August Comte, who set out to classify the "laws of historical development" of society and to highlight which social forms were coming to being so that science could indicate the appropriate course of action to take in order to cure or prevent civil disruption. Positivist philosophy in this form still has its practitioners and advocates in contemporary social science, e.g. "stagist" Marxism and theorists of "industrialism".

55. See, Keat and Urry op cit chapter 1.

56. See, inter alia, ibid. pp. 9-13, 27-30, 35-36. 40-42, 87-88, Benton op cit pp. 64-78.

57. Nagel op cit

58. See, Benton op cit pp. 64-67.

59. Hesse op cit pp. 1-16.

60. Benton op cit pp. 48-49.

61. Keat and Urry op cit p.10.

62. ibid. pp. 10-11.

63. See, "Truth, Rationality and the Growth of Scientific Knowledge", in Conjectures and Refutations, (London, 1963).

64. See, Benton op cit pp. 56-57.

65. ibid. p.57.

66. Popper op cit p.972.

67. See, Benton op cit pp. 49-53, also Popper op cit pp. 39-42.

68. *ibid.*
69. *ibid.* pp.228-48.
70. See, Chamlers *op cit* pp. 20-31.
71. Benton *op cit* pp. 48-53
72. C. Hempel, "The Theoreticians Dilemma: A Study of the Logic of Theory Construction", in Freigl, Scriven and Maxwell (Eds) Minnasotta Studies in the Philosophy of Science vol II p.177.
73. See, Bhaskar *op cit* pp. 56-62.
74. Hempel *op cit* p,177.
75. Ryan *op cit* p.90.
76. Keat and Urry *op cit* pp. 20-39.
77. Chalmers *op cit* pp. 25-30.
78. See, Hume on Belief.
79. Harre and Madden *op cit* pp. 27-41.
80. See, "Introduction" to Critique of Pure Reason.
81. The Logic of Scientific Discovery. (London, 1959), p.53.
82. Namely those made by conventionalism and realism.
83. Chalmers *op cit*.
84. *ibid.*
85. Kuhn *op cit* p.118.
86. See, inparticular, B. Hindess and P. Q. Hirst, Pre-Capitalist Modes of Production. (London, 1975). pp. 2-3 and 182-83.
87. This is particularly true of the intervention of Hindess and Hirst in British academic social science. Their work attacked the entrenched empiricist tradition in social science by way of the production of formal concepts without

outlining strategies for testing and corroborating theories in concrete analysis. Their formalist account of scientific endeavour proceeded not by the empirical testing of theories against concrete reality but by way of a subjective and formal process of auto-critique. While I would totally concur with Hindess and Hirst that all theories must satisfy internal canons of proof, i.e. they should be logically non-contradictory, this does not take us very far, since it is quite possible for the objects of discourse to be formally non-contradictory without being real objects, i.e. objects which have ontological reality. If we wish to discover which types of things there are and the nature of events in the world then we have to gain purchase to this through empirical procedures. This is not empiricist but does require empirical referencing. These issues will be brought out further in the next chapter where I look at the problem from within concrete theoretical perspective. For a relevant critique of their work see, John Taylor, "Pre-Capitalist Modes of Production", in Critique of Anthropology, Nos 4 and 5/6. Autumn 1975 and Spring 1976.

88. See, Althusser

89. See, Bhaskar op cit.

90. See, ibid pp.21-24.

91. See, ibid pp.241-42.

92. See, ibid pp. 12-17, 56-62.

93. Compare, M. Godelier, Rationality and Irrationality in Economics (New York, 1973), pp. xiii - xlii.

94. It is at this point that the realist is able to offer a solution to Nagel's dilemma on a materialist basis without

recourse to formalism or idealism, since theoretical entities are hypostatized real entities and not merely formal ones.

95. See, Bhaskar op cit pp. 74-76.

96. ibid. pp. 117-126.

97. ibid pp. 229-38.

98. ibid pp. 109-126

99. See, D. Sayer, Marx's Method, (Sussex, 1979), pp. 113-115.

100. op cit pp. 118-26.

101. ibid p. 120

102. ibid p.125

103. Bob Jessop, The Capitalist State, (Oxford, 1982), p.212.

CHAPTER 2: METHODOLOGY, SUBJECT, THEORY AND METHODS OF CONSTRUCTION

In this chapter I will outline the realist methodology utilised and some of the basic theoretical concepts used to describe the regional relations of production and ground the explanation of the phenomenon of poverty and underdevelopment in the peasant sector of the north Jordan Valley of the occupied West Bank of Jordan. These concepts shall be developed and re-constructed throughout this thesis in a manner which reflects the retroductive methodology of realism. In section II I present a very brief description of the region which provides some indication of the level and form of poverty and underdevelopment. Section III outlines the basic parameters of the debate over the articulation of modes of production and draws out the key concepts of the debate in a manner which is compatible with the research protocols of methodological realism. Finally, in section IV, I briefly explain the main methods used in constructing the study.

I. METHODOLOGY

For the realist the world exists as a real/concrete entity composed of a complex combination of structures or generative mechanisms (the level of the real) and their multiple determinations (the level of the actual). This real/concrete is composed of multiple causal mechanisms, is ontologically stratified and structurally pluralistic. The function of

realist epistemology and methodology is to reproduce this real/concrete in a conceptual formation which identifies what type of things there are, the internal pattern of determination of these things and the pattern of determination between different things in their interaction.

This occurs by means of a distinctly realist process of theoretical abstraction and concept formation through which we gain purchase on the stratified and pluralistic nature of reality by deconstructing it into its most simple constituent components and structures and by isolating their specific internal determinations - powers, tendencies, counter tendencies, etc. (1) This process can be seen quite clearly in Marx's method of presentation in Capital volume 1, where the constituent elements of the capitalist mode of production are deconstructed/reconstructed, viz. commodities, labour process, valorisation process, constant and variable capital, surplus value (absolute and relative) and the rate of surplus value, etc. (2) By this method we bring out the patterns of determination in the form of simplified abstractions. From these simple abstractions we can then begin to theoretically reconstitute the stratified nature of the real/concrete in a process of combination of concepts derived from the simple abstractions. These conceptual combinations are formed into conceptual complexes, which, as they become more intricate, more accurately approximate to the real/concrete. (3) This is what I take to be the essence of Marx's method of concept formation in Capital. (4)

The methodological protocols for this procedure derive from analysing the real/concrete in its empirical manifestations but not being content to remain merely at an empirical plane of reference. Thus, the process of theoretical abstraction does not locate determination at the level of empirical correlation and generalisation qua empiricism, but posits real entities which underly and cause the actual pattern of empirical determination we discover.

Realism is primarily concerned with the "actual intrinsic relations" and objects which determine the pattern of empirically observable phenomena. (5) Unlike formalism this method utilises empirical reference in the construction of abstract concepts but it utilises reference with more ontological depth than is to be discovered in empiricism, since it underwrites empirical phenomena with real entities or "real relations" which underly empirical reference. (6)

It is only by adopting some form of realist approach - Marx would have called it a (historical) materialist approach - that we can transcend the limits of formalist and empiricist methodology and do justice to the complexity of concrete situations which are structured by a multiplicity of causal factors, structures and mechanisms. It is with this approach in mind that I will attempt to specify the main concepts which will allow us to analyse the relations of production and reproduction and explain the conditions of poverty and underdevelopment among the peasant population in the Jordan Valley. However, before turning directly to this task I will

present a brief description of the social setting of the north Jordan Valley where the conceptual contextualisation and analysis will take place.

II. THE SETTING

The area which forms the context of my specification of these peasant relations of production and reproduction is the northernmost sector of the Jordan Valley inside the West Bank. Located here are the villages of Bardala, 'Ain al Beda, Marj Najeh, Zbeidat, Jiftlik, Frush Bet Dajan and 'Ain Shibli. The area in which the villages are located forms a triangle bounded on the east by the River Jordan, from Jiftlik in the south to Bardala in the north, and bounded on the north west by Ghor al Far'a, from Jiftlik in the south to 'Ain Shibli in the north west. (7)

The topography of the Jordan Valley is unique. It is the lowest open place on the earth's surface ranging between 200 - 300 metres below sea-level. It has an arid climate with, on average, less than 250 millimetres of rainfall per year. The winter climate is temperate and rarely falls below 10 degrees centigrade, while the summer temperature is, on average, a very hot 38 degrees centigrade. (8) Temperate winters have enabled Jordan Valley peasant farmers to produce winter crops which normally obtain higher market prices than those produced in the spring and summer seasons due to supply and demand factors.

A major outstanding problem facing Palestinian farmers in the Jordan Valley is the limited availability of water. This is not particularly a natural or even an economic problem but is essentially a political one. The Israeli military authorities have consistently refused to grant licenses for the drilling of wells to Palestinian farmers. (9) Only a few new wells have been dug in the Palestinian sector since 1967 and a considerable number have been closed down by the military authorities. Existent Palestinian wells are no more than 100 metres deep while wells in the Israeli sector range from 100 to 600 metres in depth. (10) These deeper Israeli wells have lowered the ground-water table and have affected the quality of water available to Palestinian farmers. These farmers now find a higher saline content in the water than in the past.

Agricultural and Agrarian Characteristics

The unique topographical and climatic conditions of the Jordan Valley have enabled the region to be placed at the forefront of a veritable "green revolution" in agriculture. During the early 1970's a number of foreign non-governmental organisations (NGO's) became interested in what they perceived as the backward rural production conditions and underdeveloped social conditions prevalent in the region. They proceeded to make development interventions into the local community modelled along classical diffusionist lines. That is, they perceived the problem of agrarian poverty and underdevelopment, the constraining factors posed by Israeli rule notwithstanding, as essentially a technological problem

stemming. in the main, from technological backwardness vis-a-vis local, national and international market competitors.

(11) The main policy to emerge was one geared to sending agricultural extension agents into the region to disseminate technical and technological knowledge about new equipment, plant species, seedlings, fertilizers and insecticides. This equipment was then made available through international aid transfers provided by foreign NGO's. The efforts of the NGO's resulted in a radical change in the pattern of agriculture in the region. (12) Thus, peasant farming in the region became bio-chemically based and augmented by plastic water irrigation systems. (13) The major change involved:

- (a) the cross-over from traditional earth-furrow irrigation systems to plastic pipe drip irrigation systems,
- (b) the change from local seed strains to high yield hybrid strains with saline resistant properties, and,
- (c) the move from organic to inorganic fertilizers.

This "Green Revolution" had important consequences for the pattern and extent of crop production. Subsistence production has become marginalised; almost 70% of all farmers reported that they did not produce any crops purely for household consumption. (14) Concomitant with long-term marginalisation of subsistence production had been a move to specialisation in a few vegetable crops and the development of what is potentially a regional export enclave economy. (16) Of the 19,620 dunums under cultivation, 72% were producing vegetables, 5% fruit and 23% field crops (see, Table 1). Of the 14,063.5 dunums under vegetable production 40% of these

were producing tomatoes. Tomatoes, aubergines, courgettes and cucumbers accounted for 78% of all vegetable production. Tomatoes were also the major export crop with over half of all tomatoes produced being directly exported from the farm to Jordan.

Table 1: Dunumage* of Crop Production By Crop and Agrarian Class

Crop	Share-cropper	Shepherd	Cash Tenant	Small-holder	Landlord	Total
Vegetables	10182.5	326.5	1284.0	1989.5	281.0	14063.5
Fruit	342.0	33.5	67.5	377.5	159.5	980.0
Field crops	2896.5	257.5	165.5	1087.5	169.5	4576.5
TOTAL	13421.0	617.5	1517.0	3454.5	610.0	19620.0

* 1 dunum = 1000 square metres

The basic agrarian characteristics show that a total of 17,510 dunums were held in three landholding forms - private ownership, cash rental and share tenancy - by four class categories - sharecroppers, farming-shepherds, cash tenants and smallholders (see Table 2).

Share tenancy was the most extensive form of landholding with 63% of all plots of tenured land held by sharecroppers, while land tenured under personal ownership and cash rental was almost at parity as 17% and 19% of all tenured land was held in these forms, respectively. The mean for holding in each of these forms was varied. The mean size of private ownership was 32.2 dunums, 24.7 dunums for smallholding and 39.9 dunums

for cash tenancy. The arithmetic mean is not, however, a very good measure of distribution in this case because one or two large holdings increase the average significantly. A better measure is the mode. The modes for the different forms of holding were: personal ownership 10-14 dunums, cash rent 5-9 dunums and share rent 20-24 dunums.

Table 2: Forms of Landholding By Agrarian Class (in dunums)

Landholding Form	Share-cropper	Shepherd	Cash Tenant	Small-holder	Total
Owned	753	159	198	1912	3022
Cash rented	1226	260	1478	416	3380
Share rented	9899	198	284	727	11108
TOTAL	11878	617	1960	3055	17510

The above data show that sharecropping constituted the most extensive form of landholding and it also accounted for 72% of individual landholdings (see, Table 3). While smallholders accounted for 17%, cash tenants 8%, and shepherd-farmers 3% of the individual landholdings. Quite clearly sharecropping was the dominant form of land tenure and agrarian class relationship. There were, however, village variations to the general pattern. For example, in Jiftlik, 'Ain Shibli, Bardala and 'Ain al Beda sharecropping was the dominant tenure form, constituting 89%, 86%, 68% and 73% of the tenures of these respective villages. Sharecropping was marginally predominant in Zbeidat also, but here cash tenancy was more important than in any other village constituting 36%

of the village tenures. In Marj Najeh smallholding was the dominant form of tenure (58%). In Frush Bet Dajan sharecropping and smallholding were almost equal, constituting 44% and 40% of the village tenures respectively.

Table 3: Village By Agrarian Class

Village	Share-cropper	Shepherd	Cash Tenant	Small-holder	Total
Bardala	52	3	3	18	76
'Ain al Beda	74	0	6	22	102
Marj Najeh	9	0	2	15	26
Zbeidat	31	3	20	1	55
Jiftlik	208	6	7	12	233
Frush Bet Dajan	26	5	4	24	59
Other	3	0	2	3	8
'Ain Shibli	6	0	1	0	7
TOTAL	409	17	45	95	566

Sociographic Characteristics

The total population of the seven village was 5451 persons. This was equivalent to 0.7% of the total population of the West Bank in 1983. The villages varied widely in their population distributions, as the following table shows. The village of Jiftlik is, by far, the largest in the area and 45% of the regional adult population lives in this one village (see, Table 4).

The north Jordan Valley is an almost exclusively peasant-based agricultural economy dependent upon small-scale household production. In 1983, 74% of the adult population

worked in the agricultural sector. Only 2% of the resident adult population was engaged in the commercial or industrial sector, both of which are completely undeveloped in the region. Commuter proletarianization of the local work force was marginal and only 7% of the adult population was engaged as wage labourers.

Table 4: Village Adult Population By Sex

Village	Male	Female	Total
Bardala	171	176	346
'Ain al Beda	186	201	387
Marj Najeh	65	73	138
Zbeidat	108	118	226
Jiftlik	599	601	1200
Frush Bet Dajan	136	144	282
Other	12	0	12
'Ain Shibli	35	40	75
TOTAL	1314	1353	2667

The general adult (15 years and over) illiteracy rate was 47.7%, while the gender specific illiteracy rates were 64.4% for adult females and 30.4% for adult males. Only 56.1% of the adult population had attended school for some period in their life. Of those who had attended school only 10.3% had stayed on after 15 years of age and 52.2% never remained beyond elementary level. Only 4.0% of the adult population had qualified to the level of final leaving examination (the tawjihi). Of the adult female population only 0.7% qualified in the tawjihi. Further, there were only 28 university graduates and students residing in the region, six of whom

were female.

Housing conditions in all but one village (Zbeidat) were squalid and cramped. The majority of houses consisted of mud brick constructions and one-room shacks. Overcrowding was a serious problem with an average housing density of 5 persons per room. Moreover, 67.0% of houses had no latrine facility and 79.5% had no electricity. Most cooking was carried out on primus stoves. These households have continually been refused licenses by the Israeli military authorities to up-grade the standard of their housing. Furthermore, the majority of village families have no running water. Water has to be carried from canals and wells and is stored in earthenware jars and oil drums. The water from the canals is untreated and the water from the wells is of poor quality with a high saline content. The existing water situation is a factor contributing to the high mortality and morbidity rates, through acting as a vector of disease. (16)

All these empirical indicators point to a community experiencing an exceptionally high co-efficient of underdevelopment and poverty. But clearly these indices do not explain why the community is underdeveloped. These indices are the direct and indirect resultants of determinant social processes and generative mechanisms which can be located along two axes. These are, on the one hand, the social relations of production and reproduction operative in the region, and on the other hand, the policies and practices of the Israeli state, particularly as they are represented in

the authorities of military occupation. In the framework which follows I will pay rather more attention to the social relations of production axis than to, what we might provisionally call, the settler colonial state axis.

While it is possible to outline the variety of theoretical paradigms operative in the analysis of the Third World, which could help to explain poverty and underdevelopment in the north Jordan Valley - e.g. modernisation theory, development theory, peasant society theory, dependency theory and the critique of underdevelopment (17) - this would be a rather sterile exercise since these different conceptual approaches are either paradigmatically incommensurable or limited in analytic and explanatory scope. (18) Rather, I will attempt to positively outline the most salient concepts for a Marxist-realist analysis of the phenomenon of underdevelopment. (19) I will then proceed to utilise these concepts in a concrete analysis of social relations in the north Jordan Valley.

III. SOCIAL FORMATION AND MODES OF PRODUCTION OR THE ARTICULATION OF MODES OF PRODUCTION

For a long period in its historical development much Marxist historiography and social theory has been marred by a contradictory teleological strand. This is grounded on the assumption, either implicit or explicit, that pre-capitalist forms of production would eventually be superceded by the capitalist mode of production. Among the purveyors of this

view, it was a taken for granted truth that the internal logic of capitalist expansion and accumulation carried within it the seeds of the dissolution of non-capitalist modes of production. (20) Indeed, there is much in Marx's own writing, particularly his polemical and journalistic works, which gives credence to this view. (21)

This conception, however, does not fit very well with historical reality, particularly the historical reality of agrarian communities in the Third World. Numerous divergent theorists, operating at both macro-level and micro-level analysis, have argued, for a variety of different reasons, that the unilinear/stagist assumptions embodied in this perspective are not only false, but dangerously so.

The authors of the Latin American dependent development school, for example, have argued with some justification, that, far from laying the conditions for the dissolution of non-capitalist relations of production, the penetration of foreign based capitalism has resulted, in the Latin American experience, in the integration of "dependent capitalism" and backward rural production. (22) Thus, Andre Gunder Frank argues that:

The monopoly capitalist structure and the surplus expropriation/appropriation contradiction run through the entire Chilean [and Latin American AP] economy, past and present. Indeed it is this exploitative relation which in chain-like fashion extends the capitalist link between the capitalist world and national metropolises to the regional centers (part of whose surplus they appropriate), and from these to local centers, and so on to large

landowners or merchants who expropriate surplus from small peasants or tenants, and sometimes even from these latter to landless laborers exploited by them in turn. At each step along the way, the relatively few capitalists above exercise monopoly power over the many below, expropriating some or all of their economic surplus and, to the extent that they are not expropriated in turn by the still fewer above them, appropriating it for their own use. Thus at each point, the international, national and local capitalist system generates economic development for the few and underdevelopment for the many. (23)

Similarly in Africa, Samir Amin has argued that the normal pattern of development in the Third World is "peripheral capitalism": a form of capitalism which is extraverted and externally oriented. Peripheral capitalism is a "blocked-capitalism" in which the export production sector and the import consumption sector are perversely related in a manner which does not conform to the pattern of capitalist development which occurred in the capitalist centres (autocentric capitalism). (24) The process of capitalist development in the Third World periphery consists of:

The distortion toward export activities (extraversion) ... does not result from the 'inadequacy of the home market'. But from the superior productivity of the centre in all fields, which compels the periphery to confine itself to the role of complementary supplier of products for the production of which it possesses a natural advantage: exotic agricultural produce and minerals. When, as a result of this distortion, the level of wages in the periphery has become lower, for the same productivity, than at the centre, a limited development of industries focussed on the home market of the periphery will have become possible, while at the same time exchange will become unequal. The subsequent pattern of industrialization through import-substitution, together with the (as yet embryonic) effects of the new international division of labour inside the transnational firm, do not alter the essential conditions of extraversion, even if they alter the

form it takes. (25)

On a less continental scale and less global in scope, H. Friedmann has shown that in the USA - the heartland of the world capitalist system - household forms of petty-commodity production have been the normal mode of production in the great American wheat-belt. She has demonstrated that the petty-commodity production household has been, by and large, oblivious to the advances of capitalist agriculture. (26) She claims that:

"... the majority of farms in advanced capitalist countries are not themselves capitalist in their internal relations. Most agricultural labour is performed by farmers and their families. Wage labour is quantitatively and qualitatively subordinate to full-time family labour, both for wages earned by farmers off the farm, and for wages paid to outsiders to supplement labour on the farm. Here political economy provides less guidance in practice, through its promise no less in principle. The relevant concept is simple commodity production, not in the vague use prevailing among most political economists and historians, but as a concept whose relations to other concepts of value theory can be precisely specified. (27)

The failure of the unilinear/stagist concept to cope with the contemporary reality of the Third World and agrarian relations in the "developed countries" has led to a series of debates around the notion of modes of production. (28) These debates attempted to take account of the fact that different modes of production can co-exist and be fully integrated into national and international economic contexts. We can quite usefully distinguish three sources of contemporary debate.

First, there is the Indian debate of the late 1970's which centred round the contributions of Alavi, Banaji, Chattopadhyay, Patnaik and Rudra, on the question of whether Indian agriculture could be described as capitalist or not. The Indian debate was essentially substantive, though it did raise a number of theoretical questions which were never adequately resolved. (29)

Rudra inaugurated the debate by attempting to show by inductive statistical methods that Indian agriculture was not "capitalist" and must therefore be feudal in character. (30) The theoretical and methodological basis of this position was criticised by Patnaik who agreed with the substantive point that Indian agriculture was not capitalist in nature. (31) The theoretical issues in the debate were essentially established by the work of Patnaik and Chattopadhyay rather than Rudra. Chattopadhyay argued that there were substantial components of generalised commodity production and sectors where labour power was itself a commodity within Indian agriculture. The sectors where this applied he argued were capitalist in form. (32) Patnaik responded that this was not a sufficient condition to characterise these sectors as capitalist. In order to argue the existence of capitalism, she claimed that these two conditions would have to be accompanied by accumulation through the investment and re-investment of surplus value. Since this was not happening, she argued that capitalism could not be said to exist per se. Patnaik showed that this third condition was absent due to the external imperialist relations imposed on India by

British colonial rule. (33)

Whatever the conceptual differences which separated them both, they perceived the co-existence in Indian agriculture of capitalist and non-capitalist modes of production in a manner similar to those who later talked about the articulation of different modes of production. The same thing cannot be said of Alavi who rejected the notion of modes of production and their interaction. For Alavi, the concept of mode of production was constructed as a grand structural concept whose conditions of existence were expressed throughout the socio-economic formation in economic, political and ideological practices. (34) Alavi argued that the conditions of existence of neither the feudal nor normal capitalist modes of production could be said to be present in India. What existed was a distorted form of capitalism which he conceptualised as the "colonial mode of production". The colonial mode of production is a "disarticulated" and "deformed" mode of production in which:

"... the impact of imperialism was to disarticulate the Indian economy and then reintegrate in components with the metropolitan economy in such a way to preclude the autonomous accumulation of capital within India. (34)

Thus, the colonial mode of production was disarticulated in terms of the component sectors of the Indian economy (the same point is made in other terms by Patnaik) and deformed because of the form of its connection to the imperialist heartland, i.e. the surplus accumulated in the colony was

expatriated to the metropolitan centre and not directly invested in the colony. (36) Now, it is worth mentioning that, although the economy of India may be internally disarticulated, the most important economic sectors are externally connected to the imperialist centres. Thus, internal disarticulation is itself a form of external articulation. (37) Alavi's position bears comparison with Amin's notion of peripheral capitalism. (38)

However, the main problem with this conceptualisation is that its explanatory scope remains globally structuralist and far too general. It is only useful in explaining relations between imperialism and colonialism and does not lend itself very readily to an analysis of the internal dynamics of the Indian economy. This point is highlighted by Banaji who argues that the notion of colonial mode of production cannot explain the prevalence and characteristic form of petty-commodity producers in Indian agriculture or even their incorporation into the "world capitalist system". (39) Banaji's own response to this problem is to argue that the small-scale petty commodity producers of Indian agriculture are effectively incorporated into the world capitalist economy through their labour being "formally subsumed" by small-scale money-lending capitalism. (40) For Banaji, like Alavi, this subsumption is a form of capitalism; an "intermediate" form of capitalism.

Second, we have the Althusserian "reading" of Marx's Capital which culminated in the debate about the conditions of

existence of social formations, modes of production and the combination of modes of production in different social formations. (41) This debate was centred around the contributions of Althusser, Balibar, Hindess, Hirst, Meillassoux, Poulantzas, Rey and Terray. There were a number of important substantive pieces of work to come out of this debate, although the main line of the initial debate was to sustain a rigorous conceptual reading of Marx's mature work. Through this, it was explained that it would be possible to introduce conceptual rigour into modes of Marxist theorising which were seen to be increasingly marked by a sequence of epistemological errors, viz. empiricism, economism, reductionism and humanism.(42) This attempt to proscribe empiricism, by the followers of Althusser, introduced an equally useless list of epistemological errors, viz. theoreticism, rationalism, formalism, logicism, structural-functionalism and non-substantialism.

No matter what the critics take to be the merits and demerits (and there are many) of this work, the Althusserian school stands out as the most important paradigm instrumentally in reasserting the importance of Marx's Capital as an initial logical, conceptual and methodological starting point for analysing contemporary society. (43) With Althusser, western Marxism moved out of its existentialised and re-idealised period which marked the European Marxism of the '50's and '60's. (44) The result of the work of Althusser and his colleagues led to the publication of a number of important books in politics, economics and anthropology which have a

formal conceptual congruence with Marx's later work on politics and political economy. (45) It is in Marx's later work - concerned with the analysis of the capitalist mode of production and the process of the circulation of capital - that we find the closest approximation to the concepts of social formation, mode of production and articulation.

Now, the manner in which these and related concepts have been theorised in contemporary debate is extremely heterogeneous. (46) There is no simple way of categorising the different positions which emerged through this school because they cover both epistemological and substantive issues and very often the differences between the substantive and epistemological issues were not clear. One way of by-passing a great deal of the debate and simplifying it is to focus on the epistemological and ontological issues which underly this school.

Much of the debate as it evolved from the Althusserian tradition was obsessively focused on issues of epistemology and theoretical rigour to the detriment of the methodological application of concepts to concrete historical situations. Althusser has taken himself to task, in an auto-critique, for the error of theoreticism. (47) Theoreticism was always an inherent danger in the work of Althusser and Balibar (the co-author of the English version of Lire le Capital) given that they sought to consolidate Marxism on a rigorous conceptual plane. This well-intentioned project was always likely to lose sight of the empirical and real/concrete underpinnings

of Marx's method of concept formation. (48)

The inherent danger of the Althusserian project became the fundamental theoretical prerequisite in the work of his two earliest British adherents, B. Hindess and P. Hirst, in whose work concrete analysis and concrete example were displaced by a process of purely formal abstractionism. (49) In their work, theory construction became a hermetically sealed universe of concepts and the logical connection between concepts; it is a form of logical deductivism run amok. The implications of their particular contribution to the theory of modes of production is that theoretical work and concept formation can be carried out in separation from the real, the actual and the empirical; from the realm of ontology. For Hindess and Hirst the internal canons of proof of a theory appear to be the only necessary register of its adequacy, i.e. if the relations posited between the concepts of a theory are non-contradictory, in the logical sense, then it is a perfectly adequate theory. Now no one, I hope, would deny the proposition that a theory must satisfy certain internal canons of proof, viz. that the logical relations between concepts must be constructed in a non-contradictory manner. However, when we are dealing with objects which are putated to be ontologically significant - e.g. social relations of domination and subordination articulated in the concepts of modes of production - then we must demand that we combine methodological criteria of external corroboration and reference with logical non-contradiction so that we can identify what type of things there are, i.e. we want to posit

the existence of real objects and their relations rather than merely logical objects and their relations. (50)

The formalist approach to theory construction, most skilfully represented in the work of Hindess and Hirst, offers us only logical objects homologous to the theories of pure mathematics. The formalist approach obfuscates the relation between epistemology and ontology - between the real and knowledge of the real - by completely displacing the ontological conditions of existence of social objects, e.g. modes of production, and the patterns of determination of these objects. In the formalist schema logic replaces history and the logical relations between concepts replaces the concrete determination between social objects. (51)

There are, it seems, two ways out of the dilemma of formalism. One is a return to empiricism. The second is to operate with a realist epistemology. The second approach is, in essence, the approach Marx outlined in his two most important methodological outlines, the 1857 "Introduction" to the Grundrisse and the 1859 "Preface" to A Contribution to a Critique of Political Economy.

Third, is the Laclau-Frank debate which was a debate over Andre Gunder Frank's "neo-Smithian" definition of capitalism and the implications this had, both politically and economically, for understanding and explaining Latin American history. (52) The Latin American debate, in which Frank was initiating a theoretical intervention, had a similar

conceptual object to the Indian mode of production debate, viz. whether Latin American society should be conceptualised as a feudal or a capitalist society. (53)

This was not merely a formal academic debate over the correct conceptual label to affix to Latin America but a highly-charged factional political debate among the Latin American Left which went right to the heart of the correct strategic political goals to be set in the Latin American continent. Those who claimed that Latin American society was feudal in character (the majority of the Latin American Communist Parties) took the strategic position that Latin American Leftist forces should form an alliance with the national bourgeoisie in struggle against the feudal oligarchy and imperialism. (54)

Frank criticised the theoretical assumptions underlying this position on a number of grounds. Firstly, he argued against the stagist theory which assumed that all countries must pass through certain necessary stages of development. (55) Secondly, he showed that the assumptions in the "dual society thesis" of W. A. Lewis, which a number of Latin American Marxists had taken on board as part of their conceptual baggage, was mistaken. This thesis argued that the national economies of Latin American nations were composed of two sectors; one feudal, archaic and underdeveloped and the other capitalist, dynamic and developed. These Marxists argued that the immediate political strategy should be to promote the interests of the national bourgeoisie in order to transform

the backward feudal (normally agricultural) hinterland thus completing the bourgeois democratic revolution and laying the conditions for socialist transformation. Frank showed that, far from being an independent feudal sector, the archaic sector was completely penetrated by the capitalist market and integrated into the capitalist world economy and it was for this reason that this sector was underdeveloped. (56)

While generally agreeing with Frank's critique of the dual society thesis and remaining non-committal towards his critique of political strategy, the Argentinian sociologist Ernesto Laclau was far from satisfied with Frank's definition of capitalism as a world system of exchange characterised by links of monopoly and exploitation through which the developed countries dominate the countries of the Third World. Laclau argued, correctly, that this was not a rigorous Marxist theoretical conceptualisation, since it failed to define capitalism in terms of relations of production but, on the contrary, in terms of national (imperial) power defined at the level of exchange. (57) Laclau argues:

Of course, Frank is at liberty to abstract a mass of historical features and build a model on this basis. He can even, if he wishes, give the resulting entity the name capitalism... But what is wholly unacceptable is the fact that Frank claims that his conception is the Marxist concept of capitalism. Because for Marx - as is obvious to anyone who has even a superficial acquaintance with his works - capitalism was a mode of production. The fundamental economic relationship of capitalism is constituted by the free labourer's sale of his labour power, whose necessary precondition is the loss by the direct producer of ownership of the means of production. (58)

For Laclau, Frank's major theoretical error was to locate the contradiction of underdevelopment in the sphere of circulation and exchange rather than in the sphere of production. This circulationist account can only provide a partial explanation of the phenomenon of underdevelopment. In order to complete the picture Laclau argues that we need to incorporate the analysis of modes of production in terms of their constituent relations of production, i.e. the forms of ownership of the means of production and the forms of economic exploitation. (59) These have to be analysed in conjunction with the "economic system" as a whole in which the mutual relations between the different productive sectors of the economy are brought out on a regional, national and world scale. This form of analysis includes the level of circulation emphasised by Frank. (60)

All three of these sources have elements in common but they are also separated by major theoretical and meta-theoretical differences. For the purposes of my analysis of social relations of productions and their conditions of reproduction in the north Jordan Valley I will attempt to re-interpret some of the basic concepts of this debate within the framework of methodological realism. The key concepts in this re-interpretation are; social formation, modes of production and articulation.

Social Formation

The concept of social formation is normally used to

designate, following contemporary practice, the same object or rather combination of objects which Marx referred to by the notion of "socio-economic formation". In the Marxist classics this was constructed to include the economic system (mode of production), political and legal institutions, and, ideological and cultural formations. (61) This was most commonly expressed in terms of the base/superstructure metaphor. (62)

In the recent debates the social formation is most often functionally conceived as the real/concrete object of conjunctural analysis which is constituted as a complex unity, in which, it is normally said, a particular mode of production is dominant over other modes of production in this combined unity of economic, political and ideological structures and practices. For example, Nicos Poulantzas states that:

The dominance of one mode of production over others in a social formation causes the matrix of this mode of production (i.e. the particular reflection of determination by the economic element in the last instance by which it is specified) to mark the whole of the formation. In this way a historically determined social formation is specified by a particular articulation (through an index of determination and overdetermination) of different economic, political, ideological and theoretical levels and instances. As a general rule, taking account of the dislocation which will be encountered, this articulation is that of the dominant mode of production. (63)

If we discount certain epistemological differences, then Poulantzas' position is a relevant methodological starting point for the analysis of concrete conjunctures inasmuch as

it leads us to focus on a series of different practices (policies and strategies) of political, economic and ideological instances (organisations and institutions). This approach allows us to focus on the totality of elements in a non-reductionist manner. It further allows us to approach the totality as a stratified combination of a plurality of structures and events which are articulated in historically determinate and distinct combinations and effects. My major qualm about Poulantzas' statement of the problem is that there is a methodologically and theoretically unnecessary tendency to structural a priorism. Realist methodology requires no guarantees to the structural domination of one mode of production over others in the social formation. The problem of structural domination, if it exists, is a problem to be explained and conceptualised in the historical analysis of structures and their formation rather than assumed. Moreover, the articulation of the domination of the dominant mode may or may not be completely expressed in the practices and instances of ideology and politics. Only a concrete analysis can bring this out and we have no need for structural guarantees. However, Poulantzas' position is a useful methodological heuristic which is clearly open to interpretation within a realist methodological frame. (64)

Since in the course of this thesis I will be particularly concerned to bring out the structures of the economic instance and their effects on a regional level I will now briefly outline some general comments about the non-economic instances of articulation which are co-terminous with the

economic instances of articulation. These are the political and ideological mechanisms and processes of articulation. The political instance is composed of relations of violence-legitimation and the ideological instance is composed of relations of consent-manipulation. These two instances always have a people-class specificity which is not simply reducible to economic class determination (e.g. bourgeois state or false consciousness). However, they always have a distinct class content if not a class form. (65)

Here I would just like to make a very few provisional and tentative comments on the complex issue of the articulation of the political, ideological and economic instances which will form the backdrop to the more substantive regional study which will follow in the remaining chapters. In analysing the West Bank in the present conjuncture I will start from the proposition that the West Bank has been forcibly integrated into the Israeli social formation through a matrix of relations of political-military domination and economic dependency. Politically the West Bank is dominated by a form of exceptionalist capitalist state. (66) The character of this exceptionalism is settler colonialism and military occupation. (67) I think it is a fundamental misconception to view the state, as opposed to the ideology, as Zionist. The Israeli state is an exceptionalist capitalist state legitimated among the Israeli-Jewish populace on the basis of its expression of the populist contents of Zionist ideology. This ideology is not homogeneous but composed of heterogeneous ideological forms, from labour Zionism with its

myths and symbols signified in the totemic triangle of land, labour and Jewishness, to Gush Emunim with its ideological myths and symbols signified in the holy trinity of Torah, kippah and uzzi (machine pistol). (68) The underlying element of these divergent Zionist ideologies which is popularly expressed/manipulated in the state is Jewishness. This has been the case from David Ben Gurion to Menachem Begin.

In terms of state economic policy in both Israel and the West Bank the Israeli state has consistently represented the interests of Israeli Jewish-capital. In the Occupied Territories the state continues to maintain the conditions necessary for the reproduction of the West Bank as Israel's biggest "external" market next to the USA, e.g. in trade with Israel the West Bank has always had an import surplus in both the industrial and the agricultural sectors (see, Table 5).

Table 5: Imports and Exports Between the West Bank and Israel*

Year	Agricultural Imports From Israel	Agricultural Export to Israel	Industrial Imports From Israel	Industrial Exports to Israel
1978	63.8	29.2	317.5	103.5
1979	117.9	46.8	69.2	182.3
1980	298.5	138.6	1524.8	428.8
1981**	454.3	192.6	2598.4	831.2

* In million Israeli shekel

** For the first third of 1981 (69)

State policy has resulted in economic expansion being restricted to the sector which facilitates Israeli economic

penetration (commercial capital) and the growth in migrant-commuting labour to the Israeli economy or its satellites in the West Bank. (70) There has been no structural development of productive activity in the Palestinian Arab sector of the West Bank economy, which is significantly marked by non-autarky and dependency. (71)

Modes of Production

Contemporary debates on the theory of modes of production have their theoretical lineage in Volume 1 of Capital, where Marx analysed in detail only one particular mode of production; the capitalist mode of production. (72) Marx himself, and the classical Marxists who followed him, never thought it necessary to construct a general concept of non-capitalist modes of production. (73) In the "Formen" section of the Grundrisse, Marx did discuss pre-capitalist modes of production and outlined some general differences between the capitalist mode of production and pre-capitalist modes of production, but at no time did he present a rigorous concept of modes of production in general. This has raised a number of problems for latter day analysts.

A number of Marxists, particularly economists, have a tendency to conceive the capitalist mode of production as including both the production and circulation of commodities (labour, money and products). (75) I think that a fundamental error is instantiated in this position. If this position were correct we would expect divergent modes of

production to have methods of circulation specific to these modes. This is clearly not the case. Let us consider the example of the capitalist mode of production; this form of production involves two analytically distinct processes. The first involves a particular organisation of the labour process in which labour is purchased as a commodity. The second involves a particular mode of expropriating surplus-labour in the form of surplus-value in the valorisation process. (76) These two processes are internal to the capitalist mode of production and distinct from the process of the circulation of commodities.

Historically, commodity markets in produce and money pre-existed the capitalist mode of production. In fact these commodity markets are a necessary antecedent condition for the capitalist mode of production to come into being. But there is no logically compelling reason why we should reduce the capitalist mode of production to its antecedent conditions or to view the antecedent conditions as part of this mode of production per se. These antecedent conditions merely allow us to establish the fact that the market conditions which are necessary for the capitalist mode of production to operate are established. These are necessary but not sufficient conditions which allow us to identify the operation of the capitalist mode of production in a social formation.

Marx himself clearly distinguishes the interrelatedness but structural independence of the capitalist mode of production

(Capital Volume 1), the circuit of commercial capital (Capital Volume 2), the circuit of interest bearing capital (Capital Volume 2) and the effects of the interaction of the three (Capital Volume 3).

The point I wish to extract from this is that the capitalist mode of production is both analytically and, by and large, organisationally distinct from the circuits of commercial and interest bearing capital. However, the reproduction of the capitalist mode of production requires that these organisational forms be combined or articulated as a functioning unity. Once this is grasped we can profitably differentiate between the capitalist mode of production (composed of the labour process and the valorisation process) and the capitalist economic system (composed of the historical articulation of the capitalist mode of production, the circuit of commercial capital and the circuit of interest bearing capital). (77)

The circuits of commercial capital and interest bearing capital are just as often articulated, both historically and contemporaneously, with other modes of production; petty-commodity, feudal, slave and lineage modes of production. (78) All that is required for this articulation to be possible is that a portion of the economic surplus generated in these alternative modes of production be produced as commodities for sale or market exchange. (79)

Having established that I will treat capitalist and non-

capitalist modes of production as analytically distinct from the sectors which facilitate the realisation of surplus value and surplus product. I wish to turn directly to the contemporary debate over modes of production. Harold Wolpe has made the useful analytic distinction between those theorists who work with an extended concept of mode of production (Balibar and Bettelheim) and those who work with a restricted concept of mode of production (Hindess and Hirst, Poulantzas, Laclau and Brenner). (80) In the general formulation of the restricted concept of mode of production "... the definition of the relations and forces of production is held to exhaust the concept of mode of production". (81) While, those who operate with an extended concept of mode of production argue that "... a mechanism of reproduction or laws of motion of the "economy" as a whole" should be incorporated in the conceptualisation of a mode of production. (82)

If we look at the theorists who advocate the extended concept of mode of production we find that they tend towards an economistic resolution of the problem of the mechanism of reproduction or "laws of motion" of the system, i.e. they solve the problem on a purely economic level. Thus, Balibar argues that:

"... the analysis of reproduction shows that every mode of production determines modes of circulation, distribution and consumption as so many moments in its unity. (83)

There are a number of problems with this approach. First, it is never explained, either ostensively or theoretically, how every or even one mode of production determines modes of circulation, distribution and consumption. Second, while I accept that every mode of production will entail an articulation of relations of circulation, distribution and consumption, I do not accept that these relations are linked in a directly causal or even a globally structuralist manner. The manner of their formation is normally linked but at the same time generated by a different source from the generation of the mode of production. It is therefore methodologically inappropriate to attempt theoretically to subsume these relations in the concept of mode of production itself. It is methodologically more fruitful to argue that each of these elements require substantive theorisation within the historical context of their formation and periodisation under different social formations.

A much more interesting answer to the problem, although it suffers from the same problem, is that put forward by Bettelheim in his critique of A. Emmanuel. (84) Bettelheim attempts to link the operation of market exchange back to production relations by arguing that in the capitalist mode of production the Marxist law of value determines the prices of production and the rate of capital accumulation. (85) He further argues that, in capitalist social formations, which are composed of capitalist and non-capitalist modes of production, the relations between different social formations and the tendencies within them are largely determined by the

law of capital accumulation and the law of value. (86) This general tendency is also operative in a hierarchical order on the international level, since:

Within the capitalist world market, the law of value ensures: expanded reproduction of the material and social conditions of worldwide production, a definite pattern of domination and subordination of the different social formations, reproducing the system of places corresponding to these relations of domination and subordination. (87)

In other words, the location of each national formation in the global structure of the world economy has effects on the internal modes of production in the national social formation. These effects are largely determined by the law of value and the rate of accumulation. However, these effects are reduced economic ones and at this level of analysis concerned only with market prices of products. At the global level of analysis, where Bettelheim has set the issue, there is not very much which is contentious about the substantive content, the issue about debate over the relevance of value theory in determining the price of commodities notwithstanding. (88) However, it would be less than appropriate to leave the issue here. This approach says nothing, for example, about the forms of exploitation and differential rates of exploitation of "workers" between capitalist and non-capitalist modes of production nor the forms of "legal", "racial", "familial" or "gender" relations which are just as often mechanisms of subjugation or reproduction of "workers" in capitalist and non-capitalist modes of production. (89) Moreover, these elements are

themselves just as crucial to the determination of prices and rates of accumulation. There is no simple way of theoretically subsuming these determinations into different forms of production nor is it even methodologically necessary. These dynamics have to be analysed in the process of concrete conjunctures and should not be formally subsumed in the concept of mode of production.

These criticisms show that the attempt to construct an extended concept of mode of production are theoretically problematic. While the goal of attempting to formulate an all encompassing theorisation of extended modes of production might appear logically appealing it is hardly likely to accord well with conjunctural reality. The realist point is that we should not just be attempting to locate one prime motor force or law of motion but expect to find numerous different generative mechanisms - not just in the sphere of production relations, but also in the spheres of politics and ideology (in the broadest sense) which impinge on these production relations and shape them - and their multiple effects. We cannot do this very readily utilising the extended concept of mode of production.

Thus, in order to overcome these problems, I will operate with a restricted concept of mode of production and bring out the differential conditions of the reproduction of different modes of production in concrete analysis. Now, in general terms, the concept of a restricted mode of production is a systemic combination of relations and forces of production

which entails a determinate form of ownership of the means of production and a determinate form of appropriation of the product or surplus product produced in the mode concerned.

(90) The form of ownership is a critical aspect because it categorically determines the manner in which appropriation of the economic surplus occurs and the degree of control which the appropriator has over the productive activity of the producers.

For the purposes of conceptual specification of the different forms of non-capitalist modes of production found in the north Jordan Valley I will adopt, with some modifications, Laclau's definition of a mode of production as:

"... the logically and mutually co-ordinated articulation of: 1. a determinate type of ownership of the means of production; 2. a determinate form of appropriation of the economic surplus; 3. a determinate degree of development of the division of labour; 4. a determinate level of development of the productive forces. This is not merely a descriptive enumeration of 'isolated' factors, but a totality defined by its mutual interconnections. With this totality, property in the means of production constitutes the decisive element". (91)

I contend that Laclau's definition encompasses, at this level of abstraction, the necessary conceptual elements for (re-) constituting the different modes of production in Marxist discourse; the feudal mode of production, the capitalist mode of production, the petty-commodity mode of production, the slave mode of production etc. Moreover, it should enable us to construct the concepts of modes of production not found in

Marx's discourse, e.g. the lineage mode of production and the sharecropping mode of production.

However, I would like to make a few comments on the last two elements in his specification of a mode of production. If by "determinate degree of development of development of the division of labour" and "determinate level of development of 'productive forces'" Laclau implies that different modes of production will have specific forms of division of labour and specific forms of productive forces, then this is not acceptable. It would merely be to inscribe the hoary problem of technological determinism into his theoretical specification. The words "degree" and "level" are ambiguous in this respect. Every mode of production by definition will entail a division of labour and productive forces but these will vary a great deal even within modes of production, e.g. in non-capitalist peasant agriculture we will often find some farmers using animal draft-power while other farmers will utilise tractorised machinery, yet they can both have the same relationship to their means of production and be appropriated of their economic surplus in an identical manner. Does that mean they are involved in different modes of production? I contend that elements 1 and 2 in Laclau's definition of a mode of production are the key theoretical elements for defining different modes of production. However, in order to look at the productive operation of modes of production, we have to take into consideration the various degrees of development of the division of labour and the various levels of development of the productive forces, since

it is their variation which will allow us to establish the intensity of exploitation and appropriation of surplus product within modes of production. Thus, these elements are an integral part of any mode of production but do not define the mode of production per se.

Articulation

By the term articulation I refer to the processes and mechanisms through which divergent modes of production become inserted into social formations at regional, national and international levels. (92) The main sites of articulation are the economic, the political and the ideological. In this essay I am primarily concerned to bring out the economic conditions for the articulation of social relations within the social formation at the regional level. I have already made some very tentative comments on the insertion of the West Bank economy as a whole into the Israeli social formation at the political and ideological level.

At the economic level a mode of production, in which a fraction or all of the economic surplus takes the form of commodities, will be articulated to the home and/or international markets through two complementary processes.

These are:

- 1 The circuit of commercial capital
- 2 The circuit of interest bearing capital. (93)

At an institutional level these circuits take very

heterogeneous organisational forms which do not concern us here.

The circuit of commercial capital is predicated on the logic of purchasing commodities in order to sell them at a price which is substantially greater than the purchasing price. The logic entailed in this circuit can be formally represented in the following form:

$$M - C - M'$$

where M is equal to the sum of money initially outlaid for commodity (C) and M' is equal to the final income from the sale of C. The logic of commercial capital involves two transactions and one commodity. In this process the commodity undergoes no transformation of its elemental form. The merchant does nothing to the commodity in a productive sense except to bring it to the market place. The relationship of the merchant to the purchaser is not an exploitative relationship but one of unequal exchange. (94) The relationship of the merchant to the producer from whom s/he initially purchases the commodity is also one of unequal exchange through buying the commodity at less than market price. Both these transactions take place in the sphere of market relations and they are charged with the function of consumption.

The circuit of commercial capital has mediated the relation between production and consumption in many historically distinct institutional forms: from the itinerant merchants who traversed Europe and the Orient through the Middle Ages -

of whom Marco Polo is the most renowned example - to the multinational corporate organisations of advanced capitalism. When Andre Gunder Frank and other "capitalist world system" theorists (Wallerstein and Amin) discuss core-periphery relations, they are, by and large, concerned with the international imperialist function of merchant capital in articulating subordinate economies to the dominant capitalist ones - they of course seldom conceptualise it in this manner. The main institutional conduit in articulating the peasant commodity producing sector of the north Jordan Valley to the home, Israeli and international markets is the owner of the hisbeh, i.e. merchant wholesalers of agricultural commodities.

If we consider the circuit of interest bearing capital, it becomes apparent that this circuit is a variation of the circuit of commercial capital. The main difference is that money is the commodity which is dealt in, but this commodity is not sold rather it is lent to be returned at some future date in an augmented form. In the circuit of interest bearing capital, loans can be utilised either as a means of consumption (indebtedness in order to consume) or as a means of production (indebtedness in order to capitalise). The logic of the circuit of interest bearing capital can be formally represented in the following form:

$$M - M'$$

where a sum of money, M, is forwarded in return for the deferred payment of a greater sum of money, M'. The logic entailed is one of lending in order to increase the quantity.

Both of these circuits are processes which facilitate the articulation of different modes of production - slave, feudal, capitalist, petty-commodity etc - with other modes of production in a social formation. However, as we said previously, these circuits only act to articulate the economic instances where the process of commoditization exists in either an extended or restricted way, i.e. they only articulate market societies.

IV. THE METHODS AND STRUCTURE OF THE STUDY

The bulk of the empirical research which operationalises the basic concepts in this study was produced while I was directing and coordinating a regional development study based on a census designed to be administered to the peasant community in the north Jordan Valley of the West Bank during 1982-83. (96) The study was undertaken in order to gauge the problem of regional poverty and underdevelopment. The interview schedule which led to the production of this data was composed of seven census sheets. (97) These consisted of:

1. Section A, which was a general demographic census sheet designed to produce data on sex, age, education, literacy, marital status, refugee status, clan structure and work activity.

2. Section B was a census sheet designed to produce data on family size, birth rates, infant mortality rates, miscarriage rates and morbidity rates.

3. Section C was designed to gather information on housing, home ownership status, sanitary conditions, availability of domestic supply of electricity and water and the ownership of consumer durables.

4. Section D was designed to gather information on all peasant farmers - i.e. sharecroppers, smallholders, farming-shepherds and cash tenants. This sheet attempted to operationalise the concepts of modes of production and forms of social relationships. This sheet produced data on size of holding, farmer's landlord, period of leasehold, types of relations between peasants and landlords, the social and sexual division of labour and labour organisation on the peasant farm.

5. Section E was designed to produce information on farming-landlords who were local residents. This section largely covered the same information as that produced in section D.

6. Section F was designed to gather information patterns of production and land use, animal husbandry and marketing.

7. Section G was designed to produce information on wage labourers, pattern of employment, sectors and branches of work activity.

I have made considerable use of the results of this census in this thesis. In producing the thesis, I have also made use of in-depth interviews which I conducted with peasants, agricultural engineers and agronomists about specific aspects of peasant life and agricultural issues between 1982-86. I also made use of material from official Israeli publications

and other statistical sources to make comparative analysis of trends within the region and the West Bank as a whole.

The remaining chapters of the thesis will attempt to utilise the concept of modes of production in a manner which is congruent with the research protocols of methodological realism. In these chapters I shall incorporate subsidiary concepts to the general ones outlined in this chapter in order to explore and explain in depth the forms and causes of poverty and underdevelopment among the peasant communities of the north Jordan Valley. Again, I should like to re-emphasise that this shall be done through the realist retroductive method of examining the plurality of structures, their tendencies and counter-tendencies and their causal articulation and interaction. The methodological priority of this approach should be particularly clear in the next three chapters where I consistently attempt to apply the realist methodology to the mass of empirical data was available for this study.

NOTES AND REFERENCES

1. Two notable examples of this approach are the work of Erik Olin Wright and Bob Jessop, see, in particular, E. O. Wright, Class, Crisis and the State (London, 1978), Classes (London, 1985), "The Value Controversy and Social Research" and "Reconsiderations", both in I. Steedman Ed., The Value Controversy (London, 1981) and Bob Jessop, The Capitalist State, (London, 1982). For Jessop see, The Capitalist State, (London, 1982).

2. See, K. Marx, Capital, Vol 1, (Harmondsworth, 1976).

3. For Marx's own rather cursory discussions of the problem of concept formation, see, the 1857 "Preface" to A Contribution to a Critique of Political Economy, (London, 1971) and the 1859 "Introduction" to the Grundrisse, (Harmondsworth, 1973).

4. For a detailed discussion from within the realist problematic see, D. Sayer, Marx's Method (Sussex, 1979).

5. Compare, N. Geras, "Marx and the Critique of Political Economy", in R. Blackburn Ed., Ideology in the Social Sciences (Glasgow, 1972) pp. 284-88 and M. Godelier, "Structure and Contradiction in Capital", also in Blackburn pp. 334-43.

6. See, Godelier *ibid.* p.336.

7. See, Maps 1, 2 and 3.

8. For a brief account of the climatic and topography of the Jordan Valley, see, R. G. Khouri, The Jordan Valley (London, 1981), pp. 13-42.

9. See, U. Davis, A. E. L. Maks and J. Richardson, "Israel's Water Policies", in Journal of Palestinian Studies, vol IX, No 2, 1980.

10. See, I. Matar, "Israeli Settlements and Palestinian Rights", in N. Aruri Ed., Occupation: Israel Over Palestine, (London, 1984), p.129.

11. See, A. Pollock, "Society and Change in the North Jordan Valley", in G. Abed Ed., Development Under Prolonged Occupation, (Geneva, forthcoming).

12. Ibid.

13. See, S. Tamari, "The Agrarian System", in S. Tamari and R. Giacaman, Zbeidat: The Social Impact of Drip Irrigation on a Palestinian Peasant Community in the Jordan Valley, (Birzeit, 1980), pp. 18-22.

14. See, Pollock, op cit.

15. Ibid.

16. For further details of this phenomenon, see, R. Giacaman, "Health Conditions in Zbeidat", in Tamari and Giacaman op cit. pp. 1-33.

17. For an overview and critique of the main paradigms utilised to explain the phenomenon of development/underdevelopment, see, inter alia, J. Taylor, From Modernization to Modes of Production, (London, 1979), A. Hoogvelt. The Sociology of Developing Societies, (London, 1976), P. W. Preston, New Trends in Development Theory, (London, 1985), H. Brookfield, Interdependent Development, (London, 1975), A. Webster, Introduction to the Sociology of Development, (London, 1977), N. Long, Introduction to the Sociology of Rural Development, (London, 1977) and M. P.

Todaro, Economic Development in the Third World, (London, 1977).

18. See, Taylor *ibid.* pp. 3-97.

19. I am not claiming that the approach I am adopting is the only correct Marxist approach. It is one of many possible interpretations of Marx. It does however seem to me that the marrying together of Marxist concepts and realist methodology opens up a productive vista for Marxist theory which takes it beyond the inherent limitations of rationalism/formalism and empiricism which marring much of the current debates in academic Marxism.

20. For a trenchant restatement of the "classical" position, see, B. Warren, Imperialism: Pioneer of Capitalism, (London, 1980).

21. See, K. Marx and F. Engels, "The Manifesto of the Communist Party", in Selected Works, Vol 1, (Moscow, 1962), pp. 37-38.

22. See, Andre Gunder Frank, Dependent Accumulation and Underdevelopment, (London, 1978), pp. 140-72.

23. Andre Gunder Frank, Capitalism and Underdevelopment in Latin America, (New York, 1969), pp. 7-8.

24. For a useful and objective exposition of the work of Samir Amin, see, A. Foster-Carter's, "Introduction" to S. Amin, The Arab Economy Today, (London, 1982), pp. 1-36, and A. Brewer, Marxist Theories of Imperialism, (London, 1980), pp. 233-57.

25. S. Amin, Unequal Development, (New York, 1976), p. 200.

26. See, H. Friedmann, "Household Production and the National Economy: Concepts for the Analysis of Agrarian

Formations", in Journal of Peasant Studies, Vol 7, No 2, 1980.

27. H. Friedmann, "The Family Farm in Advanced Capitalism: Outline of a Theory of Simple Commodity Production in Agriculture", paper presented to the Thematic Panel "Rethinking Domestic Agriculture", American Sociological Association, Toronto, August 1981, pp. 2-3.

28. For a useful introduction to these debates, see, inter alia, A. Brewer, op cit, pp. 261-73, A. Foster-Carter, "The Modes of Production Controversy", in New Left Review, No 107, 1978, Harold Wolpe's "Introduction" to The Articulation of Modes of Production, (London, 1980) and M. Blomstrom and B. Hettne, Development Theory in Transition, (London, 1984), pp. 128-30, 179-82.

29. For an overview and interesting account of the debate, see, D. McEachern, "The Mode of Production in India", in Journal of Contemporary Asia, Vol 6, No 4, 1976, also Foster-Carter op cit. 1978.

30. See, A. Rudra, "Class Relations in Indian Agriculture", in Economic and Political Weekly, June 3, 10, and 17, 1978.

31. See, U. Patnaik, "Capitalist Development in Indian Agriculture: A Note", in Economic and Political Weekly, September, 1971, and "On the Mode of Production in Indian Agriculture: A Reply", in Economic and Political Weekly, September, 1972.

32. See, P. Chattopadhyay, "On the Question of the Mode of Production in Indian Agriculture: A Preliminary Note", in Economic and Political Weekly, March, 1972, and "Mode of Production in Indian Agriculture: An Anti-kritik", in

Economic and Political Weekly, December, 1972.

33. See, Patnaik, op cit. 1972.

34. See, H. Alavi, "India and the Colonial Mode of Production", in Socialist Register, (London, 1975).

35. Ibid. p. 190.

36. Ibid.

37. This point is also made by Foster-Carter op cit. 1978.

38. See, *ibid.*

39. See, J. Banaji, "India and the Colonial Mode of Production: A Comment", in Economic and Political Weekly, December, 1975.

40. See, J. Banaji, "Capitalist Domination and the Small Peasantry. Deccan Districts in the Late Nineteenth Century", in Economic and Political Weekly, August, 1977.

41. See, L. Althusser and E. Balibar, Reading Capital, (London, 1970).

42. Ibid.

43. For an excellent account of the Althusserian position see, P. Anderson, Arguments With English Marxism, (London, 1981). For a trenchant critique of the British Althusserian tradition, see, E. P. Thompson, The Poverty of Theory, (London, 1980).

44. See, Anderson, *ibid.*

45. See, N. Poulantzas, Political Power and Social Classes, (London, 1973), Classes in Contemporary Capitalism, (London, 1975), E. Terray, Marxism and 'Primitive' Societies, (New York, 1972) and C. Meillassoux, Maidens, Meal and Money: Capitalism and the Domestic Community, (Cambridge, 1981).

46. The debate was carried out in a variety of different

venues. Among these venues in the English speaking world were the journals, Economy and Society, Theoretical Practice, New Left Review, Critique of Anthropology, Journal of Peasant Studies, Capital and Class, Politics and Society and Insurgent Sociologist.

47. See, L. Althusser, Essays in Self-Criticism, (London, 1976).

48. This was particularly likely given the rationalist epistemology which Althusser inherited from Bachelardian philosophy of science. For a short account of Bachelardian epistemology, see, R. Bhaskar, "Feyerabend and Bachelard: Two Philosophies of Science", in New Left Review, No 94, 1975.

49. See, B. Hindess and P. Hirst, Pre-Capitalist Modes of Production, (London, 1975) and Mode of Production and Social Formation, (London, 1977).

50. Two interesting and relevant substantive conceptual critiques of Hindess and Hirst, rather than from the methodological and epistemological critique developed in this chapter, are T. Asad and H. Wolpe, "Concepts of Modes of Production", in Economy and Society, Vol 5, No 4, 1976 and J. Taylor, "Pre-Capitalist Modes of Production", in Critique of Anthropology, Vol 4 and 5/6, 1975 and 1976.

51. Hindess and Hirst fail to discuss real objects and their conditions of existence, rather they discuss discourse and the relations between object of discourse in a manner which is completely circular. See, Hindess and Hirst, op cit. 1977, pp. 9-33.

52. The term "neo-Smithian" was defined by R. Brenner after the debate had been ongoing for a number of years. Brenner

argued that:

"... the method of an entire line of writers in the Marxist tradition has lead them to displace class relations from the centre of their analyses of economic development and underdevelopment. It has been their intention to negate the optimistic model of economic advance derived from Adam Smith, whereby the development of trade and the division of labour unfailingly brings about economic development. Because they have failed, however, to discard the underlying individualist-mechanist presuppositions of this model, they have ended up erecting an alternative theory of capitalist development which is, in central aspects, the mirror image of the "progressist" thesis they wish to surpass.

R. Brenner, "The Origins of Capitalist Development: A Critique of Neo-Smithian Marxism", in H. Alavi and T. Shanin Eds., The Sociology of 'Developing Societies', (London, 1982), p.55.

53. For an interesting overview of the debate, see, E. Laclau, "Feudalism and Capitalism in Latin America", in Politics and Ideology in Marxist Theory, (London, 1977).

54. See, A. G. Frank, "Mexico: The Janus Face of the Twentieth Century Bourgeois Revolution", "The Mexican Democracy of Pablo Gonzalez Casanova", "The Brazilian Pre-Revolution of Celso Furtado", "The National Bourgeoisie and Military Coup in Brazil" and "Destroy Capitalism, Not Feudalism", all in Latin America: Underdevelopment or Revolution, (New York, 1969).

55. See, A. G. Frank, "The Sociology of Development and the Underdevelopment of Sociology", in Frank *ibid.* pp. 39-66.

56. See, A. G. Frank, "Dialectic, Not Dual Society", in *ibid.* pp. 223-226.

57. Laclau was equally critical of Frank's definition of feudalism in which he appeared to define it as a closed

system where market relations had not penetrated. Apart from showing that this was not even the case in Europe during the era of feudalism, Laclau argues that it is necessary to define feudalism in terms of its constituent relations of production. Thus:

The feudal mode of production is one in which the production process operates according to the following pattern: 1. the economic surplus is produced by a labour force subject to economic compulsion; 2. the economic surplus is privately appropriated by someone other than the direct producer; 3. property in the means of production is in the hands of the direct producer. In the capitalist mode of production, the economic surplus is also subject to private appropriation, but as distinct from feudalism, ownership of the means of production is severed from the ownership of labour power; it is that which permits the transformation of labour power into a commodity, and with it the birth of the wage relation. (Politics and Ideology in Marxist Theory, (London, 1977) p.35.)

58. Laclau, *ibid.* 1977, p. 23.

59. *Ibid.* p. 34.

60. *Ibid.* p. 35.

61. See, J. Taylor, 1979, *op cit.* pp. 105-123.

62. See, B. Jessop, *op cit.* pp. 9-12.

63. Poulantzas, *op cit.* 1975, pp. 15-16.

64. For an extremely insightful critique of Poulantzas from a realist position, see, B. Jessop, *op cit.* pp. 153-210.

65. This neo-Gramscian approach to politics in Marxist analyses has been developed in the work of N. Poulantzas, E. Laclau, C. Mouffe and B. Jessop. See, N. Poulantzas, State, Power and Socialism, (London, 1978), E. Laclau and C. Mouffe, Hegemony and Socialist Strategy, (London, 1982) and B. Jessop, *op cit.* 1982 and Nicos Poulantzas, (London, 1982).

66. The concept of exceptionalist state was developed by N. Poulantzas who outlined three forms of exceptionalism;

fascism, military dictatorship and Bonapartism. See, Fascism and Dictatorship, (London, 1974) and The Crisis of the Dictatorships, (London, 1976).

67. See, M. Rodinson, Israel: A Colonial Settler-State?, (New York, 1973).

68. For a short account of labour Zionism and radical Zionism in Israel, see, E. Margalit, "Socialist Zionism in Palestine: Collective and Equalitarian Tradition", in The Jerusalem Quarterly, No 28, 1983 and Y. Elam, "Gush Emunim - A False Messianism", in The Jerusalem Quarterly, No 1, 1976.

69. This data is from The Quarterly Statistics for the Administered Territories, 1981, (Jerusalem, 1981), p.6.

70. For a discussion of the phenomenon of commuting-labourers, see, S. Tamari, "Building Other peoples Homes: The Palestinian Peasant Household and Work in Israel", (Jerusalem, 1981), also, E. Farjoun, "Palestinian Workers in Israel: A Reserve Army of Labour", (Tel Aviv, 1979).

71. See, B. van Arkadie, Benefits and Burdens: A Report on the West Bank and Gaza Strip Economies Since 1967, (Washington DC. 1977), pp. 115-55.

72. See, in particular, E. Balibar, "The Basic Concepts of Historical Materialism", in L. Althusser and E. Balibar, op cit.

73. For an interesting account of the problem of trying to extract a general concept of non-capitalist modes of production from Marx's various works, see, J. Taylor, 1979, op cit. pp. 152-57.

74. For a critical evaluation of the "Formen" section of the Grundrisse, see, J. Taylor, ibid. pp. 154-56.

75. The organisational unification of industrial and finance capital did not become widespread until the rise of the Joint Stock Company in the nineteenth century and only became widespread with the development of the multi-national corporation.

76. See, K. Marx, *op cit.* 1976, pp. 283-307.

77. Compare, Laclau, *op cit.* 1977, pp. 15-50.

78. See, G. Dupre and P-P. Rey, "Reflections on the Pertinence of a Theory of History of Exchange", in H. Wolpe Ed., *op cit.* pp. 138-60.

79. See, G. Kay, Development of Underdevelopment, (London, 1975), pp. 84-124.

80. See, H. Wolpe, 1980, *op cit.* pp. 6-42.

81. *Ibid.* p.7.

82. *Ibid.*

83. E. Balibar, *op cit.* p. 266.

84. C. Bettelheim, "Theoretical Comments", in A. Emmanuel, Unequal Exchange, (New York, 1972).

85. See, *ibid.* p. 277.

86. See, *ibid.* p. 293.

87. *Ibid.* p. 245.

88. For a critique of value theory from a neo-Ricardian position, see, I. Steedman, Marx After Sraffa, (London, 1977).

89. For an account of some of these issues in the context of Latin America and South Africa, see, A. Q. Oberegion, "The Marginal Pole of the Economy and the Marginalised Labour Force", and H. Wolpe, "Capitalism and Cheap Labour-Power in South Africa: From Segregation to Apartheid", both in H.

Wolpe, 1980, op cit.

90. Compare, H. Wolpe, "Introduction", 1980, op cit. pp. 6-9.

91. Laclau, op cit. 1977, p. 34.

92. For an excellent account of the problems of the theorisation of the notion of articulation, see, Foster-Carter op cit. 1978.

93. For a more detailed theorisation of these issues, see, chapter four of this thesis and G. Kay, Development and Underdevelopment: A Marxist Analysis, (London, 1975), pp. 56-85.

94. See, *ibid.* pp. 86-93.

95. See, *ibid.* pp. 56-85.

96. The statistical abstracts of this study will be published in three volumes by the Arab Thought Forum - Jerusalem during 1987.

97. The computer code book is produced in Appendix 1 (in English) and the questionnaire is produced in Appendix 2 (in Arabic).

CHAPTER 3: MODES OF PRODUCTION, AGRARIAN SOCIAL CLASSES AND LANDHOLDING

In this chapter I will consider the different types of modes of production and the forms of economic class relations of production embedded in these modes of production. Here I will utilise the realist method of analysis to bring out social relations as they are structurally constructed in the different modes of production. These modes of production allow us to identify the forms of peasant production units found in the agrarian sector of the north Jordan Valley. In the first instance I will consider these social relations from the way they are actually entailed in the process of production proper, in terms of two elements which - as I have already argued in chapter two - allow us to identify modes of production. These are, first, the ownership and control of the means of production, and, second, the form of appropriation of the economic surplus produced in the production process. These relations of production determine actors location in economic class relationships and are conventionally defined in terms of the ownership and control of the means of production and the mode of appropriation of surplus labour or surplus product - also referred to as economic exploitation. (1) Thus economic classes are normally defined in terms of economic exploitation in the sphere of production. As social categories classes act in a variety of ideological and political ways which are overdetermined by a multiplicity of concrete factors, but their actual economic location in different systems of production will delimit and

impose boundaries on their ability to act and the choices open to them.

In this chapter I will only be interested in defining how the surplus product is appropriated from the direct producers in terms of their relations of production. There are other methods of appropriation which are just as central to the exploitation of the peasantry and which are interlinked to economic exploitation in the mode of production. Thus, surplus product can be siphoned off in the sphere of circulation and exchange, normally termed exploitation through unequal exchange. Unequal exchange takes place in commercial and financial activities rather than in the production process, i.e. in the process of the circulation of commodities and the realisation of their value. (2) However, this is a different form of exploitation which I will deal with separately in Chapter 4 of this thesis.

One of the main points that should be emphasised about peasant societies in general, and about the northern sector of the Jordan Valley as a particular case in point, is that the main unit of labour supply is the peasant household and not the individual agricultural worker. Peasant relations of production are not normally constituted of an individual "worker" and her/his relationship with another non-worker who appropriates part of the product of the labour of the "worker". Rather, the peasant household, consisting of husband, wife, sons, daughters and other dependent relatives, functions in the family division of labour as a "collective

work unit", part of whose combined product is normally appropriated by landlords, merchants and/or usurers and other non-producers, i.e. economic class relations are familiarly rather than individually constituted. (3) The household unit is a unit consisting of both a domestic and a public component in the division of labour. The divisions of labour in both spheres are organised hierarchically along lines of gender and patriarchy. (4) This means that, as well as being engaged in relations of economic exploitation with other social classes in the external environment, the household is also the site of relations of domination and subordination in its own right. These internal relations of patriarchy, gender, kinship and age are articulated with external economic relationships embodied in the different forms of peasant modes of production.

These components in the household division of labour should not be seen as completely autonomous spheres since they are integrated and interconnected. The public economic sphere, which is largely dominated by male agriculturalists, is heavily dependent upon the predominantly female centred domestic component for the reproduction of the public sphere of economic activity. Subsistence production items contributed to the total household consumption by the domestic sphere, of essentially female labour, can function to reduce the costs of reproduction and increase the level of exploitation experienced in the public sphere without leading to the destruction of the system, when the public sphere cannot reproduce the costs of reproduction for the household

as a whole. (5)

As long as agrarian capitalism remains underdeveloped and as long as there is no widespread and extended employment of waged agricultural labour (a minimum condition for the development of agrarian capitalism) in the Palestinian sector, then we would expect the peasant household unit to remain the main unit of labour supply under existing social and technical conditions. The household unit provides the labour supply for a number of distinct types of non-capitalist agricultural modes of production in the region under consideration. We can usefully distinguish five types of non-capitalist productive landholding relations which are to be found in the Jordan Valley. These are: sharecropping, cash tenancy, smallholding, farming-landlordism and farming-shepherding. Each of these types of landholding forms engenders specific relations of production in terms of the ownership and control of the means of production and methods of appropriation of the surplus product, but it should be borne in mind that peasant households can be simultaneously located in more than one landholding relationship, i.e. they can be located in more than one class relation. We can utilise these divergent forms of appropriation of the surplus product to distinguish these as distinct forms of economic class relations. But it must be stated that the logic of production is not internal to these forms but rather takes its logic from an economy dominated by highly capitalised Israeli agricultural production, i.e. each of these forms are interlinked to an economy dominated by the capitalist

agricultural market although these production forms are not themselves capitalist modes of production.

I shall attempt to outline the specific forms of peasant production units in terms of the two interrelated elements of, first, the type of ownership and control of the means of production, and, second, the forms of appropriation of the surplus product. By the term means of production I refer to those elements which are combined in the actual labour process to produce agricultural use-values, which are either sold as commodities or utilised to meet subsistence requirements in the peasant household. In agricultural work processes such means of production include; land, water, machinery and equipment, labour, seeds and other agricultural inputs. By the term ownership and control of the means of production I refer to two interrelated relationships. These are, first, a relationship of property, and, second, a relationship of economic possession. (6) The property relation refers to legal ownership which is most commonly identical with private property (although it can include corporate property).

In the context of the West Bank the concept of private property in land is problematic because it is largely defined by the Ottoman Land Law of 1858 which the Israeli authorities have adapted to serve their own colonialist aspirations; they have no wish to regularise the relationship of land ownership on a rational basis. The continued existence of ambiguity over legal ownership of land is perfectly suited to a

situation of occupation which could eventually become complete colonisation. (7) The Ottoman Land Law enumerates four categories of juridical ownership. These are, first, mulk which gives full rights of ownership as private property in the sense of modern bourgeois jurisprudence, second, miri land in which right to full possession remains symbolically in the hands of the state (sovereign) but where usufruct is in the hands of a private owner, third, Waqf land which is owned by Islamic institutions, and, finally, musha land which is land which is collectively owned. (8)

Although the regularisation of landownership in the West Bank remains problematic and remains a constant site of contestation between Israel and the indigenous population, during the 1950's the establishment of private ownership in substantial sections of land in the Jordan Valley became widespread after the Hashemite regime, who had control over the West Bank between 1948-1967, introduced a land reform programme aimed at exploiting the agricultural potential of the Jordan Valley. During this period farmers were allotted private ownership of state land (miri) on proof of land reclamation, extension of water resources and exploitation of this land over three consecutive years. After this period the farmer was given title deeds to her/his land after paying three Jordanian Dinars per dunum. Moreover, during this period absentee landlordism became established in the Jordan Valley as these absentees were able to take advantage of the sale of this land for exceptionally low prices. (9)

Economic possession refers to the control of the means of production as they are combined in the labour process. The labour process involves the combination of three elements; labour activity (work), the object of labour (i.e. the raw materials which have to be worked upon and transformed into use-values) and the means by which labour acts on the objects of labour (i.e. tools and equipment). Marx defines the labour process as:

...the activity whose aim is the production of use-values, the appropriation of external substance for needs, is the general condition for the exchanges between man and nature, a physical necessity for human life, and therefore independent of all human forms, or rather common to all. (10)

Thus, the labour process and its three constituent elements are components of all forms of production. In the capitalist mode of production, for example, economic possession of the means of production is unified by the capitalist and her/his agents, where they economically control and direct all the constitutive elements in the labour process: labour, objects of labour and means of labour. Capitalist control attempts to control in minute detail the work of the labourer, the quality of the object of labour and the pace of the means of labour. The aim of this control is to produce commodities as quickly and as cheaply as possible and to utilise labour to its maximum degree. This is necessary since labour is the source of surplus-value. The capitalist mode of production in its earliest stages of development seeks the real subsumption of the labour process under the direct control and decision making of capital and seeks scientifically to rationalise the labour process in order to ensure maximum profit, or in other

words, to maximise the extraction of surplus-value. Normally the economic control of the labour process under peasant forms of production has not involved the real subsumption of the labour process under landlord control. That is, the landlord is not usually able to control and direct the labour process in all its aspects in peasant farming systems. However, there are different ways in which landlords manage formally to control this process to maximise their profits and to extract economic surplus from peasant producers, but this ability remains variable and subject to restrictions.

I. SHARECROPPING MODE OF PRODUCTION

The first thing we should say about sharecropping is that it is not a modern form of agrarian institution, but one which is found in diverse geographical and historical settings and in social formations which are dominated by various modes of production. As an institution it was found in ancient Greece, in Italy during the Roman Empire and in Feudal Europe. It exists in contemporary Spain and was a widespread form of agricultural production in the post-bellum southern states of the USA. In addition to being found in Europe and the USA, sharecropping contracts were found in ancient Peru and it is still common throughout Latin America and prevalent in Africa, India and Southeast Asia. (10) Moreover, as an economic institution, sharecropping was of interest to such classical economists as Adam Smith and John Stuart Mill.

Sharecropping was a relatively common agrarian institution

throughout the Middle East and Palestine during the period of Ottoman rule. It became widespread in Palestine at the end of the nineteenth century and the beginning of the twentieth century as French and British mercantile capital began to penetrate and eventually dominate the commercial centres of the Levant. The expansion of sharecropping in Palestine corresponds to the period of the transition from Ottoman rule to British colonial administration of the country. Alfred Bonne has argued that sharetenancy played an increasingly important role during this transition phase and about 18-20% of agricultural enterprises in Palestine at this time were sharecropping enterprises. (12)

During the early Mandate period, sharetenancy was in the ascendancy as many of the independent fellahin (peasant farmers) were transformed into sharecroppers through the process of indebtedness. Concomitantly, the dominance of the powerful families of landlord-merchant-financiers reached their zenith at this time. However, the widespread domination of these families was short-lived. The conflagration of 1948 largely marked their diminution in importance and dislocated the agrarian structure of Palestine. (13) Since 1967 the agrarian structure of the West Bank has undergone radical change and structural transformation through the processes of land expropriation, emigration, proletarianisation and the integration of the West Bank economy into the Israeli market. In other words, there has been a reconstruction of the West Bank as a dependent and colonised sector of the Israeli social formation.

It is against this backdrop that we discover the resurgence of sharecropping in the Jordan Valley. This consolidation was revitalised by the introduction of Green Revolution technology and hybrid seeds. (14) Sharecropping in the Jordan valley is unique in a number of respects. First, it is distinguished by the prevalence of irrigated farming. Second, it is the predominant form of agricultural activity in the region and it has been expanding continuously since the early 1970's. Recently it may have reached a peak, both because of a land squeeze and because of market saturation due to specialisation in a small number of agricultural commodities.

Ownership of the Means of Production

Sharecropping is the predominant system of agricultural production in the north Jordan valley and it accounts for two-thirds of the 610 individual tenures in the region (see Table 27). 12% of all sharecroppers combine sharecropping compacts with some other form of land tenure system. Of these, three-fifths combine sharecropping with smallholding, almost a quarter with cash tenancy and 16% with shepherding (see Table 6). However, the vast majority of sharecroppers (nine-tenths) are engaged solely in sharecropping tenure relationships. Combined forms of landholding is relatively less significant for sharecroppers than for cash tenants (see Table 13). Although in absolute terms it is greater than combined forms of landholding among cash tenants.

It is in the nature of sharecropping relations of production

that juridical ownership of land is in the possession of the landlord and not in the hands of the direct producers. The sharecropper has no legal right to the possession of the land upon which s/he and her/his family work other than that established by contract. Furthermore, it is the juridical ownership of land which is the pillar upon which the economic power of the landlord over her/his tenants is established. Juridical ownership is the foundation for the appropriation of the economic surplus of the direct producers. This power is legitimated on the basis of social interaction where property-contract laws obtain. Very generally these laws apply in all market societies whether it be Imperial Rome or modern capitalist societies. (15)

While sharecroppers constitute the dominant production relations in the valley, their land tenure situation is potentially, if not already, unstable since sharecroppers have not managed to establish long-term legal rights to the land upon which they work. They can be expelled from this land at any time their landlords wish to get rid of them, either to institute changes in the farm system or to introduce new sharecroppers onto the same plot of land. The tenuousness of the sharecroppers, legal access to the land s/he and her/his family work is brought out in Table 6, where we find that only two sharecroppers (0.5%) have a written contract with their landlord, 16% have no contract and the majority, slightly more than three-quarters, have only a verbal contract with their landlord, i.e. one based on a "handshake". This quite clearly puts the sharecropper in a

very weak position vis-a-vis her/his rights of security of tenure over the land which s/he works. This fact heightens the landlords' potential for exercising arbitrary power over the sharecropper, if, for example, the landlord wanted to

Table 6: Type of Contract Sharecropper has with her/his Landlord

Type of contract	Share-cropper	Combined Class Locations*		
		Shepherd	Cash Tenant	Small-holder
Handshake/verbal	315	6	11	28
Written	2	-	-	1
None	66	2	1	2
Not ascertained	26	-	-	-
Column Total	409	8	12	31

* It is possible and quite common for farming households to be engaged in more than one type of land tenure relationship, hence the category of combined class location.

alter existing land use patterns or displace her/his sharecroppers. The lack of a long-term legally sanctioned contract puts the sharecropping family in a very weak position and leaves the sharecropping household at the mercy of the dictates of its landlord.

Sharecroppers generally have to renew their farm leases on a yearly basis. The data show that no sharecropper has a contract of longer than one year's duration and 93% of sharecroppers have only a one-year lease on the land they rented (see Table 7). While more than nine-tenths of sharecroppers have a one-year lease only, we also find that 77% (see Table 8) have cumulatively leased their lands for

Table 7: Period of Share Lease

Period of lease (in Years)	Share- cropper	Combined Class Locations		
		Shepherd	Cash Tenant	Small- holder
One	380	8	12	31
Not ascertained	29	-	-	-
Column Total	409	8	12	31

less than 5 years. The vast majority of sharecroppers have not established long term tenure over the land which they farm. Only 17% of sharecroppers have cumulatively leased their land for a period of 5 years or more and only 9% have leased their land for a period of 10 years or more. This certainly points to the re-emergence or re-establishment of sharecropping in the region in the post 1972 war period, and also to the fact that there is general mobility in and out of sharecropping compacts. This is particularly true of those farmers who do not reside in the region permanently, i.e. those farmers who are also housing squatters. (16)

If we consider the question of ownership of the means of production, other than land, we discover that these elements are open to a wide degree of variation, from the landlord providing all inputs except labour, to the labourer providing all the means of production except land.

Table 8: Cumulative Period of Share Lease

Cumulative period of lease (years)	Share-cropper	Combined Class Locations		
		Shepherd	Cash Tenant	Small-holder
1 - 4	314	1	6	26
5 - 9	34	2	3	3
10 - 14	16	-	1	1
15 - 19	14	1	1	1
20 - 24	4	1	-	-
25 - 29	-	-	-	-
30 - 34	3	-	1	-
Not ascertained	24	3	-	-
Column Total	409	8	12	31

In the Jordan Valley the ownership of water-rights varies considerably depending upon the source of the water. For example, in the villages of Bardala and `Ain al Beda, village water supplies now come from the Israeli water-grid, although for the purposes of farming there are still a few independently owned bore wells. The villagers in Zbeidat and Marj Najeh get their water supplies from artesian wells for farming purposes and from a village faucet for household consumption. The artesian wells are independently owned by landlords and other individuals. The villages of Jiftlik, `Ain Shibli and Frush Bet Dajan get their water from the al Fara'a canal which flows down from the Nablus mountains and which is canalised through an aquaduct as it reaches Jiftlik. The water is used collectively by the villagers in `Ain Shibli and Frush Bet Dajan, but property rights apply to the aquaduct in Jiftlik. As well as using this water, farmers also use artesian wells which are the property of landlords

and private individuals from whom they rent water rights.

However in general, shareowning-landlords undertake to provide farm water requirements as part of their side of the sharecropping contract, whether they own this water themselves or have to purchase it from another private owner. Also, as part of the water provisioning in the contract, landlords very often undertake to provide a water pump or the hire costs of the pump and the fuel costs for operating the pump if the water supply comes from bore wells.

Table 9: Services Provided By Landlord as Part of the Contract

Landlord services	Answer	Share- cropper	Combined Class Locations		
			Shepherd	Cash Tenant	Small- holder
Provision of water?	Yes	320	5	8	21
	No	34	1	2	10
	Not asc.	55	2	2	-
Provision of water pump?	Yes	315	5	8	20
	No	34	1	2	11
	Not asc.	60	2	2	1
Provision of fuel for water pump?	Yes	313	5	8	19
	No	35	1	2	11
	Not asc.	61	2	2	1
Provision of other services	Yes	301	6	10	21
	No	35	1	1	10
	Not asc.	73	1	1	-
Column Total		409	8	12	31

The data show the major services provided by the landlord as part of the sharecropping contract: 78% of landlords provide

water, 77% provide the water pump facility, 77% provide the fuel for the pump and 73% provide other services to their sharecroppers, including, for example, the provision of housing (see Table 9). These are the main inputs the landlord provides. Other costs will normally be equally shared between the landlord and tenant but this depends on the nature of the contract.

Before the onset of tractorisation (which is now almost universal and all land is now ploughed if not harvested by tractor) when farmers utilised the furrow irrigation system, farmers owned almost all of their means of production although they may have hired a plough and team to till the land at the beginning and end of the agricultural season. With the introduction of the drip-irrigation system tractors have replaced draft power, although this process was well under way before this technology was widespread, particularly in the production of field crops where drip irrigation is not utilised. Agricultural machinery, such as tractors, ploughs and other accessories, are almost never privately owned by sharecroppers or their landlords (unless the landlord is her/himself a farmer). In fact almost three-quarters of sharecroppers owned no mechanical equipment. All sharecroppers utilise tractors and accessories, but they generally hire this equipment with four-fifths of sharecroppers renting the mechanical equipment they utilise. Approximately a quarter rent this equipment from their landlords and 3% from other farmers, but mechanical equipment is most commonly rented from commercial dealers and a third

of sharecroppers get access to mechanical equipment from this source. Private ownership of expensive technology is negligible (see Tables 1 and 2 in Appendix 5).

Table 10: Services Provided By Sharecropper as Part of Contract

Sharecropper services	Answer	Share-cropper	Combined Class Locations		
			Shepherd	Cash Tenant	Small-holder
Provision of own labour?	Yes	388	8	12	31
	No	-	-	-	-
	Not asc.	21	-	-	-
Provision of family labour?	Yes	368	8	10	31
	No	20	-	2	-
	Not asc.	21	-	-	-
Provision of day labour?	Yes	170	3	7	16
	No	216	5	5	15
	Not asc.	23	-	-	-
Provision of other services?	Yes	314	7	11	30
	No	3	-	-	1
	Not asc.	92	1	1	-
Column Total		409	8	12	31

The purchase of seeds, fertilizers, insecticides and drip irrigation equipment is usually shared by the landlord and tenant on a 50:50 basis, thus sharing ownership. Labour is, of course, the property of the sharecropper and her/his family. This labour is bound to the landlord in the form of a contract with reciprocal obligations.

The data show the major services provided by the sharecropper

as his part of the share contract (see Table 10). 95% of sharecroppers provide their own labour, 90% provide the labour of family members, 42% provide day labour (as required) and 77% provide other unspecified services to their landlord. The majority of croppers (53%) do not provide day labourers (who would normally be used in the harvest period if family labour was not sufficient to harvest the crop) as part of their contractual obligations.

We can draw up a table of juridical ownership of the means of production which looks like this:

Table 11: Juridical Ownership of the Means of Production

Means of Production	JURIDICAL OWNERSHIP			
	Landlord	Tenant	Shared	Rented
Land	X			
Water	X			X
Machinery				X
Seedlings			X	
Insect. & Pest.			X	
Drip irrigation			X	
Labour		X		

From the above table we can see that juridical ownership of the means of production is subject to diffuse ownership between landlords, sharecroppers and rentiers, but that landlords have ownership of the two most crucial agricultural factors of production: land and water. One important fact stands out here; there is no generalised capitalisation of the most costly items of equipment, i.e. agricultural machinery such as tractors, ploughs, reapers, etc.

Control of the Means of Production

If we consider economic control of the labour process under sharecropping, we find that real subsumption of the labour process to landlords' control has not occurred. The fundamental ability of the landlord to immediately direct and control the labour process in all its elements in minutely rationalised detail, which is normally associated with advanced forms of mechanisation, is not an operative aspect of sharecropping. This becomes clear if we break the labour process down into its constituent elements and analyse them in terms of economic possession or real economic control.

Economic possession of the sharecropper's and her/his family's labour resides directly in the hands of the tenant. The sharecropper allots the specific quantities of labour time to the different jobs in the production process. This allotment is, of course, subject to ecological-agronomic constraints on labour activity, but this in no way diminishes the fact that the tenant exercises "managerial authority" over labour. This managerial authority is invested in the patriarchal and hierachical ideologies which structure the sexual division of labour in the peasant household. The landlord does not spend enough time on the farm, either her/himself or through an agent, to direct and control labour activity. The landlords generally visit their tenants' farms infrequently during the agricultural season and only spend a significant amount of time there around the harvest season.

In the case of the control of the objects of labour, i.e. land, water, seeds, fertilizers and insecticides, the issue of real economic control is slightly more complicated for a number of reasons. Let us firstly consider water. When water comes from artesian wells or from the Israeli water grid it is subject to partial control by the military authorities, inasmuch as the amount of water permitted for agricultural purposes is tightly controlled. However, this control is not economic possession and, leaving aside problems associated with water shortages, the tenant has real economic control over the utilisation of water in production. The tenant supervises and controls its utility function. Second, the landlord has partial power to determine what will be produced; what seeds, fertilizers and insecticides will be used, and what section of land will be used for production. These are important powers which the landlord has, but they do not essentially constitute real economic control over the objects of labour. They may give the landlord partial control, when, as in the case of the Green Revolution technology utilised in the region, they surreptitiously introduce quality and quantity control into the labour process. These improvements also underplay the role of labour in controlling the quality of production, they appear to the landlord as a sort of "technological management" in the absence of real managerial control. In addition these improvements initiate the process of de-skilling the agricultural producer by separating traditional farm skills from scientific development, e.g. seed stock selection and breeding is taken out of the hands of the peasant farmer and

placed in the hands of biochemical agronomic specialists and companies. This process does not lessen the fact that the tenant still has economic control over seed productivity, but it does mitigate this control and opens up the possibility of the landlord contracting with less skilled tenant-labourers and it potentially widens the landlord's "tenant pool".

When we consider the means of labour - drip irrigation, farm machinery - we find economic possession and control invested in the hands of the tenant. The tenant exercises management and planning control over their use.

We can thus draw up a table of economic possession which looks like this:

Table 12: Economic Control of the Means of Production

Means of production	REAL ECONOMIC POSSESSION	
	Landlord	Sharecropper
Land		X
Water		X
Seedlings	partial	X
Insect. & Fert.	partial	X
Drip irrigation		X
Machinery		X
Labour		X

While the sharecropper has juridical ownership over her/his own labour power only, s/he has real economic and managerial control over all the elements in the labour process. We should note however that this real economic control is not dominated by the logic of capitalist cost benefit analysis, since the peasant farmer does not utilise these categories in

organising the labour process. Thus, this real economic control allows the sharecropper to control the work rhythms, job schedules, labour time, intensity of effort, crop cycle (within ecological constraints) and crop fertility. The landlord has very little economic and managerial control of the means of production in this particular mode of production.

This particular method of producing commodities bears a remarkable structural homology to the "putting out system" which was common among artisanal labour in Europe during the transition from feudalism to capitalism. (17) Under the "putting out system" the artisan provided labour and means of labour (machinery, tools and equipment) and the merchant provided the objects of labour (raw materials or unfinished products). The resemblance between sharecropping and the "putting out system" concerns only juridical ownership and economic possession. They differ significantly in the form of the appropriation of the economic surplus from the direct producer.

Form of Appropriation of the Economic Surplus

The form of appropriation of the economic surplus is normally the most visible aspect of class relations in modes of production. The manner in which the economic surplus is appropriated from the direct producer by the non-labourer is the precise criterion for outlining the specific class natures of different forms of production. Different modes

and forms of production are normally differentiated by their differential modes of "exploitation". (18)

I shall attempt to bring out what is specific about the form of exploitation internal to social relations of production in sharecropping. The first thing to note is that sharecropping is based upon a legal contract, whether verbal or written.

Table 13: Percentage of Net Yield Paid By Sharecropper As Rent

Percentage of net yield paid to landlord	Share-cropper	Combined Class Locations		
		Shepherd	Cash Tenant	Small-holder
1 - 9	1	-	-	-
10 - 19	17	-	-	5
20 - 29	2	-	-	-
30 - 39	15	1	2	3
40 - 49	1	-	-	-
50 - 59	348	6	9	23
60 - 69	-	-	-	-
70 - 79	1	-	-	-
80 - 89	-	-	-	-
90 - 99	-	-	-	-
Not ascertained	24	1	1	-
Column Total	409	8	12	31

which stipulates the provision in designated proportions of certain inputs into the labour process by both the landlord and sharecropper. The contract further designates the proportion of the final crop yield, or sale of crop yield, which each party will receive. In the north Jordan Valley, as we have already seen, the majority of share-contracts are verbal and contracted on a yearly basis. The actual

specification of the contract itself is open to numerous variations. There are three general types of contract.

The first, and almost universal, which accounts for 85% of all share-contracts (see Table 13), is the contract where:

- (a) the cropper provides her/his own and her/his family's labour, and also wage labour if required, e.g. at harvest;
- (b) the landlord provides land, water, water pump (if required) and fuel for the pump;
- (c) all the other costs of inputs - seeds, fertilizers, insecticides and drip-irrigation equipment are equally shared. On the basis of this contract the final crop yield is shared between the landlord and tenant on a 50:50 basis, normally set at market prices, since the total product is sold and the income from the sale divided rather than the crop itself being divided between the landlord and the share-tenant.

The second is the contract, which accounts for only 4% of sharecontracts (see Table 13), where:

- (a) the cropper provides her/his own and her/his family's labour, and wage labour if required;
- (b) the landlord provides land, water, water pump, fuel for pump, seeds, fertilizers, insecticides and drip-irrigation equipment. On the basis of this contract the sharecropper receives one third, and the landlord two thirds, of the sale price of the crop yield. This is the individually most exploitative form of share-contract and constitutes the sharecropper as a semi-proletarian who contributes nothing

but her/his labour power in return for an income at the end of the agricultural season. Only the poorest sharecroppers would willingly undertake such a disadvantageous contract.

The third is the contract, which again accounts for only 4% of all share-contracts, where:

- (a) the landlord provides only land;
- (b) the sharecropper provides all other inputs. On the basis of this contract the landlord receives 15%, and the tenant 85%, of the net sale price of the crop yield. This contract is the most rewarding form of share-contract from the point of view of the sharecropper. However, it is not widespread.

Thus, we can detect a general tendency toward the almost universal establishment of the 50:50 share contract.

The formal legal contract - even if not established through due legal process - is the important characteristic in specifying the particular method of surplus appropriation of the agricultural product, i.e. of specifying the form of exploitation. This contract has two aspects which need to be brought out. First, persons undertaking a sharecropping compact do so freely. The sharecropper is formally free to undertake, or not to undertake, cropping as a form of employment. There is no legal or political power forcing the sharecropper to contract; this is not forced labour. Second, in order for sharecropping to exist it is a necessary but not sufficient condition that there be commodity markets. The contract requires the development of extended or restricted

commoditisation within the social formation. This point is compatible with the aforementioned existence of sharecropping in ancient Greece, Imperial Rome, ancient Peru, and Europe during the transition to feudalism and with modern capitalist economies, for all of these societies have been market societies with the process of commoditisation developed to varying degrees. (19)

The process through which exploitation or the appropriation of the economic surplus occurs is variable with the degree of commoditisation. The appropriation of the economic surplus is extracted at the end of the circuit of production when the landlord acts to receive her/his legally sanctioned share of the total product. (20) The actual quantity of produce which the landlord can appropriate depends, apart from technical and market pricing factors, on the sharecropper's ability and predisposition to produce, i.e. the psychological desire for self improvement and betterment of her/his own economic condition which in turn supplements the landlord's income. This is subject to market constraints which means that higher productivity does not necessarily mean higher income, since this is subject to supply and demand factors at sale.

We might of course expect a tendency on the part of the sharecropper to procure as much as possible for her/himself by concealing quantities of produce from the landlord. This was found to be the case, by Keegan in his study of sharecropping in the South African Highveld. (21) In the Jordan Valley the absentee landlords appear to be aware of

this probability, since at harvest time they visit the farm on a daily basis to check and oversee the product quantity. The potential quantity by which the tenant can augment her/his legally designated share in this way is severely restricted, because the landlord is able to compute a fairly accurate assessment of crop productivity per dunum, as one of the results of the introduction of new varieties of seeds, fertilizers and efficient water management is to produce relatively stable production rates, natural blights notwithstanding.

I would suggest that the following elements are necessary to conceptualise sharecropping as a restricted mode of production:

1. The antecedent existence of product markets in which the process of commoditisation may be either extended or restricted.
2. The diffusion of juridical ownership of the constituent elements of the means and objects of production, but where landlords invariably hold juridical ownership of land.
3. The concentration of economic possession of the constituent elements of the labour process under the economic control of the sharecropper.
4. The appropriation of the economic surplus legitimated on the basis of a private contract between consenting parties which is sanctioned in law, and thus,
5. The class relation between landlord and sharecropper based on formal economic freedom.

These elements allow us to construct the concept of sharecropping as a distinct form of production unit with specific sets of relations of production.

Commentators, such as Fatimah Halim, are I believe mistaken when they consider that the appropriation of the economic surplus is based on a form of "forced labour". Halim has argued that:

"Lacking access to the means of production, labour is forced to sell its power in a system of low remuneration. The price of labour within the sharecropping system has no determinate level. It is the outcome of relations of servitude existing within the village." (22)

This passage reveals a gross misunderstanding of Marx's notion of free and unfree labour. For Marx, labour (in the capitalist mode of production) is free in a dual sense. First, the labourer is "freed" from ownership of the means of production, i.e. s/he is legally alienated from the means of production. Second, the only force making the labourer return to her/his workplace each day is the economic need to feed and clothe her/himself and her/his family. Economic freedom is, if you will, the proletarian state of existential dread. In general, the proletarian enters the factory because s/he has no means of economic existence other than the sale of her/his labour power. Unfree labour, on the other hand, is labour which is forced by "extra-economic" compulsion to work. This is labour which is forced to work on threat of violence, normally military and most commonly, sanctified by law and social convention. Two notable examples of unfree

labour are slavery and serfdom. The slave is the property of another person and is legally forced to do that person's bidding, normally within certain moral parameters. The serf is normally forced to contribute a certain portion of her/his labour for work on the lord's demense. (23) Both these forms are marked by the threat of violence. The same cannot be said for sharecropping, since no person or power forces the tenant to sign the contract. The appropriation of part of the surplus product is thus quite visibly inscribed in the sharecropping compact. Exploitation is undisguised and the household legally and freely undertakes to part with a portion of their overall production to their landlord.

II. CASH TENANCY: A LIMITED PETTY COMMODITY MODE OF PRODUCTION.

Cash tenancy (ist'jar) is a form of land rental tenancy arrangement in which the tenant undertakes to pay her/his landlord a designated sum of money for the rental of a particular area of land. There are only 45 cash tenant land tenure arrangements in the region and cash tenants constitute only 7% of all land tenures in the region (see Table 27). In the absence of the development of a real estate market in agricultural land, determined by laws of value and the potential for real capital accumulation in this form, it would be naive to expect cash tenancy to develop into an important land tenure form in the immediate future. Given the strategic role of the Jordan Rift Valley in Israeli military thinking and in the logistics of colonialism, it is unlikely

that the Israeli state will do much to encourage the establishment of a free real estate market in Palestinian farm land in the region, since at the very least this would mean legally recognising in an unambiguous manner Palestinians' rights to private property in land. (24)

The data show that of the 45 cash tenancies in the region two-thirds of the incumbents of these tenancies combine cash tenancy with other kinds of tenancies: 42% combine cash tenancy with sharecropping, 16% combine cash tenancy with smallholding and 9% combine cash tenancy with farming-shepherding (see Table 14). Almost 70% of cash tenants combine cash tenancy with some other form of land tenure. Only a minority of cash tenants are solely cash tenants. It is also possible for cash tenants to sub-let the land they rent out to sub-tenants, either in the form of cash tenancy or sharecropping. However, in the present study we are only concerned to look at bona fide cash tenant farmers.

Ownership of the Means of Production

As in the case of sharecropping, the legal ownership of the farm land in cash tenancy arrangements is legally owned by a landlord and not invested directly in the legal ownership of the direct producer. The cash tenant has no legal rights to the land s/he works other than those established by private contract. Also, as in the situation of sharetenancy, the long-term tenure situation of cash tenants is unstable.

Table 14: Period of Cash Tenants' Leasehold

Number of years	Cash Tenant	Combined Class Locations		
		Share- cropper	Shepherd .	Small- holder
1	36	16	3	6
2	1	-	-	-
3	2	-	-	-
Not ascertained	6	3	1	1
Column Total	45	19	4	7

The leasehold situation of cash tenants is legally very precarious with only 3 tenants (7% of the cash tenant population) having a leasehold for a period of longer than one year (see Table 14). Four-fifths of all leaseholds are for a period of only one year and the maximum lease hold is for three years. Only 13% of cash tenants have lease contracts for this maximum period of time.

While the actual lease contract is generally for a very short period of time, the cumulative period of lease holding varies quite considerably. The average cumulative period of cash rental is 14 years, while the most common cumulative rental period is 1 - 4 years, with 29% of cash tenants renting their land over this period (see Table 15). Over a third of cash tenants have been cash renting for 20 or more years, while just under two-fifths have been cash renting for less than 10 years. Thus, although their legal situation is still generally tenuous and subject to yearly renewal, cash tenants have established access to their farm land over significantly

longer periods of time than those farmers engaged in sharecropping relationships.

Table 15: Cumulative Period of Cash Tenants' Leaseland

Number of Years	Cash Tenant	Combined Class Locations		
		Share-cropper	Shepherd	Small-holder
1 - 4	13	5	-	3
5 - 9	4	1	1	1
10 - 14	2	-	-	1
15 - 19	4	3	-	1
20 - 24	9	4	1	1
25 - 29	5	2	1	1
30 - 34	2	1	-	-
Not ascertained	6	3	1	-
Column Total	45	19	4	7

Apart from land, rentier landlords very seldom provide other services to their tenants. For example, only 9% of cash tenants' landlords provide them with water (see, Table 16) and the same number of tenants are provided with a water pump by their landlords (see, Table 17).

Table 16: Does Landlord Provide Water?

Does your landlord provide water?	Cash Tenant	Combined Class Location		
		Share-cropper	Shepherd	Small-holder
Yes	4	1	-	1
No	35	14	3	6
Not ascertained	6	4	1	-
Column Total	45	19	4	7

Table 17: Does Landlord Provide Water Pump?

Does your landlord provide water pump?	Cash Tenant	Combined Class Locations		
		Share-cropper	Shepherd	Small-holder
Yes	4	-	-	-
No	35	15	3	7
Not ascertained	6	4	1	-
Column Total	45	19	4	7

Cash tenants normally either privately own or rent their other means of production. In the case of water very few cash tenants privately own their water resources. They get access to water through a number of sources: from communally owned village water networks coming from wells or from private owners from whom they purchase water. Further, like sharecroppers, the majority of cash tenants (almost two-thirds) do not own their mechanised agricultural machinery (i.e. tractors and tractorised equipment). The great majority, seven-tenths, rent some or all of their mechanical equipment, most commonly from commercial dealers. (See Tables 1 and 2 in Appendix 5)

Unlike sharecroppers, cash tenants do privately own and individually purchase (although they may purchase these items on credit) their seeds, insecticides, pesticides and drip irrigation equipment. Again, as in sharecropping, labour is the private property of the peasant family.

We can draw up a typology of juridical ownership of the means

of production in cash tenant forms of production units which looks like this:

Table 18: Juridical Ownership of the Means of Production

Means of Prod.	Juridical Ownership			
	Landlord	Tenant	Shared	Rented
Land	X			
Water				X
Machinery		X		X
Seedlings		X		
Insect. + Pest.		X		
Drip Irrigation		X		
Labour		X		

In cash tenancy forms of production juridical ownership of the means of production is normally concentrated in the hands of the cash tenant, with rentier landlords' only relation to the ownership of the means of production being invested in the private ownership of land. However, cash tenants may be involved in other rentier relationships to the means of production as in the case of the rental of agricultural machinery.

Economic Control of the Means of Production

Rentier landlords are not engaged in any relationship of real subsumption of the labour process and are alienated from direct involvement in the production of agricultural commodities. The rentier landlord has no interest or right to assert any sort of economic or managerial control over the

labour process. Her/his relationship to her/his tenant is purely a financial relationship and s/he has no vested interest in controlling the level of agriculturally generated profit, other than to ensure that the tenant makes enough money to pay for her/his rent or destroy the eco-structure of the land.

The cash tenant has total control and responsibility for managing the labour process in terms of the control of labour, the objects of labour and the means of labour and, as we will see, her/his economic control of the means of production is more akin to relations in smallholding and farming-landlordism than in sharecropping. This mode of production can be conceptualised as a limited form of petty-commodity production.

Form of Appropriation of the Surplus Product

The form of appropriation of the surplus product in cash tenancy is based on a straightforward financial rental transaction. The tenant undertakes to pay her/his landlord a designated sum of money for the right to agricultural usufruct of a given piece of land. Under normal circumstances this rent would be determined by prices established on the agricultural real estate market. This condition can hardly be said to operate in relation to the West Bank where colonial policy mitigates against the establishment of such a market. The price of agricultural rent is established by custom rather than through the process of capitalist ground-rent.

Apart from the farmer owning her/his own land outright, rentier relations are generally less immediately exploitative of the peasant household than the sharecropping land tenure relationship. Moreover, we should note that the real extent of rentierism in the region is less than the figures show since the biggest rentier landlord in the region is the Israeli Department of Absentee Property which collects nominal rents from farmers, particularly in Zbeidat, for land over which the actual legal categorisation is in dispute.

III. SMALLHOLDING: A PETTY COMMODITY MODE OF PRODUCTION.

Smallholding is the next most prominent form of land tenure arrangement in the Jordan Valley after sharecropping. Yet of the 610 individual tenures found in the region, smallholding accounts for only 16% of these (see Table 27).

Ownership of the Means of Production

In smallholding forms of production the legal ownership of the means of production is almost wholly the property of the smallholding household. Smallholders, by definition, own the land which they work and they normally hold title deeds to this land. They either privately own or privately purchase their farm water supply. They have direct ownership of their objects of labour and the least costly means of production such as seeds/seedlings, insecticides, pesticides, drip-irrigation equipment, plastic sheeting, etc. However, like both sharecroppers and cash tenants, the majority of

smallholders (70%) do not own the mechanical equipment they use in their farming activity. Only a fifth of smallholders do not hire some or all of their mechanised equipment. (See Tables 1 and 2 in Appendix 5) However, this does not present a major problem and, unlike sharecroppers, smallholders are solely responsible for maintaining access and ownership to all of their means of production.

Economic Control of the Means of Production

In the smallholding form of production the household has real economic control over all aspects of the labour process and the production of agricultural use-values. The smallholding household directs and manages the labour input of the family workforce. It decides what agricultural commodities will be produced and decides what plants, tools and machinery will be utilised in the production process. All aspects of the "managerial control" and economic ownership of the labour process are thus under the direct control of the peasant household itself.

Form of Appropriation of the Surplus Product

Since the smallholding form of production has complete legal ownership and real economic control over all aspects of the production process, there is no method of legitimating the appropriation of the surplus product from the labour process to a non-producer. The smallholding household does not have any of its surplus product appropriated inside the production

relationships. In terms of its constitutive production relations, smallholding is a non-exploitative form of production, relations of gender and patriarchy in the peasant household notwithstanding. Legally the smallholding household reaps the full benefits of the labour exerted in the production process.

However, as I previously intimated, once the smallholding household steps outside the sphere of production proper into the sphere of exchange and the circulation of commodities, then it enters a sphere where exploitation and subordination are experienced. Moreover, although the smallholding household is analytically separate from these spheres, as soon as it enters the realm of commodity production for exchange rather than the production of use-value production for subsistence then it becomes intertwined with these "external" relations in an inextricable manner. The production of commodities for generalised exchange - and the whole region is actively engaged in commodity production - necessitates that the production unit be linked to the wider economy through merchant and usurer capital relationships. The production of commodities requires the pre-establishment of marketing and financial structures and networks as a necessary condition for independent producers' engagement in commodity production. These necessary relations which link the independent producer to the wider economy are normally established in a manner which is inimicable to the long-term interests of the petty-commodity producers.

In summary, smallholding households legally own their own lands and are not engaged in relations of direct appropriation at the level of the labour process itself, i.e. they have ownership and control over their land and the other inputs which go into producing agricultural commodities. The smallholder is not in a direct economic class relationship with landlordism. As such, the smallholder is a petty commodity producer who owns all of her/his means of production and controls and owns without fragmentation the commodities produced in the labour process. (25)

IV. FARMING-LANDLORDISM: A PETTY COMMODITY MODE OF PRODUCTION PLUS EXPLOITATION

Farming-landlord relations of production account for only 7% of the regional land tenures and are therefore equal in extent to the cash tenant tenure population (see, Table 27). In terms of the constituent relations of production this form of land tenure is identical with smallholding relations of production. The relations of production are identical in terms of ownership and control of the means of production and the establishment of non-exploitative relations in the production process itself, i.e. the farming-landlord is a petty-commodity producer. The only thing which fundamentally distinguishes the farming-landlord from the smallholder is the fact that, as well as farming her/his own land, s/he has an alternative source of income from the rental of spare or extra land. This extra source of income leaves quite a wide margin for differentiation of the farming-landlord from the

wider peasant population. On the one hand, it is possible for her/him to produce as extensively as the smallholder and thus consolidate her/his farm income through rental receipts. However, it would be a mistake to view the farming-landlord as marginal to the regional economy since farming-landlords are normally larger farmers than most other peasant farmers in the region. The farming-landlord is probably more akin to the middle or even rich-peasant than the small peasant farmer. Thus, although constituting less than a tenth of the regional tenancies, farming landlords have access to more than a quarter of the regional land area (see Table 27). The farming-landlords who live in the immediate villages of the area control eleven cash tenants and 88 sharecroppers. There are eleven local farming-landlords who combine smallholding with rentierism. However, these farming-landlords have spare income coming from only one cash tenant each. There are, also, 27 local resident farming-landlords who control 88 sharecroppers. Slightly under a third of these landlords have only one tenant each, almost a quarter have two tenants, a tenth of them have 3 tenants and almost a third have 4 or more tenants under their immediate control. Moreover, these farming-landlords most commonly (40%) reside in the village of Jiftlik. Thus, extra income from rental relationships can lead to quite marked differentiation among the farming-landlords and lead to marked differentiation between them and the general peasant population since they are engaged in relationships of economic exploitation with segments of the peasantry.

V. FARMING-SHEPHERDING: A CONCEPTUAL LACUNA

Farming-shepherding, unlike the other forms of production, does not entail specific relations of production. It is a residual category in which all of the other forms of production can be mixed with shepherding. Some farming-shepherds thus combine sharecropping with shepherding, some combine cash tenancy with shepherding and some combine smallholding with shepherding. Farming-shepherding is the least prominent form of production relationship in agricultural activity and it accounts for only 3% of all land tenure relationships (see Table 27). It is not a generalised feature of the regional economy.

Shepherding in the Jordan Valley is highly differentiated; while some shepherds are village based peasants others are beduin semi-pastoralists. The result is that a number of shepherds (a minority) have access to land which they privately own, rent or sharecrop and which they use for the purposes of farming. All shepherds pasture their animals on state land (Miri) over which they have herding rights which have been historically established through tradition and custom.

VI. LANDLORDISM

To consider the situation of the non-producers who positively benefit from the appropriation of the economic surplus produced by the region's tenant peasants, we have to turn our

attention to the question of landlordism. Landlordism should not be treated as a descriptive concept with a high level of generality, rather it has to be linked to its concrete manifestations in terms of legal and economic relations of production. I do not accept the commonly held descriptive view which reduces landlords to a property owner who has tenants working her/his land and who pay rental for this land. Rather I contend that landlords have very specific and differential social relations with their tenants which depend on the mode of production or unit of production they control, either in a real or formal sense. Thus, in this section I will be considering both shareowning-landlordism and rentier-landlordism which are the two distinct forms of landlordism which exist in the region. These forms of landlordism are each linked to two quite distinct modes of economic class exploitation and two distinct modes of peasant production unit. Shareowning landlords are landlords who take their rental payment in the form of a portion of the crop yield produced by their tenants. This is now conventionally paid in the form of cash which is divided after the sale of the crop at the market rather than the division of the crop on the farm itself into designated portions of the crop itself. Rentier-landlords, on the other hand, are landlords who rent their lands for a designated sum of money on the basis of a yearly or longer term financial contract basis.

Table 19: Type of Landlord By No. of Tenancies and No. of Tenants

No held by land- lord	TENANCIES			TENANTS		
	Rentier	Share- owner	Row Total	Rentier	Share- owner	Row Total
1	18	117	135	18	117	135
2	-	26	26	-	52	52
3	-	9	9	-	27	27
4	-	10	10	-	40	40
5	-	3	3	-	15	15
6	-	2	2	-	12	12
7	-	4	4	-	28	28
8	-	1	1	-	8	8
9	-	2	2	-	18	18
10	-	1	1	-	10	10
12	-	1	1	-	12	12
17	-	1	1	-	17	17
18*	1	-	1	18	-	18
24	-	1	1	-	24	24
Not Asc.	-	-	-	9	29	38
Col Tot	19	176	197	45	409	454

* This rentier landlord is the Israeli Department of Absentee Property

In the region in which the study was undertaken there are 197 individual landlords who have legal control over 454 rental tenures. This brings out the centrality of landlordism in the region, as landlords legally control three-quarters of all the regional land tenures. However, the majority (69%) of both rentier and shareholding landlords have only one tenant and these landlords hold only 30% of the regional tenancies (see Table 19). Yet, at the same time, 17 landlords (less than a tenth of the landlord population) has 5 or more tenants contracted to them and these landlords hold over a third of the regional tenancies. Moreover, four landlords (3% of the landlord population) have 10 or more tenants under them and these landlords hold approximately a fifth of the

regional tenancies.

If we separate the different categories of landlord we find that rentier landlords account for only a tenth of the landlord population and they hold only 8% of all tenancies. Thus, it is quite clear that shareholding landlordism is the dominant form of landlordism in the region, accounting for nine-tenths of all landlords and 90% of all forms of rental tenancies.

Shareowning Landlordism

In the region there are 213 named shareowning landlords who between them legally control the share-tenancies of 409 sharecroppers (see Table 20). The majority of these landlords (55%) have only one tenant and they legally control only 29% of the sharecropping tenures. Thus, slightly more than half of shareowning landlords legally control less than a third of the sharecropping population. Moreover, seven-tenths of shareowning landlords have less than four tenants and these landlords control less than half of all sharecropping tenures. This data show that there is a wide dispersion of share tenures among an extensive population of landlords and land concentration is not widespread. Only four landlords (the Agricultural Engineers Cooperative, Mahmud al Dammen, Jawad Risq al Masri and Suleiman Saleh) have contracts with 10 or more share tenants. These four shareowning landlords (who constitute only 2% of the landlord population) control 15% of the regional share tenures. The two largest landlords,

Jawad Risq al Masri and Mahmud al Dammen, control 6% and 4% of the sharecropping tenancies respectively. While this does not constitute monopolistic control over share tenures, it does constitute a significant portion of the tenures and

Table 49: Landlords of sharecroppers

Landlord's Name	No of Landlord	No of Sharecropper	Combined Class Locations		
			Shepherd	Cash Tenant	Small-holder
No. Landlords with one tenant	117	117	3	4	12
No. landlords with two tenants	26	52	-	1	6
No. landlords with three tenants	9	27	-	-	5
Yehia Abdel Azziz	1	8	-	-	-
Abdel Rah. Abdallah	1	4	-	-	-
Abu Hasham	1	7	1	2	-
Muh. S. Abu Rihan	1	4	-	-	-
Abu Shamat	1	4	-	-	-
Agr. Eng. Coop.	1	10	1	-	-
Issa al Aamawe	1	7	-	-	-
Adham al Dammen	1	5	1	-	-
Mahmud al Dammen	1	17	1	-	-
Hasan al Fahd	1	4	-	-	-
Nimer al Hasan	1	7	-	-	2
Ainad al Masri	1	4	-	-	-
Fat. R. al Masri	1	9	-	-	-
Jawad R al Masri	1	24	-	1	-
Walid al Masri	1	4	-	-	-
Ali Abdel Dammen	1	6	-	-	1
Saleh A. G. Dammen	1	7	-	1	-
Darwish Fahd	1	9	-	-	-
Ghaleb I. A. Karim	1	4	-	-	-
Mahmud Nayyef	1	5	-	-	-
Ahmad Nayyef	1	4	-	-	-
Amin Mah. Qassem	1	6	-	-	-
Sulieyman Saleh	1	12	-	2	-
Muhamad Thiban	1	5	-	-	-
Not ascertained	37	37	1	1	4
Column Total	213	409	8	12	31

enhances their position of economic and social power over their tenants. This is particularly true of al Masri since he is also the largest merchant capitalist operating in the region. Moreover, looking at individual landlord control over sharecroppers underemphasises the degree of control since the power of landlords is interlinked through family connection.

Table 21: Landlord Families By Number of Sharecroppers

Family name of families with 10 or more tenants	No. of Family member land-lords	No. of sharecroppers
Families and individual landlords with less than 10 sharecroppers	155	257
Agricultural Eng. Coop.	1	10
al Damen/Damen	11	47
al Masri	8	46
Suleiman Saleh	1	12
Not ascertained	37	37
Column Total	213	409

In terms of family control of land tenure in the region the data show that the two major landlord families, al Masri and al Damen, legally control almost a quarter of the regional share tenancies (see Table 21). This constitutes a fairly significant degree of landholding concentration. This is not merely a quantitative relationship since the power these families wield is based on quantitative factors related to the level of patronage and market control which they exercise. In this respect the al Masri family is much more powerful than the al Damen family, because the al Masri family are a group of merchant capitalists with links to the

market centres of the West Bank and power centres in Jordan. (26) This family is highly organised in terms of the business ethic and the profit motive, owning transport facilities, sales outlets and auctioning crops. The al Damen family on the other hand is a more traditional landed family of beduin origin which has been centred in the rural sector for a long period and maintains its patronage on the basis of semi-feudal tradition rather than on incorporating traditional patronage elements into a commercial business ethic. This latter process is now underway and the logic of appropriation and profit maximisation as it operates in the region is likely to lead to al Damen entering the sphere of merchant and financial activity in a manner which is likely to conflict with the regional influence of al Masri. However, this outcome is not a foregone conclusion and depends on al Damen identifying his interests in this manner.

Table 22: Sharecroppers' Landlords Place of Residence

Landlord's place of residence	Share-cropper	Combined Class Locations		
		Shepherd	Cash Tenant	Small-holder
Local village	133	2	2	10
Nabius	157	1	3	12
Tamun	5	-	-	-
Tubas	67	4	6	9
Jerusalem	6	-	-	-
Jericho	6	1	-	-
Other	11	-	1	-
Not ascertained	17	-	-	-
Column Total	409	8	12	31

The majority of the landlords of sharecroppers - three-fifths - are not residents in the region (see Table 22). Only a third of sharecroppers' landlords are local residents. The most common place of residence of these absentee landlords is Nablus, where over a third reside, and Tubas, where a further sixth reside. The remaining absentee landlords live in Tamun, Jerusalem, Jericho and other assorted towns and villages. Thus, the great majority of shareowning landlords are absentees who live, work and have their businesses in the urban centres of the West Bank.

Table 23: Does Your Landlord Farm?

Does your landlord farm?	Share-cropper	Combined Class Locations		
		Shepherd	Cash Tenant	Small-holder
Yes	45	2	1	5
No	338	6	10	26
Not ascertained	26	-	1	-
Column Total	409	8	12	31

Apart from residing in urban centres, the bulk of the landlords of sharecroppers - more than four-fifths - are not themselves directly engaged in productive agricultural activity (see Table 23). Only a tenth operate as farmers on their own account. It would appear that the majority of landlords maintain only a commercial or rentier relationship with agriculture. The level of commercialisation varies from those who own only a small piece of land (the majority of landlords) - and whose income from this source is minimal and

likely to be a supplement to their normal source of livelihood - to those who gain a large portion, if not all, of their private income from specialisation in agricultural rent and associated commercial activities. This aspect of social relations of production, distribution and exchange will be brought out in greater detail in the following chapter.

Rentier Landlordism

In the region there are 19 named rentier landlords for 45 cash tenants (see Table 24). If we consider the actual number of tenancies held by the different types of landlords we find that only one rentier landlord has more than one tenant. This landlord is a special case, since the landlord in question is the Israeli Department of Absentee Property.

This department accounts for 18 tenancies or 40% of the regional cash tenancies. The majority (95%) of rentier landlords have only one tenant and the holdings this group legally control constitutes 40% of regional cash tenancies.

The data point to the fact that there is no monopolisation or even oligopolisation of cash tenancies. Ownership is diffuse and no Palestinian landlord has more than one tenant. This points to the fact that the phenomenon of rentier landlordism in the region is undeveloped and not a highly specialised commercial activity, but is one based on the letting out of either private family inheritance, privately

purchased land, or sub-let rental land to farmers in the region. No individual rentier landlord can make a substantial income from this source alone. Thus, it is highly likely that

Table 24: Name of Cash Tenants' Landlord By Number of Tenants and the Combined Class Location of Tenants

Name of Rentier Landlord	Cash Tenant	Combined Class Locations		
		Share-cropper	Shepherd	Small-holder
Radi Abdullah	1	-	1	1
Aref Abu Jesh	1	-	-	-
Saleh Ahmad	1	-	-	-
Mahmud Allah al Dammen	1	-	-	-
Mithqal al Dammen	1	-	-	-
Jawad al Ghazzawi	1	-	-	-
Abed al Hafez	1	-	-	-
Said al Hajji	1	-	-	-
Zahi Walid al Qahhawi	1	-	-	-
al Said	1	-	-	1
Rafir al Zuabi	1	-	-	1
Mahmud Ibrahim	1	1	-	-
Muhamed Ibrahim	1	-	-	1
Israeli Government	18	12	3	2
Ibrahim Abdel Karim	1	-	-	-
Muhamed Abdel Karim	1	-	-	-
Abdullah Mirai	1	-	-	-
Other	2	2	-	1
Not Ascertained	9	4	1	-
Column Total	45	19	4	7

the bulk of rentier landlords rent land to supplement their family incomes rather than undertaking rentierism as a specialised business activity. The only major rentier landlord in the region is the Israeli Government Department of Absentee Property, which rents to 40% of cash tenants, and the majority of tenants who rent land from this source,

Table 25: Location of Cash Tenants' Landlords

Place of Residence of Landlord	Cash Tenant	Combined Class Locations		
		Share-cropper	Shepherd	Small-holder
Local Resident	8	7	-	3
Nablus	7	2	-	1
Tubas	5	2	-	1
Israeli Government	18	5	3	2
Not Ascertained	7	3	1	-
Column Total	45	19	4	7

particularly in the village of Zbeidat, claim that they should have the right to legal ownership of this land. (27)

The majority of Palestinian rentier landlords (60%) live outside the locality where they rent their lands, in either Nablus (35%) or Tubas (25%) (see Table 25). The remaining 40% of Palestinian rentier landlords are local village residents and live in the locality where they rent their lands.

Table 26: Farming Status of Cash Tenants' Landlords

Does your landlord farm ?	Cash Tenant	Combined Class Location		
		Share-cropper	Shepherd	Small-holder
Yes	4	2	-	1
No	16	11	1	5
Don't know	-	1	-	1
Not ascertained	25*	5	3	-
Column Total	45	19	4	7

* This "Not ascertained" figure includes the Israeli Department of Absentee Property.

Less than a tenth of cash leasing landlords are themselves farmers (see Table 26). If we include the Israeli Department of Absentee Property this means that 76% of landlords do not farm on their own account. Moreover, rentier landlords are less likely to actively participate in farming-related commercial activities - e.g. through the provision of equipment and resources - than their shareowning counterparts. However, like their shareowning counterparts, they are most commonly absentees and urban based.

The general picture which emerges from both shareowning landlordism and rentier landlordism is one of diffusion of landownership among a very large number of landlords, but with a small number of landlords, particularly in sharecropping compacts, controlling substantial numbers of tenancies and the farming population who work these tenancies. Moreover, these few large landlords are also involved, to varying degrees, in the region's major commercial and financial intercourse and networks. They do not limit their economic activities purely to the appropriation of surplus product from the relations of production proper.

VII. LANDHOLDING AND AGRARIAN CLASS

In this section I will attempt to describe the distribution of agrarian classes among the different villages and the pattern of land distribution among the different modes of production and agrarian classes.

Village Agrarian Class Distribution

Before I consider the actual village level distribution of the different agrarian classes among the seven villages in the study, I will describe the aggregate regional distribution of agrarian classes. The data show that out of a total of 610 regional land tenures two-thirds are held by sharecroppers, 16% are held by smallholders, 7% are held by cash tenants, 7% are held by farming-landlords and 3% are held by farming-shepherds (see Table 27). The data bring out very clearly the regional predominance of sharecropping as the numerically most extensive form of landholding. Another interesting feature of these data is the limited development of capitalist ground-rent - i.e. cash tenancy - which accounts for less than a tenth of the regional landholdings. Moreover, while smallholding is more significant than all other forms of landholding except sharecropping, it is still relatively marginal and regionally undeveloped.

When we consider the overall number of landholdings on a village basis we find that two-fifths of all landholdings are located in the village of Jiftlik, almost a fifth in `Ain al Beda, slightly more than an eighth in Bardala, a tenth in Frush Bet Dajan, almost a tenth in Zbeidat, a twentieth in Marj Najeh, 3% in other villages and 1% in `Ain Shibli (see Table 27). Thus, the regional dominance of Jiftlik as the centre of regional production is brought out very clearly in these data.

Table 27: Village by Landholding Form

Landholding	VILLAGE										Row Total
	Bardala	~Ain al Beda	Marj Najeh	Zbeidat	Jiftlik	Frush Bet Dajan	Other	~Ain Shibli			
Absolute No.											
Sharecropper	52	74	9	31	208	26	3	6			409
Shepherd*	3	-	-	3	6	5	-	-			17
Cash Tenant	3	6	2	20	7	4	2	1			45
Smallholder	18	22	15	1	12	24	3	-			95
Farming-landlord	5	8	7	2	11	3	8	-			44
Column total	81	110	33	57	244	62	16	7			610
Percentages											
Sharecropper	64.2	67.3	27.3	54.4	85.2	41.9	18.8	85.7			67.0
Shepherd	3.7	-	-	5.3	2.5	8.1	-	-			2.8
Cash Tenant	3.7	5.5	6.1	35.1	2.9	6.5	12.5	14.3			7.4
Smallholder	22.2	20.0	45.5	1.8	4.9	38.7	18.8	-			15.6
Farming-landlord	6.2	7.3	21.2	3.5	4.5	4.8	50.0	-			7.2
Column total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			100.0

* In this table the shepherds referred to are those who hold land in some form of land tenure which they also farm. The actual number of shepherds is much greater than those who hold land tenure.

If we look at the agrarian class formation on a village basis we find that the aggregate regional picture is subject to some variation. Thus, the data show that sharecropping is statistically predominant in `Ain Shibli, Jiftlik, `Ain al Beda, Bardala and Zbeidat, where it constitutes 86%, 85%, 68%, 64% and 54% of the respective village landholdings. It is also the most common form of landholding in Frush Bet Dajan (42%) but is not numerically greater than the other forms of landholding. Only in Marj Najeh is the existence of sharecropping relatively low, here it constitutes only marginally more than a quarter of the village landholdings.

Smallholding is found relatively frequently in the majority of villages except Zbeidat and Jiftlik where it constitutes only 2% and 5% of the respective village landholdings. Only in `Ain Shibli was there no incidence of smallholding found. Smallholding is the most common, although not predominant, form of landholding in Marj Najeh where it accounts for almost half of the village landholdings. It accounts for four-fifths of holdings in Frush Bet Dajan, almost a quarter in Bardala and a fifth of landholdings in `Ain al Beda.

Cash tenancy, while limited in extent, can be found in all villages but its incidence is relatively low in all villages except Zbeidat, where it constitutes marginally more than a third of all the village landholdings. However, although cash tenancy is fairly common in Zbeidat, sharetenancy is still the predominant form of village landholding. In `Ain Shibli, Frush Bet Dajan, Marj Najeh, `Ain al Beda, Bardala and

Jiftlik it accounts for 14%, 7%, 6%, 6%, 4% and 3% of the respective village landholdings.

The incidence of farming-shepherds in the landholding population is relatively infrequent and generally very insignificant. There are no farming-shepherds to be found in the villages of `Ain al Beda, Marj Najeh and `Ain Shibli. While in Jiftlik, Bardala, Zbeidat and Frush Bet Dajan they constitute only 3%, 4%, 5% and 8% of the respective landholding populations of the villages.

Some farming-landlordism is to be found in all villages, except `Ain Shibli, but its incidence is relatively low. Only in Marj Najeh is it an important form of landholding where it accounts for 21% of all the village landholdings. In the other five villages it accounts for between only 4-7% of the village holdings.

In summary, the sharecropping mode of production is the dominant form of landholding in five out of the seven villages studied, i.e. in Bardala, `Ain al Beda, Zbeidat, Jiftlik and `Ain Shibli. Smallholding (the petty-commodity mode of production) is important in four villages where it accounts from between 20-45% of all landholdings, i.e. in Bardala, `Ain al Beda, Marj Najeh and Frush Bet Dajan. Cash tenancy (capitalist ground-rent) is undeveloped and only exists at a significant level in Zbeidat, but even here it can hardly be considered as a proper form of capitalist ground-rent. Farming-shepherding is relatively insignificant.

Farming-landlordism constitutes a very small portion of all of the holdings in all of the seven villages (ranging from 5% to 7%), except Marj Najeh where it constitutes 21%. However, the numerical extent of farming-landlordism underemphasises its economic importance in the region.

While we have shown the relative numbers and percentages of the different forms of landholding this does not say very much except that there are a greater number of sharetenants than all the other forms of holding combined. A much more interesting picture emerges when we look at the area of landholding and the distribution among the different agrarian classes.

Aggregate Holding

In the following section I will look at the pattern of landholding and land distribution among the different agrarian social classes. There are three distinct forms of landholding in the region. These are private ownership, cash rental and share rental.

Regionally there is a total of 24,201 dunums held under the three different forms of landholding (see Table 28). Almost half of this is share-rented, two-fifths is privately owned and 14% is cash rented. In terms of the aggregate distribution of this land area among the different agrarian class groupings, almost half is controlled by sharecroppers, over a quarter by farming-landlords, 13% by smallholders, 8%

by cash tenants, and 3% by farming-shepherds. Thus, although sharecroppers constitute two-thirds of landholders they have access to only half of the available land area. At the other extreme, we find that although farming-landlords constitute less than a tenth of the landholding population they have access to over a quarter of the available land area. The other agrarian social classes are much closer to parity in this respect, with, farming-shepherds who constitute 3% of landholders having access to 3% of the available land area, cash tenants who constitute 7% of landholders having access to 8% of available land area and smallholders who constitute 16% of landholders having access to 13% of available land area.

TABLE 28: FORMS OF LANDHOLDING (DNMS) BY AGRARIAN CLASS

FORMS OF LAND- HOLDING (Tot. No. Dnms)	AGRARIAN CLASS					ROW TOTAL
	share- cropper	shepherd	cash tenant	small- holder	farming- landlord*+	
Owned	753	159	198	1,912	6,991	9,713
Cash rented	1,226	260	1,478	416	-	3,380
Share rented	9,899	198	284	272	-	11,108
Column total	11,878	617	1,960	3,055	6,991	24,201

* The figures for farming-landlords include both arable and non-arable land.

+ There will be some double accounting of land since the land included in this column includes land which is let to sharecroppers and/or cash tenants.

If we consider the total class distribution of land in terms of the three forms of landholding, we find that of the 9713 dunums of land held in private ownership seven-tenths of this

area is owned by farming-landlords, a fifth by smallholders, 8% by sharecroppers and 2% each by both farming-shepherds and cash tenants. It should be borne in mind that when we are discussing land owned by sharecroppers and cash tenants this is in addition to the land they share rent and cash rent. Also, of the 3,308 dunums of land which are cash rented approximately two-fifths of this area is rented by cash tenants, a third by sharecroppers, an eighth by smallholders and 8% by farming-shepherds. Furthermore, of the 11,108 dunums which are sharecropped nine-tenths of this area is sharerented by sharecroppers, 7% by smallholders, 3% by cash tenants and 2% by farming-shepherds.

These figures show that access to privately owned land among the people residing in the region (as opposed to absentee landowners living outside the region) is dominated by farming-landlords. Farming-landlords who hold less than a tenth of individual holdings own seven-tenths of the land privately owned among the regional population, while smallholders who hold 16% of individual holdings have access to only a fifth of land privately owned among the regional farming population. Access to cash rented land is most commonly in the hands of cash tenants who hold 7% tenancies and have access to two-fifths of the cash rented land area. Interestingly, sharecroppers also have access to a third of the cash rented land area. Sharecroppers who hold two-third of all land holdings have access to nine-tenths of the share-rented land area.

Individual Landholding Pattern

If we turn from the aggregate picture of land distribution to consider the individual size of holdings among the different agrarian classes we find that the majority of all agrarian classes, except farming-landlords have farm holdings of less than 25 dunums (see Table 29). 59% of share-rentals, 56% of

Table 29: Forms of Landholding By Dunumage

Number of Dunums	Forms of Landholding				Row Total
	Owned Farming- landlord	Small- holder	Cash- rental	Share- rental	
1 - 24	10	53	23	243	329
25 - 49	12	17	6	124	159
50 - 74	3	2	3	18	26
75 - 99	1	-	2	4	7
100 - 124	2	2	3	1	8
125 - 149	3	-	-	-	3
150 - 174	1	-	1	-	2
200 - 224	2	1	1	1	5
300 - 324	3	-	-	-	3
325 - 349	-	-	-	1	1
400 - 424	2	-	-	-	2
500 - 524	1	-	-	-	1
775 - 779	3	-	-	-	3
950 - 974	1	-	-	-	1
Not Ascertained	-	20	6	17	43
Column Total	44	95	45	409	593

smallholdings, 51% of cash rentals and only 23% of farming-landlord holdings are less than 25 dunums. Moreover, nine-tenths of share-rentals, three-quarters of smallholdings, two-thirds of cash rentals and half of farming-landlord holdings are less than 50 dunums in size. Only 1% of share

rentals, 3% of smallholdings and 11% of cash rentals are of 100 or more dunums, while over a third of farming-landlords holdings are of 100 or more dunums. This data show that smaller farms are the norm and that large farms are an infrequent phenomenon. The majority of the region's peasant farmers farm on holdings of under 25 dunums. Larger holdings are more frequent among farming-landlords although a substantial part of the land controlled by them is rented out rather than farmed directly.

Table 30: Forms of Landholding (under 50 dnms) By Dunumage

Number of Dunums	Forms of Landholding			
	Small-holder	Cash-rental	Share-rental	Row Total
1 - 4	6	3	6	15
5 - 9	11	12	31	54
10 - 14	18	4	68	90
15 - 19	9	2	59	70
20 - 24	9	2	79	90
25 - 29	1	1	47	49
30 - 34	9	1	44	54
35 - 39	2	2	8	12
40 - 44	3	1	19	23
45 - 49	2	1	6	9
50 plus	5	10	25	40
Not Ascertain.	20	6	17	43
Column Total	95	45	409	549

Moreover, while four-fifths of the landholding population farm under 50 dunums of land, we should be aware that even within this range there is likely to be wide variations in land distribution. Table 30 gives a less concentrated breakdown of landholding for the different agrarian groups in

numerical class unit widths of 5 dunums. This data show that just over four-fifths of all landholders, except farming-landlords (who are excluded from this table), have holdings of under 45 dunums and two-fifths have holdings of under 20 dunums.

If we consider the differential landholding patterns among different forms of landholding we find that the average smallholding is 19 dunums, the average cash rental is 34 dunums and the average share-rental is 23 dunums. The most common size of smallholding is 10-14 dunums, the most common cash rental is 5-9 dunums and the most common share-rental is 20-24 dunums. Moreover, more than a third of both smallholdings and cash rentals and over a quarter of share-rentals are holdings of less than 15 dunums. Almost half of both smallholding and cash rentals and only two-fifths of share-rentals are under 20 dunums in area. Furthermore, share-rentals are relatively more common in the ranges over 25 dunums than either smallholdings or cash rentals. However, we should not be particularly surprised at this fact, especially when compared with smallholding, since we should bear in mind the fact that sharecroppers are divested most commonly of 50% of their produce in the form of the rental payment they make to their landlord.

For an average sharecropping household to maintain income parity with a comparable smallholding household the sharecropping household would, ceterus paribus, have to farm twice as much land as the comparable smallholding household.

However, the main fact which emerges from these data is that small scale farming is the predominant form of farming system. This small scale farming makes economic sense as a form of high intermediate technology, irrigated and labour intensive farming. The general feature of this farming system is that it is much smaller in size than the normal farm size in Palestine during the Mandate period, which in any case was normally based on rain-fed agricultural production. The general feature of the farming system in the north Jordan Valley is that it is small-scale intense farming geared up to the production of vegetable crops for a developed commodity market. The agriculturalists in this region are first and foremost producers of exchange value where the money obtained is utilised to meet rental payments and to purchase the necessary household consumption requirements. These peasants largely live and work in a social formation where wage labour relations predominate over all other forms of economic activity and thus it would be mistaken to assume that in the event of a severe agricultural crisis they could revert back easily to simple forms of household subsistence production. Subsistence production is now a secondary aspect of their production related activities and in times of crisis, such as periods of market gluts and natural catastrophes, this subsistence side of agricultural activities can help the peasantry to cushion the worst impact of these crises. However, in the final analysis, subsistence production cannot constitute an alternative to highly specialised and commoditised agricultural production. The logic of the landholding situation is geared to intense agricultural

production utilising modern technology and agricultural inputs. Existing farm size mitigates against a return to a system where subsistence production predominates over the market function which is based on the highly monetised and technologically based production of use-values for exchange.

Parcelization

One factor which often mitigates against extensive land use and bringing land under more intensive forms of production is the dissolution and fragmentation of landholding into minute parcels of land, often separated by fairly substantial distances and over different agricultural terrains. This is certainly an aspect of the landholding pattern in the West Bank highlands where landholding has been subject to fragmentation. This happened over a long period of time as larger landholding units became fragmented into smaller and smaller units through the inheritance system, which generationally dissolves the original landholding unless it is consolidated through purchase and traditional forms of transfer, e.g. as a bride price etc. However, this mechanism does not appear to be operating in the Jordan Valley where sharecropping rather than smallholding is the predominant form of land tenure system.

The data show that slightly more than two-fifths of all landholdings are parcelled into more than one plot of land (see Table 31). Sharecroppers show the least tendency to work parcelized holding with three-fifths of sharecroppers working

consolidated holdings. There are not, however, large statistical differences between the different landholding classes in terms of the degree of parcelization, since half of both smallholders and cash tenants, two-fifths of sharecroppers and three-fifths of farming-shepherds work parcelized plots. The figure for farming-shepherds is exceptional in relative terms, but in absolute terms this group only constitutes 4% of those with parcelized plots of land.

Table 31: Landholding By Land Parcelization

Land Dispersion	Landholding Category				Row Total
	Share-cropper	Shepherd	Cash Tenant	Small-holder	
Parcelled	167	10	22	48	247
Adjacent	229	5	22	46	302
Not Ascertain.	13	2	1	1	17
Column Total	409	17	45	95	566

The actual number of land parcels ranges from 1 to 19, although only 0.2% of the population has 19 parcels and indeed only 3% of the farming population farms on more than 5 parcels of land (see Table 32). After the fully consolidated landholding, two parcels are the most common form of parcelized holding, with 15% of sharecroppers, 35% of farming-shepherds, 29% of cash tenants and 28% of smallholders farming on two separate parcels of land. Farming on three or more plots is not unknown and indeed it

is relatively common with a quarter of both sharecroppers and farming-shepherds, and a fifth of both cash tenants and

Table 32: Landholding Category By Number of Parcels

Number of Parcels	Landholding Category				Row Total
	Share- cropper	Shepherd	Cash Tenant	Small- holder	
1	229	5	22	46	302
2	61	6	13	27	107
3	39	3	3	9	54
4	25	-	2	4	31
5	24	1	3	4	32
6	9	-	-	1	10
7	1	-	-	-	1
8	-	-	1	-	1
9	1	-	-	-	1
Not Ascertain.	19	2	1	3	25
Column Total	409	17	45	95	566

smallholders farming on three or more separate parcels of land. However, farming on five or more parcels of land simultaneously is quite infrequent with only 9% of both sharecroppers and cash tenants, and only 6% of both farming-shepherds and smallholders farming on five or more distinct plots of land. Thus, while parcelized farming is not the dominant form of land dispersion there is still a relatively high incidence of parcelized farming, but this has not led to fragmentation of landholding in the same manner as in the West Bank highlands. Parcelisation is probably directly related to different forms of landholding and thus to different class locations in most cases rather than to fragmented landholdings.

The major problem associated with parcelized land is that it inhibits the development of extensive farming systems, i.e. systems which are highly mechanised in terms of the planting and harvesting technology utilised. This is not an important problem in the Jordan Valley at the present time since the farming system adopted is an intensive farming system on small plots of land producing vegetable crops, where harvesting technology has not been developed to reap soft-skinned vegetable produce. Harvesting remains labour intensive. As long as this farming system continues then the issue of consolidation of parcelized plots is not likely to change the land tenure pattern of land distribution. However, a changeover from vegetable crop production to extensive field crop production or the development of mechanical sowing and cropping systems capable of handling soft-skinned vegetable produce, which at the same time works out less costly and more profitable than sharetenancy, would most likely lead to a de-peasantisation of the sharecropping sector in the Jordan Valley.

SUMMARY

In this chapter I looked at the different types of peasant modes of production and their constituent class relations of production which exist in the region. I demonstrated that all forms of peasant enterprise are engaged in petty-commodity production but that there are only two forms of non-capitalist modes of production which entailed relations of direct economic exploitation in their immediate relations of

material production. These are sharecropping and cash tenancy. Sharecropping forms of production are prevalent in the region and account for two-thirds of all peasant enterprises. Cash tenancy is fairly marginal and accounts for only 7% of peasant farm enterprises.

The other two types of production unit found in the region are internally non-exploitative in their immediate relations of material production, familial and gender relations of subordination notwithstanding. These are smallholding and farming-landlordism which are both forms of petty-commodity production. Smallholding accounts for less than a fifth of peasant farm enterprises and farming-landlordism accounts for only 3% of peasant farm units. Thus, we can infer from this picture that the regional economy is one which is largely based on production through the direct exploitation of immediate producers.

The pattern of land ownership under private landlords is diffused among a large number of small landlords, and thus we can say that there is no actual concentration of economic exploitation, although this is an ongoing tendency since the two largest landlords control a tenth of all sharecropping compacts. Moreover, the largest landlord is also the major merchant and commercial haulier operating in the region and the two largest landowning families (as opposed to individuals) control almost a quarter of sharecropping compacts.

The pattern of landholding in the region is dominated by relatively small-scale plots; more than half the peasant farmers operate enterprises of less than 25 dunums. The most common size of share-rental is 20-24 dunums, while the most common areas of smallholding and cash rental are 10-14 and 5-9 dunums respectively. The parcelization of land - while not prevalent - is not an uncommon phenomenon.

This chapter has allowed me to bring out, through the realist retroductive method, the pattern of economic class relations embedded in the different modes of production. In the following chapter I will attempt to bring out through the same methodological procedure the structure of unequal exchange, its tendencies and interaction with these economic class relations.

NOTES AND REFERENCES

1. See, E. Laclau, "Feudalism and Capitalism in Latin America", in Politics and Ideology in Marxist Theory, (London, 1977), p.34. and chapter two of this thesis.

2. I have discussed this aspect of social relations in "Sharecropping in the North Jordan Valley: Relations of Production and Reproduction", in Kathy and Pandeli Glavanis eds., Agrarian Relations in the Middle East, (London, forthcoming) pp. 7-10 and pp. 34-38.

3. For a general discussion on the peasant household as a distinct production unit, see, inter alia, Kathy and Pandeli Glavanis, "The Sociology of Agrarian Relations in the Middle East: The Persistence of Household Production", in Current Sociology, Vol 31, No 2 Summer, 1983. Kathy Glavanis, "Aspects of Non-Capitalist Social Relations in Rural Egypt: The Small Peasant Household in an Egyptian Delta Village", in Norman Long Ed., Family and Work in Rural Societies, (London, 1984), pp. 30-57. Marit Malhuus, "Cash Crop Production and Family Labour: Tobacco Growers in Corrientes, Argentina", in Norman Long ed. *ibid.* pp.61-77. Harriet Friedmann, "Household Production in the National Economy: Concepts for the Analysis of Agrarian Formation", in Journal of Peasant Studies, Vol 7, No 2, 1980. pp. 158-84.

4. On the general question of patriarchy, see, Gayle Rubin, "The Traffic in Women: Notes on the 'Political Economy' of Sex", in Rayna Reiter ed., Towards and Anthropology of Women, (New York, 1975), pp. 157-210. For a discussion of gender hierarchy in West Bank villages, see, Annelies Moors, "Gender

Hierarchy in a Palestinian Village: The case of al Balad", in Kathy and Pandeli Glavanis eds. op cit.

5. For a general discussion of these issues in terms of the link between the peasant economy and capitalism, see, Carmenr Dianna Deere, "Rural Women's Subsistence Production in the Capitalist Periphery", in Robin Cohen, Peter C W Gutkind and Phyllis Brazier eds., Peasants and Proletarians, (London, 1979), pp. 133-45.

6. Balibar makes an identical distinction between a "property connection" and a "real or material appropriation connection". See, E. Balibar, "The Basic Concepts of Historical Materialism", in L. Althusser and E. Balibar, Reading Capital, (London, 1970), p. 215.

7. See, R. Shehadeh, "Some Legal Aspects of Israeli Land Policy in the Occupied Territories", in Arab Studies Quarterly, Vol 7, Nos 2 and 3, 1985.

8. Compare, Alfred Bonne, State and Economics in the Middle east, (London, 1948), pp. 116-17.

9. See, Salim Tamari, The Dislocation and Re-Constitution of a Peasantry: The Social Economy of Agrarian Palestine in the Central Highlands and Jordan Valley, 1960-80, Unpublished PhD Thesis, (Manchester University, 1983), p. 10.

10. Karl Marx, Capital, Vol 1, (Harmondsworth, 1976) p.283.

11. For a general historical discussion of sharecropping, see, R.Pearce, "Sharecropping: Towards a Marxist Analysis", in Journal of Peasant Studies, Vol 10, No 2 and 3, 1982.

12. These figures are an estimate based on the 1931 census, which shows a population of 14,000 sharecroppers in Palestine. Alfred Bonne, further informs us that after WWI

there were approximately 70-80,000 agricultural units in Palestine. Thus, if things remained relatively constant, sharecropping would constitute between 18-20% of all agricultural enterprises.

13. See, Tamari op cit. pp. 50-73.

14. For a more general discussion of these issues, see, Alex Pollock, "Society and Change in the North Jordan Valley", in George Abed ed., Development Under Prolonged Occupation, (Welfare Association, 1987) (forthcoming).

15. On the general issue of the links between property and markets, see, J. B. MacPherson, Possessive Individualism, (London, 1968).

16. Compare the chapter on squatting in this report.

17. See, Timothy Keegan, "The Sharecropping Economy of the South African Highveld in the Early Twentieth Century", in Journal of Peasant Studies, Vol 10, No. 2 and 3, 1982.

18. See, E. O. Wright, Classes, (London, 1985), pp. 73-86.

19. Compare, Alex Pollock, "Sharecropping in the North Jordan valley: Social Relations of Production and Reproduction", in Kathy and Pandeli Glavanis Eds., Agrarian Relations in the Middle East, (London, 1987) (forthcoming).

20. Compare, Salim Tamari and Rita Giacaman, Zbeidat: The Social Impact of Drip-Irrigation on a Palestinian Peasant Community in the Jordan Valley, (Birzeit, 1980), pp. 42-45.

21. See, op cit. pp. 201-25.

22. Fatimah Halim, "The Major Mode of Surplus Appropriation in the West Malaysian Countryside: The Sharecropping System", in Journal of Peasant Studies, Vol 10. No 2 and 3, 1982, p.262.

23. Compare, Wright op cit. pp. 77-84.

24. See, Shehadeh, op cit. pp. 54-56.

25. For an interesting theorisation of the simple commodity mode of production in a manner which is congruent with the extended definition of a mode of production, see, H. Friedmann, "The Family Farm in Advanced Capitalism: Outline of a Theory of Simple Commodity Production in Agriculture". Paper presented to the Thematic Panel, "Rethinking Domestic Agriculture". American Sociological Association, Toronto, August, 1981.

26. See, chapter four of this thesis for further discussion.

27. For Details, see, Tamari and Giacaman, op cit pp. 3-5.

CHAPTER 4: MERCHANT/USURER CAPITAL AND THE SUBORDINATION OF NON-CAPITALIST FORMS OF PRODUCTION

In the preceding chapter I attempted to define the specificity of the relations of production in the different forms of non-capitalist modes of production which were found in the region under analysis in this study. I showed how only in sharecropping and cash tenancy relations of production did there actually occur relations of economic exploitation engendered in these modes of production themselves. In this chapter I want to show how all forms of peasant agrarian enterprises have become formally subordinate to merchant/usurer capital and the mechanisms which merchant/usurers utilise to appropriate part of the surplus product produced by the different forms of peasant commodity producers residing in the region. I will then attempt to draw out some basic ideas on agrarian development strategies which can help to off-set the worst aspects of peasant poverty instigated by their formal subsumption to merchant/usurer capital.

I. THE CIRCULATION OF COMMODITIES, COMMERCIAL AND USURER CAPITAL

In order to understand the phenomenon of peasant subsumption to merchant/usurer capital I feel it is necessary to move from an abstract account of the process of social reproduction through a series of specifications which lead us to a concrete understanding of the real relationships which

bind the peasantry to merchant/usurer capital. To begin at the most abstract level, in all societies the basic biologically necessary element of human existence and human reproduction is provided by means of consumption - food, clothing, shelter, etc. However, in order for consumption to be possible, the production of consumer items (use-values) must take place or humanity cannot exist. It is a basic feature of all human society that people produce the consumption requirements of society regardless of the specific forms of production, the social division of labour or the economic class structure that exist. Thus, from the very primordial beginnings of human existence consumption and production are conjoined in a basic symbiotic unity. The symbiosis itself has no necessary form other than the fact that it is a social construction and not a natural one, and thus it is subject to change and infinite variation through different social formations and different historical epochs.

(1) This interconnection is a basic law of social reproduction which consists of an interdependent circuit of production and consumption. This can be represented formally, as:

$$P \dots C \dots P \dots,$$

where, P represents the production of use-values and C represents the consumption of these use-values.

In outlining this abstract account we are not concerned with the empirical patterns of consumption but merely with necessary consumption, in other words a biological necessity. Consumption has two elements which are required to maintain

any stable level of production and reproduction; first, we have the personal consumption of producers which must fulfill a biological minimum if producers are to go on producing, and, second, we have the productive consumption of producers which refers to the actual means of production (i.e. tools, machinery, etc.) and the elements necessary to cover the depreciation of the means of production. These two elements are necessary invariant aspects of all human activity and in this model are historically unspecific.

Once society passes beyond the level of natural economy and attains a relatively complex level in the social division of labour, markets begin to operate as a mechanism of distribution and exchange of production for necessary consumption. Production and consumption become linked through the mechanism of trade and exchange and the use-values exchanged take the form of commodities.

If we shift the level of analysis to a more concrete but still abstract model, which allows us to specify the form of articulation of commodity producers - i.e. sharecroppers, smallholders, cash tenants, farming-shepherds and farming-landlords - in the Jordan Valley to the West Bank, Israeli and international economy, then we find that the social reproduction of these commodity producers occurs through three interconnected and complementary processes in the circulation of commodities.

In the first instance, simple commodity producers are

dependent upon the pre-existence of markets where they can sell the commodities they produce and purchase other commodities (both personal and productive commodities) which they do not produce. This circuit of simple commodity production can be formally represented as:

$$C - M - C',$$

where, $C - M$ represents the act of selling commodities (C) for a sum of money (M), and the final part of the circuit $M - C'$ represents the outlaying of a sum of money (M) for a bundle of commodities (C'). This is the formal outline of the circuit of simple commodity production, where the producer is concerned to exchange the commodities s/he produces in order to obtain money to purchase another package of commodities which s/he does not produce but which are necessary for both her/his personal and productive consumption. The extended circuit of simple commodity production can be formally represented, thus:

$$P...C - M - C'...C_n,$$

where, $P...C$ represents the production of commodities and C_n equals the total bundle of commodities purchased.

The generalisation and reproduction of simple commodity production requires the development of the circuit of commercial capital as a necessary condition of social reproduction, i.e. the existence of commodity markets where commodities can be bought and sold. The circuit of commercial capital is a sphere of economic activity in which merchants act as intermediaries between different consumers and producers. The circuit of commercial capital can be formally

represented, thus:

$$M - C - M',$$

where, M represents the initial sum of money outlaid for a bundle of commodities C, and M' represents the final income from the sale of these commodities. The circuit of commercial capital is predicated on the logic of purchasing commodities cheaply in order to sell them at a dearer price. If the merchant does not achieve this aim, i.e. if M' is equal to or less than M, then s/he is wasting her/his time and effort.

The development and expansion of the circuit of commercial capital accompanies increasing specialisation and differentiation in the social division of labour. The circuit acts as a medium through which a multivarious array of differentiated producers enter an institutionalised form of economic interaction through which they can exchange their produce for money with which they can purchase other commodities through the same institutional arrangement. This institutionalised form is the sphere of market relations which is charged with the function of consumption. As the social division of labour in commodity producing social formations becomes more complex, then the role of merchant capital reaches prominence as merchants become more specialised in order to integrate the different commodity markets with one another. This development integrates the circuits of production and consumption, and we can formally represent this form of social reproduction, thus:

$$P...C - (M - C - M') - C'...C_n$$

In acting as a mediator between the circulation of different commodities to consumers and producers, the merchant is not particularly interested in the origin of the commodities. S/he is not concerned if they originate from capitalist or non-capitalist forms of production. The main criterion for merchant capital is that M' is of greater monetary value than M . The only concern is with immediate profitability. In acting out this brokerage role, merchant capital most commonly acts as a mediator between non-capitalist and capitalist commodity producers over regional, national and international boundaries.

In the actual process of exchange the commodity undergoes no transformation in its basic form. The merchant does nothing to the commodity in a productive sense. The relationship between the merchant and consumer is not based on a relationship of economic exploitation, rather it is based on unequal exchange. The relationship to the merchant of the original producer of the commodity is also normally one of unequal exchange. This essentially means that merchant capital exchanges commodities at non-equivalent values. This point is brought out quite clearly by Geoffrey Kay, who defines the mechanism of unequal exchange in the following terms:

Its [commercial capital's] circuit, $M - C - M'$, involves two transactions but only one commodity, and there is nothing merchant capital does to this commodity between the moment of its purchase and subsequent sale, which increases its value. The same commodity is with the same value features in both exchanges, so that if the two transactions took place at value, it would be the same value.

Buying price and selling price would be equal and the merchant would make no profit. For any profit to be made one transaction, at least, must take place at a price not equal to value. This is not simply an imperative for the individual merchant, nor an occasional requirement that can be satisfied by the odd crooked deal - unequal exchange is a general condition for the existence of merchant capital as a whole. (2)

Thus, for merchant capital to achieve profit and sustain the general strategic aim of capital accumulation it must engage in unequal exchange between producers and consumers. This profit from unequal exchange finds its essential foundation in the sphere of production in the form of the unremitted product of labour, i.e. it is part of the surplus product or surplus labour which is appropriated by merchant capital through the function of market exchange and trade. Merchant capital pursues its strategy of capital accumulation through the circulation of commodities and not their production per se.

The third element involved in the circulation of commodities is the circuit of interest bearing capital. Interest bearing capital or usurer's capital, like merchant capital, is dependent upon the circulation of commodities. Interest bearing capital is one further means of appropriating part of the surplus product or surplus labour of peasant simple commodity producers. Interest bearing capital is really a variation of the circuit of commercial capital. The difference being that interest bearing capital deals in only one commodity: money. Money is not a commodity which is produced but is instead a formal means of exchange. Moreover,

this commodity is not sold but lent to be returned at some future point in a financially augmented form. Money is normally borrowed in order to consume. We previously noted two forms of consumption (personal consumption and productive consumption). The main reasons why peasant producers borrow money is to purchase either goods for personal consumption or goods for productive consumption or both.

The logic of the circuit of interest bearing capital can be formally represented, thus:

$$M - M',$$

where a sum of money, M, is forwarded in return for a deferred payment of a greater sum of money, M'. The logic entailed is one based on pure quantity. The profits obtained by usurers' capital are based on a monetary deduction from surplus product and is also based on the mechanism of unequal exchange. The inequality in this monetised transaction is open and translucent since one sum of money is exchanged for a greater sum of money.

We can now set out formally the interaction of the three circuits involved in the social reproduction of simple commodity production, thus:

$$P...C - (M - C - M') - (M' - M'') - C'...Cn$$

While I have discussed these three circuits in generally abstract terms, they have very real specifications which have to be brought out empirically. While we can analytically and conceptually separate the circuits of commercial and interest

bearing capital, when we actually look at their operations in concrete situations we may discover that, particularly in the absence of institutionalised credit and banking facilities, these circuits become unified in the hands of individual merchants. This unification of commercial and interest bearing capital can invest substantial levels of financial, economic and political power in the hands of merchants/usurers. Both these circuits share a similar logic; one based on the quantitative expansion of capital as money. The merchant needs money to increase her/his supply of cheap commodities which s/he then sells expensively. While the usurer needs money to expand her/his money-lending activities. The logic itself is of course subject to the constraints of supply and demand and competition between merchants and usurers.

When the circuit of interest bearing capital comes into interaction with non-capitalist forms and modes of production the interaction normally takes two distinct forms. Usurers either extract a portion of the surplus product indirectly through lending to landed elites who directly appropriate the surplus product from peasant producers, or they may enter directly into money-lending relationships with the direct producers themselves, which results in money-lending itself becoming the primary mechanism of extracting surplus product from non-capitalist modes of production.

In this respect, usurers' capital is different from merchant capital since, as William Roseberry argues, it is not limited

to the sphere of circulation but may well enter into the sphere of production itself. It is Roseberry's contention that interest bearing capital can stand in a distinct social relation of production in the context of peasant forms of non-capitalist production, since:

Where interest is the primary method of extracting surplus product from the direct producers, the usurer has imperfect control over production, not unlike the control exercised by the landlord who rents out a portion of his land. In both cases, the producer is identified with the means of production, and in both cases, control of these means is not, precisely speaking, the producers'. In other words, the producer has not been separated from the means of production, but these means have been alienated from him to a certain extent. Moreover, this alienation may lead to separation if the creditor forecloses or if the landlord expropriates. (3)

In other words, interest bearing capital does not exercise real control or ownership of the labour process and thus no actual real subsumption of the labour process to the logic of capital, rather the labour process becomes formally subsumed and tied to merchant/interest bearing capital although the logic of production is still that based on simple commodity production.

II. THE PROCESS OF COMMODITISATION

In the previous section I attempted to clarify in a fairly formal and abstract manner the way in which the circuits of merchant and usurer capital interact with the circuit of simple commodity production. However, in order to supplement this abstract analysis we need to specify another concept

which leads us towards a more concrete understanding of how the mechanisms of formal subsumption interact at the more concrete level of social agency. The concept which helps us to understand this interaction is the concept of commoditisation. Commoditisation is a concept with dual aspects; on the one hand, relations of personal commodity consumption, and, on the other, relations of productive commodity consumption.

In the north Jordan Valley it is now almost completely generalised that all forms of non-capitalist agrarian enterprises are engaged in simple commodity production, through which peasant households produce the most significant portion of their agricultural produce for market exchange and also utilise a smaller portion of their produce for household subsistence consumption. The contemporary situation in the Jordan Valley is based on the fact that all peasant producers are engaged in an economic market situation dominated by the capitalist circulation process and to which they are interlinked as "independent" producers of agricultural commodities.

Once simple commodity production becomes generalised, it almost inevitably results in commodity specialisation as the production process comes under the sway of market forces, since it is only through specialisation, particularly on the part of smaller farmers, that limited economies of scale can be achieved. The form of specialisation in the north Jordan Valley is wholly limited to vegetable crop production,

normally utilising HVY's and intermediate drip irrigation technology.

In peasant societies, specialisation in different sectors of agricultural commodity production most often results in an extension of personal commodity consumption within the peasant household as less and less of the household foodstuff consumption is met from the subsistence resource base of the peasant economy, and as these subsistence requirements are met through commodity consumption through the market place mediated by cash payment. Henry Bernstein, in his work on African peasantries, has shown that this can be taken as one of the signs in the development of increasing commoditisation. He states that:

When food needs are satisfied on a regular basis by purchase this signifies that commodity relations have developed to a higher level. It reflects a more advanced social division of labour in which some peasants specialise in the commercial production of food, some of which is directed through the market to peasants engaged in other branches of commodity production, or in which food is produced on capitalist farms with higher levels of productivity of labour and is available more cheaply than food produced within the household.
(4)

While this is certainly an aspect of social relations in peasant agriculture in the north Jordan Valley, the more important side of commoditisation, at least from the side of merchants and usurers, is perhaps the intensification of productive commodity consumption. By this I am referring to the intensification of commodity purchases of productive consumption on peasant farm enterprises. The main reason for

the intensification of productive commodity consumption in the Jordan Valley is directly related to the changeover from the furrow irrigation system to the drip irrigation system and the associated bio-chemical package of HYV's, insecticides and pesticides which occurred in the mid-1970's. During this period the regional peasantry became deeply enmeshed in a new level of productive commodity consumption as these new techniques - drip-irrigation equipment, plastic sheeting, HYV seeds/seedlings, insecticides, fertilizers, etc. - had to be purchased in the market. The intensification of these commoditised productive consumption needs created a larger exploitative space and more profitable possibilities for merchant and usurers in the appropriation of surplus product through the mechanism of unequal exchange. It allowed merchants to manifestly increase the appropriation of surplus product through relative unequal exchange.

Bernstein has drawn out the effects of increasing commoditisation on the economy of the peasant household resulting in increasing costs of production and decreasing returns to labour. This process he calls a "simple reproduction squeeze" and comments that:

The pressures which result in the "squeeze" on simple reproduction include those arising from the exhaustion of both land and labour given the techniques of cultivation employed, from rural "development" schemes which encourage or impose more expensive means of production (improved seeds, tools, more extensive use of fertilizers, insecticides and pesticides, etc.) with no assurance that there will be increased returns to labour commensurate with the costs incurred, and from deteriorating terms of exchange for peasant

produced commodities. (5)

The last two elements in the constitution of the "squeeze", the application of rural development schemes which substantially increase productive commodity consumption costs and the advent of deleterious terms of trade, clearly applies to the case of peasant indebtedness in the Jordan Valley. However, the simple reproduction squeeze should further be viewed as the conjunctural impact of drip irrigation and HYV technology in leading to market saturation of peasant produced commodities in conjunction with intensified levels of unequal exchange on the peasantry by merchant/usurer capital.

III. MARKETING

In his study of Zbeidat, Salim Tamari identifies four modes of marketing open to peasant households. (6) These are through, (i) direct sales to retailers and the public, (ii) crop-leasing (daman mahsul) to merchants who estimate the potential crop yield of a planted field before the harvest period and make the farmer a cash offer for it which is paid immediately, (iii) direct export through agents to Jordan, and, (iv) direct auction sales in the regional wholesale fruit and vegetable markets through commission agents.

First, direct sales by peasant households to fruit and vegetable retailers were minimal and only four farmers claimed to sell directly to retail outlets. Such sales

require the ownership or possession of a truck or Volkswagon transporter to get the produce to market, since the nearest retail outlets are at a distance of 80-150 kilometres from the farming areas. This is too far, too time-consuming and too expensive to travel by tractor and trailer. Thus, direct sales through retailers do not represent an important marketing outlet for the vast majority of peasant producers.

A large number of farms, particularly if they have younger children and older persons in the household, sell a portion of their produce by peddling produce at the side of the road to passing traffic. While this practice does bring in an immediate monetised income into the household, only a very small portion of the total crop yield is sold in this manner and thus only a minor fraction of the total farm income comes from this source.

Second, while there is substantial evidence that crop leasing was common in the villages of Zbeidat, Marj Najeh, 'Ain Shibli and Bardala after the initial introduction of drip irrigation and HYV's in the late-1970's and even into the 1980's, the practice is no longer prominent today. There are a number of reasons for the demise but two stand out as being particularly important. First, in the initial phase of introduction market prices were generally set by lower volume production and crop-lessees were able to take advantage of high tomato prices, particularly at the beginning of the season. However, as more and more farms moved over to the drip irrigation system, market prices dropped significantly

and thus the normal interplay of supply and demand drove crop-lesers from the market in search of safer ventures. A second, and not necessarily unrelated, aspect is the fact that the major crop-lesers were Israeli and Israeli-Arabs who sold the crop they leased across the "Green Line" (i.e. inside Israel itself). Such economic trade, while legally permissible for a variety of agricultural commodities produced in the West Bank and Gaza, is legally proscribed by military orders for the exportation of tomatoes, the main crop of the region. (7) Israeli merchants undertaking such ventures were liable to have their merchandise and transport impounded and even confiscated if caught illegally "exporting" agricultural commodities from the West Bank. At the beginning of the 1980's much more stringent effort was exerted by the Israeli authorities in attempting to curb these illegal exporting ventures. During this time an increasing number of merchants were caught and prosecuted. Thus, for a combination of these two reasons, crop-leasing came to an almost complete halt by 1983-84. Although the nature of the drive for capital accumulation and quick profits being what it is, some people, mainly very small operators, are still prepared to take the risks but the practice is certainly no longer widespread.

It is difficult to find accurate figures on just how widespread crop-leasing was, but Tamari has suggested that:

Crop leasing is done only for a portion of the fields, usually one dunum at a time, as the farmer always hopes to get a better price by marketing his crops in the hisbeh. (8)

The situation described by Tamari, which may only be applicable to the period during which he conducted his fieldwork, is directly contrary to my field work evidence, which it must be admitted in this case is impressionistic and based on a very small number of interviews. My field work evidence shows that only a small percentage of peasant households formerly crop-leased their lands. But those which did, crop-leased anything from 50-100% of their tomato crop, which could be anything from 3 to 15 dunums. This is significantly larger than the figure suggested by Tamari. Moreover, as Tamari himself states, in the spring of 1980, peasant households were receiving a gross income of \$1000 per dunum of tomatoes. (9) Given these prices it is very unlikely that those peasant households who were crop-leasing would not have been prepared to crop-lease more land, particularly as harvesting, packing and marketing of the crop becomes the responsibility of the crop-leaser.

Moreover, if we consider crop-leasing from the point of view of the Chayanovian thesis of the trade-off between factor income and leisure, then, the labour-consumer balance instigated by crop-leasing is very favourable to the peasant household. Since they only have to look after the crop until the harvest period and the harvesting (i.e. the most intense period of farm labour activity) of the crop becomes the responsibility of the crop-leaser. (10) The Chayanovian thesis tends to support my impressionistic data that those peasant farmers who crop-leased, leased substantially more land than that suggested by Tamari. However, the evidence is

not veridical and is unlikely to be proven one way or the other now that the practice has largely ceased.

Fourth, one of the major incentives for the introduction of Green Revolution technology and HYV's at the beginning of the 1970's was the availability of the international Arab export market via Jordan as an extended market for produce from the West Bank. Before the onset of the Iran-Iraq war, produce from the Jordan Valley was entering Iraq. Goods were also entering Syria until the onset of the particularly chilled relations between Syria and Jordan. In order to export their crops from the West Bank to Jordan, Palestinian peasant farmers have to obtain "certificates of origin" guaranteeing that their produce is the produce of Palestinian farms and does not originate in Israel. The certificates permit farmers

Table 33: Source of Certificates of Origin by Agrarian Class

Source	Share-cropper	Shepherd	Cash tenant	Small-holder	Farming landlord	Total
Landlord	72	-	-	2	-	74
Mark. Coop	99	3	22	36	-	160
Other	162	7	10	23	-	202
Not asc.	38	-	3	11	12	64
Total	371	10	35	72	12	500

to export up to 50% of their crop yield to Jordan. These certificates have to be notarised by a representative of the Jordanian government in the West Bank. This function is

normally carried out for the north Jordan Valley region by the Jericho Marketing Cooperative or employees of the Jordanian Department of Agriculture. However, farmers do not often have direct access to these sources and they will use intermediaries to obtain the certificates of origin on their behalf. Almost a third of peasant households get their certificates of origin directly from the Jericho Marketing Cooperative, 15% get them through the mediation of their landlord and the largest group - two-thirds - gets them from "other" unspecified sources which includes commission agents, village mukhtars and the Jordanian Department of Agriculture employees (see Table 33).

There are some differences in the ways in which the various agrarian classes gain access to certificates of origin. A fifth of sharecroppers got their certificates from landlords and they were the only group to obtain their certificates substantially from this source. Only slightly more than a quarter of sharecroppers got their certificates directly from the Jericho Marketing Cooperative, compared with almost two-thirds of cash tenants and half of all smallholders. One reason for this is that sharecroppers are least likely to be members of the marketing cooperative. Another reason is that they are much more likely to be at the prey of other social groups, particularly commission agents and commission agents who combine mercantile functions with landlordism, and to obtain their certificates of origin for them. This helps to maintain and reinforce relations of patronage and clientism.

Although the export market is open and trucks can cross into Jordan at both the Allenby and Dammia bridges, the passage of trucks across the bridges is subject to delay. Moreover, transport costs are high, transportation is limited and often farmers do not obtain their certificates of origin in time to get their crops to Jordan before the harvest begins to go bad. Thus, two-thirds of those farmers who exported part of their produce to Jordan had problems in marketing (see Table 34). The most common problem was that transportation costs were seen to be excessively high. The cost of transportation, including the certificates for the driver and truck, is 180 dinars (approximately US\$540) for a journey of 90-100 kilometres. Moreover, trucks for transportation over the bridges were in short supply, since the number of trucks allowed to pass over the bridges between the West Bank and Jordan are limited in number and have to be specially stripped down so that they can be easily screened and checked for the smuggling of arms and explosives; all wheels and engine parts are sealed, the chassis and interior is completely stripped and the petrol tank is open. A tenth of farmers said that limited availability of transport was a major export marketing problem. Only 3% found that delays at the bridge itself constituted a problem. A further 18% gave other problems with marketing. Only a quarter of farmers claimed that they did not have any problems in marketing. All agrarian classes were equally subject to these problems and there were no significant differences between the different modes of production in this respect.

Table 34: Problems of marketing in Jordan by Agrarian Class

Problem	Share-cropper	Shepherd	Cash tenant	Small-holder	Farming landlord	Total
None	96	3	8	28	2	137
Quantity	9	1	2	-	1	13
Delays	14	-	1	-	1	16
Trans cost	28	-	-	6	-	34
Limited tr	19	-	9	5	1	34
Permission	73	3	13	13	4	106
Other	77	3	2	7	1	90
Not asc.	55	-	-	13	2	70
Total	371	10	35	72	12	500

Although not so much a problem but more an index of exploitation, almost half of the peasant farm population claimed that they had to pay a double commission on the sale of their crops which were exported to Jordan (see Table 35), i.e. they had to pay a commission to both their West Bank commission agent who transported the crops to Jordan, and also to the commission agent on the Jordanian side who auctions the crop in the market place. In extreme cases, this can mean almost a quarter of the sale price of the crop being paid in commission. Moreover, this does not even take into account transportation costs. Sharecroppers were marginally more likely to be exploited in this way than other agrarian classes, with 60% of sharecroppers paying double commission, compared with 55% of cash tenants, 50% of farming-landlords and 24% of smallholders.

Table 35: Do You Pay Double Commission When You Market Your Crops in Jordan by Agrarian Class?

Double Commsn.	Share-cropper	Sheqnero	Cash tenant	Small-holder	Farming landlord	Total
Yes	244	7	24	25	7	307
No	26	2	2	15	1	46
Other	34	1	1	4	1	41
No Exports	22	49	9	31	2	123
Not asc.	69	-	8	28	3	108
Total	405	59	44	103	14	625

The larger West Bank merchants also have offices in Amman (the Jordanian capital) where they conduct business through family networks. In most cases there is no economic necessity for double commission, it is merely using power invested through their monopoly over transportation and knowledge of East Bank markets. An important point which should be borne in mind is the fact that the export market is not an alternative to marketing through commission agents, since the export market is largely controlled by merchants on the West Bank and this is particularly true of exports from the north Jordan Valley.

In the past few years there have been increasing problems of marketing in Jordan as vested interests on the East Bank have attempted to limit and even prevent the penetration of the Jordanian market by an influx of agricultural commodities from the West Bank which can result in a reduction of the profits of Jordanian merchants and farmers. (11)

Finally, in the context of the market exchange of commodities among the peasant community in the Jordan Valley, the main institutional conduit for articulating the peasant commodity producing sector to the home, colonial and international markets are commission agents operating through the regional fruit and vegetable wholesale markets (hisbeh). These commission agents are merchant wholesalers of agricultural commodities. Commission agents are commercial capitalists who essentially unify the function of merchant capital with the function of usurer capital and a number also provide necessary productive services to get the produce to market. The control over these markets invests monopoly power in the hands of these merchants which they utilise to consolidate their power as usurers and transporters. In the West Bank there are three main markets which are centred in Nablus, Jericho and Hebron. The Nablus hisbeh, is the largest in the West Bank and is the regional centre for the auction of agricultural commodities produced in the north Jordan Valley, the coastal plains and the West Bank Highlands. Commission agents control a section of the hisbeh where they carry out their primary business of auctioning agricultural produce. Their particular section of the hisbeh is normally rented to them, although the whole hisbeh is licensed by tender to the highest bidder by the municipal authorities. There are a number of smaller hisbehs in the other major towns on the West Bank, but these are retail markets and not wholesale ones. The majority of commission agents in the north Jordan Valley operate through the Nablus hisbeh.

The vast majority (83%) of peasant households in the north Jordan Valley market their produce directly through regional commission agents (see Table 36). Only 4% of peasant households did not sell their farm produce in this manner. Moreover, in terms of the regional class structuration, sharecroppers (91%) and cash tenants (96%) were even more likely than the other agrarian classes to be integrated into the regional commodity markets by sales through commission agents.

Table 36: Do You Sell Through Commission Agent by Agrarian Class?

CA.	Share-cropper	Shepherd	Cash tenant	Small-holder	Farming landlord	Total
Yes	368	12	42	87	11	520
No	23	1	1	2	-	27
Not asc.	14	46	1	14	3	78
Total	405	59	44	103	14	625

IV. MARKETING AND MERCHANT/USURER CAPITAL

The data from the survey shows that a total of 27 different commission agents were operating in the seven villages studied (see Table 37). (12) The majority (63%) of these commission agents were the agents for 10 peasant households or less. In other words, two-thirds of commission agents acted on behalf of only 12% of the agricultural population, while slightly more than a third of commission agents acted on behalf of 62% of the agricultural population. The region's

two largest commission agents, Jawad Rizq al Masri and Abu Shammat, both based in the Nablus Hisbeh, were the agents for over a third of the peasant farm population. The breakdown of

Table 37: Name of Commission Agent by Agrarian Class

Name	Share-cropper	Shepherd	Cash tenant	Small-holder	Farming-landlord	Total
Abu al Walid	3	-	-	-	-	3
Raja Abu Atiyeh	2	-	-	-	-	2
Ghazi Abu Hantash	21	1	1	1	1	25
Abu Hassem Tubassi	6	-	2	-	-	8
Abu Hisham	1	-	-	1	-	2
Abu Shammat	42	1	3	3	2	51
Khalid al Awad	15	-	2	2	-	19
Al Fahami (Jenin)	8	-	-	4	-	12
Al Fahami (Nablus)	3	1	-	-	-	4
Jawad Rizq al Masri	112	4	19	20	5	160
Al Shaarwi	1	1	1	4	-	7
Ibrahim al Sheikh	2	-	-	-	-	2
Yehia Abdel Aziz	13	-	2	3	-	18
Afif Halaweh	-	-	-	1	-	1
Majid Yussef Jaber	10	-	-	-	-	10
Misbah Yussef Jaber	6	1	-	1	-	8
Mahmud Salam Muannes	2	-	-	-	-	2
Yussef Muhammed	1	-	-	-	-	1
Nayef al Haj Mussa	6	-	-	4	-	10
Al Haj Nasser	16	-	2	6	1	25
Mahmud Salameh	2	-	-	1	-	3
Hussein Shakaa	11	-	2	8	-	21
Rajeh Shakaa	6	-	-	2	-	8
Husni Shantir	7	-	2	4	-	13
Shawwa	1	-	-	-	-	1
Abdo Sulleman	15	1	6	5	1	28
Yussef Taher	-	-	-	1	-	1
Other	48	3	1	10	-	63
Not ascertained	23	45	-	20	4	92
Total	382	58	43	101	14	598

this figure is that al Masri commissions the produce for more than a quarter of the peasant population and Abu Shammat acts for 9%. Al Masri is the most important and economically powerful commercial agent operating in the region. It should

also be noted that he is the region's largest landlord, transporter and major export agent.

While the control of these two largest commission agents is marked over the peasant farm population generally, it is even more marked in the case of the sharecropping mode of production, where these two agents act on behalf of two-fifths of the sharecropping population and al Masri alone acts on behalf of almost a third of all sharecroppers. Moreover, al Masri also controls the commodity markets of 43% of cash tenants, 20% of smallholders and 30% of farming-landlords. Thus, the tendency for marketing functions to be dominated by a small number of commission agents is both relatively and absolutely more developed in the sharecropping mode of production than among other petty commodity producers.

Table 38: Percentage of Cash Sale Paid to Commission Agent by Agrarian

Class

%	Share-cropper	Shepherd	Cash tenant	Small-holder	Farming landlord	Total
1 - 4	7	-	-	-	-	7
5 - 9	138	6	28	29	7	208
10 - 14	176	5	12	38	3	234
15 - 19	3	-	-	-	-	3
20 - 24	1	-	-	-	-	1
Other	38	2	1	6	-	47
Not asc.	19	45	2	28	4	98
Total	382	58	43	101	14	598

In order to pay the commission agent for her/his service, the peasant household hands over a set percentage of the sale price of her/his produce which the commission agent deducts when s/he auctions the crop. This percentage is variable, but is normally set somewhere between 5-14% of the selling price; almost three-quarters of peasant households paid commission in this range (see Table 38). The most common commission paid was 10-14% (normally 12%) which two-fifths of farmers paid, and slightly more than a third paid 5-9% (normally 7%). (13)

If the only activity commission agents were involved in was the formal merchant capital function of acting as a commercial broker and intermediary between consumers and producers, their monopoly position in the wholesale fruit and vegetables market would not be particularly significant in terms of their relationship to the peasantry and peasant impoverishment. However, the larger commission agents are not content to limit their economic role to that of merchant broker. Rather, the drive for capital accumulation and financial gain has led them into other areas of economic activity, through which their monopoly position in the hisbeh allows them to accentuate their economic and social power over the peasantry.

One of the ways in which commission agents spread their economic network beyond the function of merchant capital is to enter into the sphere of productive activity through providing transportation and haulage services in order to deliver agricultural produce to the market. If the peasant is

independent and free from combined landlord/merchant control or indebtedness, then s/he is generally free to select her/his commission agent and transporter on the basis of the best price available. However not all peasants have this degree of independence, and it is normally only the larger and wealthier peasants who have this degree of economic manoeuvrability.

If peasant households wish to get their crops sold in the wholesale markets then they are compelled, if their commission agent is also a transporter and haulier, to use her/his services to get their produce to the market. Such transportation activities has enabled a number of commission agents to form a cartel for the production of regulation packaging boxes, which peasant households have to use to package their produce before it can be sold in the wholesale market. During the 1982-83 agricultural season these boxes were being rented to peasants for 40 old Israeli shekels (IS) (approximately US\$0.40) each - and in the course of a season an average peasant household would use hundreds, if not thousands, of these boxes - and when the box is delivered to the wholesale market s/he gets a refund of 35 IS. (14) For the commission agent/transporter this is quite a lucrative side venture to her/his merchant capitalist activities, since in the course of the agricultural season the larger merchants will deal in hundreds of thousands, if not millions, of boxes. Apart from the income from box rental, the merchant/transporter receives income for transportation costs and portorage expenses in the hisbeh. A direct result of the

introduction of HYV's has been to increase substantially these costs to peasant households since the volume of their production has risen tremendously, and thus their need to make more extensive use of packaging and transportation facilities has intensified in equal degree to their product volume.

While the provision of transport services is a useful component in linking and subordinating the peasantry to merchant capital, the singularly most important mechanism of formally subsuming the peasantry is through the tied provision of credit through indebtedness. Once the "independent" peasantry - from all agrarian class forms - become indebted to commission agents then that commission agent has a monopoly over the marketing of their produce and is able to consolidate the process of indebtedness by the continuing provision of credit to the tied peasantry from year to year. This process is particularly marked in sharecropping where the commission agent is also the tenant's landlord.

The commission agents' monopoly position allows them to act as main provisioners of drip irrigation, seeds, seedlings, chemical pesticides and fertilizers and plastic sheeting. Tables 39 and 40 show that the majority of peasant households purchase their insecticides and fertilizers (53%) and seeds/seedlings (52%) from commission agents, while a fifth of peasant households also get loans from commission agents (see Table 41). Sharecroppers are much more integrated into

farm provisioning of their basic farm inputs from commission agents than other agrarian classes. Three-quarters of sharecropping enterprises get their fertilizers, insecticides and seeds/seedlings through commission agents.

Table 39: Do You Purchase Insecticides and Pesticides from Commission Agent by Agrarian Class

Insect. & pest.	Share-cropper	Shepherd	Cash tenant	Small-holder	Farming landlord	Total
Yes	241	9	33	41	7	331
No	87	3	9	33	3	135
Other	33	1	1	4	1	40
Not asc.	44	46	1	25	3	119
Total	405	59	44	103	14	625

Table 40: Do You Purchase Seeds/seedlings From Commission Agent by Agrarian Class?

Seed/seedling	Share-cropper	Shepherd	Cash tenant	Small-holder	Farming landlord	Total
Yes	234	9	32	40	7	322
No	83	3	9	34	3	132
Other	33	1	1	4	1	40
Not asc.	55	46	2	25	3	131
Total	405	59	44	103	14	625

Table 41: Do You Get Loans From Commission Agent By Agrarian Class?

Loans	Share-cropper	Shepherd	Cash tenant	Small-holder	Farming landlord	Total
Yes	86	2	11	17	5	121
No	275	10	31	65	6	387
Other	25	1	1	3	-	30
Not asc.	19	46	1	18	3	87
Total	405	59	44	103	14	625

It is in providing credit for the purchase of farm inputs that the combination of merchant and usurer capital becomes most acute and this intensifies the commission agents' ability to engage in a monopoly form of unequal exchange which is highly exploitative of the peasantry. The impact of HYV's and the associated technological package on the process of commoditisation has accentuated the process of merchant/usurer exploitation of the peasantry.

The manner in which this has occurred is that peasant households are increasingly bound to their commission agents, either because s/he is also their landlord or they become indebted to her/him, or both. At the beginning of the farming season the commission agent provides the fertilizers, insecticides, drip irrigation equipment, seeds and seedlings which the peasant household needs to start up the agricultural season. All of these items are provided to indebted peasants on credit. Normally, even if this credit-bonded peasantry can afford to pay cash for these items, the commission agent compels them to pay on credit. Quite clearly

this credit arrangement works to her/his advantage as the range of credit which peasants pay ranges from 15-40% over a nine month period (i.e. the period of the agricultural season). Moreover, the original price of the inputs sold to the peasants are highly inflated, ranging from as much as 25-100% more than the free market price.

Peasant farmers are quite clearly aware of the extreme exploitative nature of the system under which they operate, although they are largely powerless to do anything about it in the absence of peasant associations, credit, marketing and consumer cooperatives and other forms of institutionalised credit which they could get access to. Immediately below I have presented a selection of voices from the peasantry which show their consciousness of the exploitation which they face in their daily lives. (15)

The cooperative listens only to the landlords and not to the farmers and if the farmer protests the landlord will not renew his sharecropping contract for the coming year. Jawad Rizq al Masri took possession of three-quarters of the lands of the Jordan Valley by usury... The landlord refuses to allow me to buy in cash from the hisbeh and on my own expense. The hisbeh sells each sack of fertilizer for 11 dinars instead of 7 dinars and Rupigan [a brand name for inorganic pesticide] is sold for 28 dinars instead of 21 dinars (Mahmud - Jiftlik)

The sharecropping system is a feudal system. It would have been better if the farmer could afford to pay in cash at the beginning of the season. Buying on credit is depriving the farmer of achieving any profit. The price of Intercole [a brand name of a pesticide] is 100 IS. [on the free market] while the commission agents at the hisbeh sell it for 250 IS. (Mithqal - 'Ain al Beda)

Even though the commission agent deals with the

Jordanian dinar, he still get 25% interest. Example. The cost of insecticide is 20 dinars at the hisbeh, while the price becomes 25 dinar if it is bought on credit. (Tawfiq - 'Ain al Beda)

Working in the Jordan Valley is not profitable, it is as if we are working on a voluntary basis with no material award. The only good thing in the Jordan Valley is that the farmer supplies himself [with food] from his own produce without paying a commission, which is the only thing he doesn't pay a commission on. (Hassan - Jiftlik)

Jawad Masri [the region's largest landlord and commission agent] rents out drip irrigation equipment for 20 dinars per dunum. Jawad forces us to buy everything from the hisbeh and prevents us paying cash even when we can afford it. (Muhammed - Jiftlik)

The main reasons for the increase in indebtedness during the 1980's has been the enhancement of commoditisation associated with the introduction of the "Green Revolution" technology. This has led to the re-ensnarement of peasant households in the perennial cycle of indebtedness to merchant/usurers. During 1984, when I did a number of field visits, I was shown bills and receipts by one informant for the sum of 1000 Jordanian dinars (approximately US\$3000) which he had to pay to the region's largest commission agent. This particular informant considered himself fortunate, as most of his colleagues were considerably more indebted, owing sums ranging from 2000-3000 dinars (approximately US\$6000-9000). Peasant farmers reported that in previous times, when they operated with the furrow irrigation technology or produced field crops, they would accumulate debts of up to 200 dinar (approximately US\$600) at most but never more. (16) These peasant farmers were deeply concerned about the implications of this new development and feared that their accumulated

debts and the interest upon them would be difficult for them to clear. This fear was well founded, since, during the 1986-87 agricultural season, the debt burden of these farmers has increased and they have accumulated debts of between 7000-9000 dinars (approximately US\$21,000- 27,000). (17) Moreover, in discussion, the agent for the region's second largest merchant claimed that his employer was owed a total of 180,000 dinars (approximately US\$540,000) by peasant farmers in the whole of the Jordan Valley region.

Through their ability to act as suppliers of agricultural inputs, merchants have been entering into direct relations with peasant producers and their activities as money-lenders have presented them with a structural claim on a significant portion of the surplus product of the debt-bonded peasantry. However, merchants have not been concerned to exercise control over the production process itself which still largely remains in the hands of the peasant household. To exercise such control would be to undermine the very foundation of the perhaps inefficient and unstable, but still very lucrative, system of unequal exchange from which a large part of their income is derived. Rather than directly alienating the indebted peasants from their land, merchant capital has been content to utilise its power and influence to make sure that money coming into the region in the form of loans and grants from the PLO-Jordanian administered Joint Committee Funds has been used by the peasantry to service their accumulated debt. However, as the financial inflows from Joint Committee Funds have been frozen since the de

facto collapse of the Amman Agreement between the PLO and the Jordanian Hashemite regime during 1986, it remains to be seen how the system will continue to operate without this influx of funds which helped the indebted peasantry to keep their heads above water.

Due to the fact that indebtedness is not linked to merchant/usurer control over the production process, this form of surplus appropriation is necessary less rational and more unevenly developed over the peasantry than control of the production process under capitalist regimes of surplus extraction. While the intensification of productive commodity consumption by peasant farmers with the introduction of "Green Revolution" technology did enable merchants to increase their appropriation of relative surplus product from the peasantry to a higher level, the ability to increase even more relative surplus product has a built-in ceiling linked to market constraints and ecological and technical constraints on the productiveness of peasant producers. The main accumulation strategy open to merchant/usurers is to develop capital accumulation strategies through increasing their share of absolute surplus product. This requires a spatial expansion of their usurer activities over increasing numbers of peasant households, pushing out less "competitive" merchant/usurers and thus tendentially increasing the number of peasants indebted to each of the more competitive merchant/usurers.

There has been a distinct empirical trend towards both the

horizontal and vertical integration of market, credit and transport functions among a number of the most powerful Nablus-based merchant families. This trend is exemplified and most developed in the case of Jawad al Masri, where we can detect a horizontal integration through the incorporation of increasing numbers of peasants under his patronage as a merchant auctioneer of agricultural crops. Vertical integration can be seen in his evolving control and diversification into transportation, packaging, credit and exporting. The combined horizontal and vertical integration of merchant capital, usurer capital and transportation allows the larger merchants both to extend and intensify the appropriation of absolute surplus product from the peasantry.

Although the process of horizontal and vertical integration is well under way, especially in the case of al Masri, the main mechanism of subordinating the peasantry to merchant/usurer capital is through debt-bondage. This is unevenly developed and distributed throughout the peasantry as a whole and the larger and wealthier peasants have so far been able to remain outside the net of perennial indebtedness. It is the smaller and poorer farmers who are most systematically exploited and subordinated through this mechanism. As long as independent farmers are not indebted they can purchase their inputs outside of the hisbeh, where they obtain better rates on the open market. The independent peasant household only needs to use the hisbeh for its commercial function and not for its credit function. However, one recent trend is that the formerly independent and middle

level peasantry are beginning to succumb to indebtedness brought about by what Bernstein refers to as a "simple reproduction squeeze". As agricultural costs have risen as a result of increased commoditisation, there has been a concomitant deterioration in the terms of exchange of peasant produce over the last four years. This has resulted in significant numbers of peasants not being able to meet their seasonal costs at the beginning of the agricultural season. Thus, in order to meet their seasonal provisioning and start-up requirements, more and more peasant households have been forced to use the informal credit facilities offered by commission agents in the absence of alternative agrarian credit institutions.

IV. MERCHANT/USURER CAPITAL AND SHARECROPPING

There is another mechanism operating which also serves to subordinate the peasantry and pull them into structural indebtedness and which offsets any relative freedom on the part of certain groups of peasants to act as free market individuals. This is the vertical integration of sharecropping-landlordism with commercial/usurer capital. In this form of integration commercial/usurer capitalists are also the landlords of sharetenants. This results in a dual subordination of the sharecropping mode of production at both the level of production and the level of exchange. Thus, the debt-bonded sharecropping household faces economic exploitation as a production unit and unequal exchange in its market and credit relations. The result of this process is

not merely the juxtaposition of two forms of exploitation but the concentration and intensification of both processes. Debt-bonded sharecropping households are more securely locked into subordinate relations with their merchant-usurer landlords than any other agrarian class. They are among the most impoverished and indebted group of peasants in the Jordan Valley. The clearest and most developed example of this form of concentration is again to be found in the merchant/usurer/landlord Jawad al Masri, who is the landholder of 6% of sharecropping tenancies in the region and the commission agent for almost a third of all sharecroppers. Moreover, the al Masri family as a whole are the landholders for 11% of the regional sharetenancies. (18) The sway which al Masri holds over his tenants has allowed him to institute a system of monopoly pricing for farm inputs for his dependent tenants and debt-bonded peasant farmers.

While sharecropping in particular, but also other forms of peasant production, remain under the control of merchant/usurer capital it is unlikely that the laws of motion of this form of appropriation will change and develop into capitalist relations of production in the area. Most commentators have had a tendency in the past to view sharecropping as either a backward or transitional form of agrarian system. Thus, most Marshallian economists focus on the "technical inefficiency" of sharecropping, while, Marxists, following Marx, tend to perceive sharecropping as a transitional form of capitalist ground-rent, which was destined to be superceded by capitalist ground-rent proper.

Timothy Keegan has recently contended that both positions are mistaken and argues that sharecropping is an exceptionally rational mechanism of capital accumulation, under determinate conditions. (18) In the context of landlordism and merchant/usurer capital relations in the Jordan Valley sharecropping is an eminently rational, although not a completely efficient, response on the part of landlords and merchant/usurer/landlords to the problem of capital accumulation in a situation delimited by colonialism and long-term occupation.

Sharecropping, which is the dominant form of peasant production relations in the region, was revitalised in the area through the introduction of intermediate technology. This outcome was largely brought about without any concomitant capitalisation in expensive machinery, plant and equipment, such as tractors, farm buildings, storage and processing facilities, since sharecroppers typically rent much of their mechanical equipment requirement. Capitalisation with this "Green Revolution" technology involves, by and large, an annual expenditure on the purchase of seeds, fertilizers, insecticides, drip-irrigation equipment and plastic sheeting. It is the phenomenon of annual capitalisation which contains the clue to the consolidation of sharecropping during the early 1970's, and in particular merchant/usurer integration with this form of peasant production. In the context of ongoing land expropriation by the Israeli authorities, it would require an unfounded optimism on the part of any capitalist investor to

proceed on the path of capitalisation of the means of production along capitalist lines, for this would involve a substantial investment in mechanical equipment, plant machinery and storage facilities over a longer period of time. Capitalist farmers would have to be prepared to present a budget for capitalisation and depreciation which would have to cover expenditures over a period of anything from 10-30 years. Because of the ever present danger of land expropriation and crop and market control by the military authorities, such a long-term investment plan becomes an unmerited financial risk. The appeal of sharetenancy over agrarian capitalism is that it offers an extremely lucrative solution to the drive for capital accumulation in the money form for merchant/usurer capital under the constraints of colonial occupation.

VI. SOME NOTES ON DEVELOPMENT STRATEGIES IN THE SPHERE OF MARKETING AND CREDIT

The peasants really need co-operatives, and especially consumers', marketing and credit co-operatives. When they buy goods, the merchants exploit them; when they sell their farm produce, the merchants cheat them; when they borrow money or rice, they are fleeced by usurers; and they are eager to find a solution to these problems...Given proper guidance, the co-operative movement can spread everywhere along with the growth of peasant associations. (Mao Tse-Tung) (20)

I start this section with a quote from Mao, written to celebrate the "Fourteen Great Achievements of the Peasant Movement in Hunan" (although it was written about a very different context from that of the peasantry in the north

Jordan Valley) since it identifies, with lucid brevity, exactly the direction in which organisation and mobilisation must necessarily move if peasants are to break out of the perennial cycle of indebtedness to merchant/usurer capital. While certain sectors of the peasantry, most particularly sharecroppers and cash tenants, are enmeshed in exploitative relations in the sphere of production, the main site of peasant exploitation and subordination is in this sphere of market exchange and access to credit facilities, i.e. the main location of peasant exploitation in the present economic conjuncture is in the sphere of the circulation of commodities and money. It is in this sphere that peasants are most systematically subordinated to the interests of merchant/usurer capital. The whole system of merchant/usurer capital is centred around the hisbeh, and a number of merchant capitalists have been able to use this arena to establish a complex institutional network geared to appropriating as much surplus product from peasant producers as is humanly possible.

Given that this is where the root of the problem lies, it is no more than a false panacea to pursue development strategies which conceive of the solution to peasant poverty to lie in inducing peasant households to become more efficient and even more productive than they are at present - i.e. the "Green Revolution" strategy turned another ratchet. This certainly may be a useful solution for independent middle and rich peasants, but it is not a strategy which is going to mitigate the worst aspects of the debt-induced poverty among the

poorest peasants; in fact it will only tighten the simple reproduction squeeze around them. By the same token, neither is the search for more extensive markets a solution to the problem of peasant poverty and indebtedness. While a widened market network would be very appropriate for raising the income of an independent peasantry, it will not affect the subsumption of the indebted peasantry one iota and will only succeed in accentuating their miserable position.

Outwardly and at first glance, both of these strategies appear to be progressive and potentially income-generating, particularly as both have been addressed and pursued by NGO's which have shown a long-term commitment to resolving Palestinian agrarian problems and by at least one "popular" Palestinian organisation working in agriculture. (21) The main problem with both strategies is that neither is inherently progressive. This is clear if we look at their underlying rationale. They can both be viewed as tactical adjuncts of the general strategic aim of economic growth centred on a regional level. Economic growth is normally measured in terms of aggregate output or aggregate income, rather than according to the principles of income distribution. While the "Green Revolution" strategy clearly does lead to an increase in aggregate output, it does not, however, necessarily lead to an increase in aggregate income since this is subject to the determinants of supply and demand. If the home market or existing marketing outlets cannot incorporate this increased output into the existing market demand structure, it then leads to a crisis of over-

production which results in decreasing market prices simultaneously with increasing and more efficient production. This is where the search for new market outlets becomes important as a tactical component in attempting to counter-balance the over-production crisis. In this respect both strategies are complementary. However, the main problem with both is that they do not question the existing institutional arrangements which syphon-off surplus product from peasant producers, so that increased income from expanded production or enlarged markets does not reach peasant producers. This has been the general effect of economic growth strategies throughout the Third World. Economic growth strategies which do not include a clearly defined redistributive element have consistently been of no benefit to the poorest peasant producers and the case of the application of this model on a regional basis in the north Jordan Valley is no exception to the general rule.

The only effective solution to peasant poverty and indebtedness in the peasant context is to establish redistributive strategies which set out to break the monopoly hold which merchant/usurers have over the peasantry through their control of marketing and credit institutions. One way forward in attempting to ensure that peasant households receive a less unjust distribution of their product is to promote the development of institutional networks and organisations which provide a means for the peasantry to obtain a larger share of the value of their product than they receive at the present time. One of the

most common measures of achieving this aim in other Third World countries has been through the establishment of marketing and credit cooperatives, where peasants can sell their crops for a fair rate of return and borrow money and agricultural inputs at non-usurious rates of interest.

The whole idea and practice of cooperation is not a new concept in the West Bank, but the cooperative movement which exists there has largely been under Jordanian hegemony and dominated by the Jordanian Cooperative Organisation (JCO). Moreover, the actual number of active members in the movement has remained very low. In a study carried out during 1980, Abdul Rahman Khraisheh and Jon Ebersole show that:

The agricultural cooperatives at this stage, reach only a small minority of West Bank farmers. There are 466 villages in the West Bank, only 32 have active agricultural cooperatives, less than 7%. While 45,000 [persons] were working in West Bank agriculture in 1978, our survey showed 4,222 members active and semi-active [in] cooperatives. These figures put participation in cooperatives at just under 10%. (22)

While these figures would appear to represent a generally high level of involvement, they overemphasise the actual level since, as the authors themselves admit:

... the figure of 10% lacks significance due to the wide variation in the amount of services provided to members... [and]... semi-active is a generous description for some of the general agricultural cooperatives. (23)

Moreover, the actual superstructure of the cooperative

movement has not been reconstituted since the rupture brought about by the Israeli occupation of the West Bank in 1967. The authors are equally clear on this issue: "At present there are no facilities for cooperative education, no auditing union or department and no cooperative bank." (24) No fundamental concentrated effort been put into educating peasant farmers on the basic principles of cooperation and Khraisheh and Ebersole found that:

In general it could be said that most members do not know how cooperatives are supposed to function, management committee members have a basic understanding of the by-laws, and Regional Office personnel, though well educated and experienced in cooperatives, have no way to transmit that knowledge. (i.e. lacking publications, transportation and personnel). (25)

The general tenor of their report, although most probably for "political" reasons they do not say this in so many words, is that the JCO in the West Bank has largely been an unmitigated failure and although agricultural "cooperatives" have been established, very few of these operate in a manner which can be ultimately conceived as being based on the fundamental principles of cooperation. It is clear from their report that many cooperatives are cooperative in name only and operate as private business interests, a few of which are extremely corrupt. (26) In recent years the JCO has acted as a vehicle for the movement of funds from the Joint PLO-Jordanian Committee funds to the West Bank and in 1979 over 9 million Jordanian dinars (approximately US\$27 million) were made available to the JCO. (27) However, very little of this money has found its way into the hands of poorer peasants or

institutions which may be capable of providing support to them.

While Khraishah and Ebersole are right to point to the need to develop the cooperative movement in the West Bank, such development needs to be promoted without the corrupting and politically partisan interests of the JCO. There is a need for a return to basic principles and to develop a cooperative movement concerned with addressing the basic needs of peasant communities. Such a development is unlikely to occur without the active participation of the peasantry in the control, management and establishment of cooperatives. This further requires their active participation and leadership in the cooperative movement. The re-creation of such a cooperative movement is problematic since, at the present time, peasants are largely unorganised and there are no existing peasant associations and unions in the West Bank. A fundamental priority for developmentalists and "popular" organisations is the need to expend time, organisation and personnel in helping to organise the peasantry, since it is only when the peasantry is organised in intrinsically peasant associations that it will be able to address its problems and find appropriate ways and mechanisms of meeting its basic needs.

SUMMARY

In this chapter I outlined some basic concepts relating to the circulation of commodities and the social reproduction of commodity relations in a manner which is compatible with the

realist retroductive method. This was brought out through an analysis of the circuit of simple commodity production, the circuit of commercial capital, the circuit of interest bearing capital, commoditisation, personal commodity consumption, productive commodity consumption and the simple reproduction squeeze. This enabled us to understand and explain the subsumption of peasant producers to merchant/usurer capital. I mapped out the principle contours of marketing among peasant producers. I also attempted to bring out through concrete empirical analysis the main mechanisms and accumulation strategies open to merchant/usurer capital in its attempt formally to subsume the peasantry. I further attempted to show how the formal subsumption of sharecropping peasant households was more developed, both in relative and in absolute terms, than among other categories of peasants. Finally, I made some very cursory notes about cooperative development and its potential as a countervailing social force to the formal subsumption of the peasantry.

In the next chapter I will outline another interacting structural element which contributes to the subordination of the peasantry. In this chapter I will consider the role household subsistence production has played in the formal subsumption of the peasantry to merchant capital and how the burden of this subordination has been constructed in the household in terms of gender.

NOTES AND REFERENCES

1. In outlining the presentation which follows I borrow freely the main methodological precedents outlined by Marx, who distinguished the interrelatedness and institutional independence of the capitalist mode of production (Capital volume 1), the circuit of commercial capital (Capital volume 2), the circuit of interest bearing capital (Capital volume 2) and the effects and interaction of all three circuits of capital (Capital volume 3). I am also heavily indebted to Geoffrey Kay's analysis of simple commodity production and merchant capital, see, Kay, Development and Underdevelopment: A Marxist Analysis, (London, 1975).

2. Kay, *ibid.* p.87.

3. William Roseberry, Coffee and Capitalism in the Venezuelan Andes, (Austin, 1983), p.104.

4. Henry Bernstein, "African Peasantries: A Theoretical Framework", in Journal of Peasant Studies, Vol 6, No 4, 1979. p.429.

5. *Ibid.* p. 427.

6. See, Salim Tamari, The Dislocation and Reconstitution of a Peasantry: The Social Economy of Agrarian Palestine in the Central Highlands and the Jordan Valley, 1960-80, (Manchester, 1983), pp. 367-69.

7. Military Order Number 47. "Order Concerning Transport of Agricultural Products - 1967", according to a translation from Hebrew by Kuttab and Shehadeh:

Prohibits the import or export (from the West Bank) of any agricultural products (defined very broadly to include all animals or plants or their products) without a permit from the "competent authority". Also granting

extensive powers in enforcing the order and setting conditions in any permit of grants.

See, Jonathan Kuttab and Raja Shehadeh, Civilian Administration in the Occupied West Bank, (Ramallah, 1983), p.31.

8. Op cit. p.368.

9. Ibid.

10. See, Mark Harrison, "Chayanov's Theory of Peasant Economy", in John Harriss, Ed., Rural Development: Theories of Peasant Economy and Agrarian Change, (London, 1982), pp. 248-55.

11. See, Tamari, op cit. p.367.

12. It is possible that one or two of the names in Table 37 are not commission agents but rather merchant retailers who come into the region with their own transport to purchase produce directly from peasant households.

13. In his study, Salim Tamari, showed that commissions tended to fluctuate between 5-7%. It is possible that the time lag between the two studies accounts for this change in commission rates. My study shows a wider variation in commission rates than those presented by Tamari. See, Tamari, op cit. p.295.

14. This information comes from fieldwork carried out during 1983.

15. These peasant voices are based on discussions which were recorded during field work trips. Although there is numerical variance between between prices stated, they still adequately reflect the subjective perceptions of a number of the more articulate peasants in the region of the study.

16. This information comes from additional fieldwork carried out during 1984.

17. This information comes from discussions with agricultural engineers working in the region during February 1987.

18. For the source of this data refer to the previous chapter.

19. See, Timothy Keegan, "The Sharecropping Economy of the South African Highveld in the Early Twentieth Century", in Journal of Peasant Studies, Vol 10, No 2 and 3, 1982.

20. Mao Tse-Tung, "Fourteen Great Achievements of the Peasant Movement in Hunan", in Mao Tse-Tung, Selected Works, Vol 1. (Peking, 1967).

21. I would contend that the term "popular" in this respect is a misnomer, if this is meant to give the impression that these organisations are populist organisations with a wide following among peasant farmers and representing "the will of the people". To take the example of two exemplary "popular" organisations in the West Bank: the Agricultural Relief Committee (ARC) and the Union of Medical Relief Committees (MRC), it takes nothing away from the "progressive" orientation of these committees to question the logical rigour of using the concept "popular" to define them. Both organisations are largely service organisations made up of middle class professionals (In the case of MRC: doctors, dentists, chemists, nurses, medical technicians, etc. In the case of ARC: agronomists and agricultural engineers) attempting to provide necessary services to rural communities in the area of clinical and preventive health care and

agricultural extension. However, if we were to adopt a second definition of populism as a movement against the spreading of capitalist relations into peasant societies, then it might be possible to accept that there is a populist element in their organisational form given their, frequently disavowed (MRC), political affiliation to the Palestine Communist Party. This would, however, be to stretch the conceptual meaning too far since their anti-capitalism is largely undeveloped and postural in terms of their concrete development interventions. For a discussion of the conceptualisation of populism along the lines I have mentioned, see, John S. Saul, "On African Populism", in Giovanni Arrighi and John S. Saul, Eds., Essays on the Political Economy of Africa, (New York, 1973), pp. 152-76.

22. Abdul Rahman Khraishah and Jon Ebersole, West Bank Agricultural Cooperatives: A Case Study in Institutional Change Under Military Occupation. (Jerusalem, 1980), p. 13.

23. Ibid. p.13.

24. Ibid. p.27.

25. Ibid. p.29.

26. See, Appendix in *ibid.*

27. See, *ibid.* p.31.

CHAPTER 5: HOUSEHOLD SUBSISTENCE PRODUCTION AND LABOUR ORGANISATION AND LABOUR SUPPLY IN THE COMMODITY PRODUCING SECTOR

In this chapter I want to show how household subsistence production and commodity production interact in a manner which is beneficial to commercial capital. I also attempt to bring out some of the policy options for mitigating some of the worst aspects of this interaction as it affects peasants generally and peasant women's subordination in particular. I will then consider how labour is organised in the commodity production sector and the pattern of labour supply in this sector.

As I have stated previously, the main unit of labour supply among the different forms of peasant modes of production in the region is the peasant household. The direct implications of this are that exploitation and the construction of social relations with the external environment take place not between individual producers and, for instance, landlords, commercial capital and usurer capital, but between the household as a whole and these external actors, i.e. the household is a structure with economic tendencies based on gender and age and these can be drawn out and articulated by means of the realist method of analysis. Although the peasant household faces economic exploitation, unequal exchange and political subordination with this external economic environment, it is wrong to conceptualise these general relations of economic exploitation and political domination as being distributed in a symmetrical manner within the

peasant household, since the social relationships within the household are themselves ordered hierarchically in a symbolic order of domination and subordination based on gender, age and kinship.

While the symbolic ordering refers to the whole gamut of the sexual politics of male-female relationships I am only interested in bringing out those aspects of it which underpin the sexual division of labour in the peasant household. Thus, while accepting the important contribution made by feminist-materialist analysis to our understanding of the links between patriarchy and economic exploitation, it is beyond the scope of the present work to bring out in their entirety the dynamics of male-female relationships in the peasant family. (1) Rather, I will limit my comments on gender relationships to the way they are constituted in the sexual division of labour.

One important point which should be borne in mind is that the male-female sexual division of labour is not immutable and fixed and it can and does change, and is often reconstructed according to a multitude of factors which are largely overdetermined and thus multifaceted and following no preconceived logical order of determination. However, among the elements which can lead to the reconstructing of male-female relations within the sexual division of labour are, e.g., the introduction of new technologies, changing land-use patterns, proletarianisation, etc. Changes in the relations of production and forms of exploitation can result in

simultaneous and correlative changes in the hierarchical ordering of the sexual division of labour, the form and content of women's subordination and women's role in the sexual division of labour.

We have seen how peasant relations of production are constituted, by and large, through the peasant family consisting of husband, wife(s), sons, daughters and other dependent relatives who function within the household and sexual division of labour as a "collective work unit", part of whose combined product is normally appropriated by landlords, merchants and/or usurers and other non-producers. The household unit is often conceptualised as being composed of two elements which very generally relate to women's and men's work in the sexual division of labour, i.e. a domestic component and a public component. (2) The domestic component consisting mainly of a sphere of women's work in which they largely contribute to the subsistence economy of the household. On the other hand, the public sphere is largely dominated by male agriculturalists and is predominantly linked to the production of use-values for exchange on the agricultural commodity market rather than to meet the subsistence requirements of the peasant household. There is a serious error in conceptualising these two realms as autonomous spheres of women's work and men's work, since, in terms of concrete relationships, they are completely integrated and interdependent. It is much more appropriate to conceptualise these spheres in terms of specific economic sectors, viz. the subsistence production sector and the commodity production sector and then treat the particular

gender determined division of labour in each sphere as a problem to be explained rather than explaining it away through an assumed biological-sexual reductionism.

I. THE HOUSEHOLD SUBSISTENCE ECONOMY

Two recent contributions from feminist analysis of subsistence production which can help us to understand the nature of the integration and articulation of subsistence production and commodity production in the peasant household, are the works of Veronika Bennholdt-Thomsen and Carmen Diana Deere.

Bennholdt-Thomsen's basic argument is that there exists "...[a] basic contradiction within the capitalist mode of production in the separation of subsistence production from social production." (3) This separation is, she argues, intrinsic to the capitalist accumulation process. The main producers of subsistence production are women in the capitalist countries and peasants (men and women) in the Third World. Thus, for Bennholdt-Thomsen, subsistence production needs to become a component in the analysis of political economy. She argues that:

Subsistence production includes work related to pregnancy, childbirth, nursing and education of children, as well as that required in the production and transformation of food, clothing, housing, and the physical and psychological demands associated with sexuality. In short, subsistence production is largely women's work (wives, housewives and mothers) in the metropolitan countries. (4)

She would also include Third World peasant production among subsistence production since peasant producers, she argues, largely directly appropriate nature for consumption. However, in stating her case thus, she makes a gross over-generalisation, since many Third World peasants are increasingly meeting fewer of their direct consumption needs from their own produce and are becoming increasingly engaged in market purchases to meet their basic food requirements as their farm production becomes increasingly specialised and undiversified. Thus, the major peasant subsistence producers in the Third World are those who are least integrated into the capitalist world market. This is a real contradiction in Bennholdt-Thomsen's article. Whether peasants are subsistence producers or not is an empirical question which should not be generalised completely out of existence.

However, the central core of her argument is that under capitalism the work of subsistence production is subordinated to the capitalist valorisation process, and that the subsistence products of the housewife are dependent upon the wage of her husband. This is very reminiscent of the domestic labour debate which further argues that the subsistence production of the housewife is unremunerated and that this reduces the wage costs to capital since part of the reproduction costs of labour power are met from the unremunerated domestic labour of housewives. (5)

Carmen Diana Deere develops an argument which is complementary to Bennholdt-Thomsen's, but her argument is directly concerned with rural women's subsistence production in the Third World itself. She argues that:

... family structure and the attendant division of labour by sex are key to the extraction of surplus from non-capitalist modes of production. In particular, the division of labour by sex characterised by female production of subsistence foodstuffs and male semi-proletarianization allows the payment by capital of a male wage rate insufficient for familial maintenance and reproduction. The articulation between modes of production, based on the familial division of labour by sex, thus allows the wage to be less than the cost of production and the reproduction of labour power. This inequality is then reflected in the low value of labour power within the periphery, which either enhances peripheral capital accumulation or is transferred to the centre via unequal exchange, financial imperialism, or other forms of surplus extraction. (6)

Deere's hypothesis is similar to Bennholdt-Thomsen's. She argues that women's production of subsistence foodstuffs and other services within non-capitalist modes of production indirectly lowers the value of labour power and thus increases capitalists' appropriation of relative surplus value and the rate of capital accumulation. (7) Women's work in the agricultural subsistence sector thus serves to maintain a cheap male labour force for the capitalist sector of the economy.

While both Bennholdt-Thomsen and Deere apply their model to the articulation of domestic labour in the capitalist economy and non-capitalist modes of production in the Third World to the capitalist mode of production, I can think of no logical reason why this model cannot be equally applied to the interconnection between non-capitalist modes of household commodity production and landlordism, merchant and/or usurer capital. In other words, the female dominated subsistence sector of household production can operate to lower the

remuneration of the household commodity production sector and thus to enhance the ability of landlords, merchant capital and usurer capital to increase their economic appropriation of the surplus product from the commodity sector of the peasant household. The model developed by Bennholdt-Thomsen and Deere can thus be used to explain the articulation of the internal sexual division of labour in the peasant household with the articulation to landlord, merchant and financial relations and it does not therefore apply solely to generalised capitalist production but also to other social formations where generalised commodity production is existent.

In an empirical application of the model, I will argue that rural women's subsistence production in the north Jordan Valley has resulted in landlords, merchants and usurers being able to appropriate economically a larger share of the economic surplus and income generated by peasant based commodity production than would be the case if women members of the peasant household were not engaged in subsistence production. Peasant women's subsistence labour is a largely unremunerated economic "income" which permits the reproduction of peasant relations of commodity production to survive when the income generated in the sphere of commodity relations does not meet the expenses of covering farm labour costs, production costs and the costs of maintaining the peasant family. The household subsistence economy, when articulated with household commodity production, thus acts as a hidden income equivalent which can reduce the cost of reproduction of the peasant commodity production sector.

However, this process is not static nor even unidirectional, but is a dynamic process which can change and reverse over time with changing market relations, changing ecological conditions and changes in the balance of peasant political bargaining power. In agricultural communities marked by a significant degree of commoditisation of agricultural production we are likely to find that the subsistence sector plays a more important role in times of agricultural crisis, e.g. during market gluts when prices drop and farm income is low, during poor agricultural seasons or during periods when peasant indebtedness is on the increase. On the other hand, when income generated from the commodity production sector is significant and increases the disposable income of the peasantry we should expect to find a lessening of, and break down of dependency on, the subsistence sector, as more and more household foodstuffs and services are bought in the market place and no longer prepared and manufactured in the household.

During the period, 1982-83, when I conducted the research for this study, there was very little agricultural production designated for unalloyed household consumption. The data show that two-thirds of peasant households did not produce a wholly household subsistence crop (see Table 42). Of those peasant households which did produce subsistence crops we find that only onions, potatoes, garlic and lentils were produced for purely household subsistence consumption. However, we should not be surprised at the limited development of purely subsistence based production since the regional economy is completely geared up to agricultural

commodity production. A fairly significant amount of household subsistence foodstuff requirements are met from utilising a portion of those crops directed for commodity production and market exchange.

Table 42: Crops Produced Mainly For Household Consumption By Agrarian Class

Crop	Share-cropper	Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
Onions	14	1	3	5	-	23
Potatoes	6	-	-	1	-	7
Lentils	1	-	-	2	1	4
On + Gar.*	5	-	-	-	-	5
OGP**	8	-	1	1	-	10
PT***	13	-	1	-	-	14
None	295	12	37	76	9	429
Other	26	3	1	5	2	37
Not asc.	37	43	1	13	2	96
Total	405	59	44	103	14	625

* Onions and garlic

** Onions, Garlic and potatoe

*** Onions and potatoe

A recent comparative nutritional and food systems study of two West Bank villages, undertaken by Alison Powell during 1985, shows the pattern of household subsistence food consumption. (8) This study is interesting inasmuch as one of the villages studied - 'Ain al Beda - is one of the villages covered by my own research and so it is possible that the results of this research are relevant for the peasant farmers in the other villages in the region, who operate similar agricultural systems. The main hypothesis of this study was that women's subsistence production was more important in the

Table 43: Origin of Foods Consumed Daily - 'Ain al Beda*

Food	Purchased	Home prodcd	Purchased & home prodced	Gift	Made at home from hme produce	Made at home from home purchased	Total
Bread	3	117	-	-	-	-	120
Tomatoes	-	115	-	5	-	-	120
Olive Oil	104	2	-	-	-	-	106
Onions	79	26	1	-	-	-	106
W. Melon	2	101	1	-	-	-	104
Eggs	66	24	2	-	-	-	104
Za'tar	62	22	1	-	2	1	88
Melon	3	82	1	2	-	-	88
Cheese	40	3	1	3	40	-	87
Olives	82	3	1	-	-	-	86
Yogurt	21	6	1	7	45	-	80
Milk	26	52	1	1	-	-	80
Hot pepper	18	59	1	1	-	-	79
Pickles	-	3	1	-	64	5	73
Grn onions	32	39	-	-	-	-	71
Ghee	48	-	8	-	5	-	65
Garlic	53	8	2	-	-	-	63
Total	639	662	21	20	160	6	1508

* This table is taken from Powell, 1986, p.51.

village of Karma in the Hebron region of the West Bank Highlands than 'Ain al Beda in the north Jordan Valley, because agriculture in the Hebron region had a broader and more traditional agricultural productive base, a more traditional social structure and was less geared to specialised and modern agricultural production techniques. Powell's study shows that the traditional women's agricultural subsistence plot (the hakura) is very common in Karma with 90% of the village households having a woman's household subsistence plot which is controlled, managed and worked by women family members, while only 5% of the peasant

households in 'Ain al Beda have women family members working a similar plot. (9) These figures show that women's subsistence agricultural production in 'Ain al Beda is marginal and suggests that with the development of commodity specialisation, women's roles in the agricultural labour force become integrated with male labour and that both women's and men's land and agricultural labour is directed to commodity production for market sales. The separation of male and female spheres of autonomous agricultural production and land control thus begins to break down once the peasant household becomes entirely engaged in generalised commodity production.

However, although women's autonomous agricultural subsistence production becomes integrated with generalised commodity production, women still play a key role as subsistence producers because the definition of subsistence production does not just refer to the growing of crops for purely household subsistence consumption, but includes the production, preserving and manufacturing of foodstuffs from raw materials and a whole series of other necessary household tasks which are largely undertaken by women. We find that women in the region still play a key role as subsistence producers of foodstuffs for household consumption.

The data from Powell's study show that household based production of foods for household consumption is still significant in the region. More than half of the food produce consumed daily is either produced on the farm or produced in

the household from foodstuffs grown on the farm. Only two-fifths of the daily household food consumption is purchased in the market (see Table 43). The figures show that the majority of items of daily consumed household food is met from the subsistence resource base of the peasant household. This phenomenon remains positive for those foodstuffs which are consumed between two to four times per week, where we discover that slightly more than half of the foodstuffs consumed during this cycle are derived from farm subsistence production (see Table 44). However, Powell's data show that the majority of foodstuffs consumed only once per week (88%) are much more likely to be purchased from the market. (10) Her main finding was that more than half of the household subsistence foodstuff requirements are being met from either the direct growing of foodstuffs on the family farm or from their manufacture in the household from food grown on the family farm.

Table 44: Origin of Food Consumed 2-4 Times a Week - 'Ain al

Beda*

Food	Purchased	Home Produced	Purchased and Home Produced	Gift	Total
Potatoes	75	2	-	-	77
Broad Beans	1	70	-	2	73
Squash	1	60	-	4	65
Rice	60	-	-	-	60
Eggplant	1	55	-	4	60
Grapes	51	2	-	-	53
Khubbazeh	-	52	-	-	52
Pulses	32	-	-	-	32
Total	221	241	-	10	472

* This table is taken from Powell 1986, p.54.

The preparation, manufacture and preservation of subsistence foodstuffs is the work of women members of the peasant household. This work is diversified and, as well as the preparation of meals, also involves longer term food manufacturing and preservation processes, which allow the household to store food for consumption throughout the year, particularly during periods when foodstuffs are not directly available from the family farm. Among the foods which are produced daily are bread and yoghurt. The bread is made from flour which is most commonly purchased, although some families still have access to flour from their own wheat and corn production. Two types of bread are produced, one is a course thick pita bread which is produced in a clay oven (called a taboun) and the other is a very thin doughy bread cooked on a convex metal griddle (called a sadj) over an open wood or dung fire. Yoghurt is manufactured either from milk purchased in the market, produced by local shepherds or from family goats, sheep or cows. Among the foodstuffs which are manufactured in bulk and kept over a longer period are cheese, pickled fruits and vegetables and dried fruits and vegetables. This subsistence manufacture of foodstuffs is carried out by women and the knowledge of the techniques and processes of production and storage are passed down from mother to daughter. Occasionally part of this processed food might be sold to local merchants to bring in extra income into the household.

Other subsistence tasks carried out by rural women are: carrying water from wells and springs, gathering firewood, nurturing and educating children, washing and producing

clothing. All of this work is done without mechanical assistance, is burdensome and labour intensive. The main point which has to be brought out is that women's subsistence production is carried out alongside their involvement and labour activity in the commodity production sector, i.e., the subsistence side of household production is the preserve of women who also work with their husbands, brothers and sons in the production of commodities for market exchange.

The form of women's subsistence production varies in different Third World countries but the form is generally related to the forms of social class relations in which the peasant household is involved in the social formation in general. Thus, for example, in Africa it is quite common for men to leave the family farm and to work on colonial plantations, export industries and even immigrate to Europe, where their wages do not cover their families' consumption needs and women's subsistence agricultural production continues to support the rest of the family and even husbands and sons in times of unemployment and illness. This type of relationship is typical of South Africa, Mozambique, Algeria and Kenya. (11) The situation in the Jordan Valley, while not identical, has more in common with agricultural relations in areas of Asia, inasmuch as it is characterised by irrigated farming techniques and labour-intensive farming which require the participation of the whole of the peasant family in agricultural cultivation. (12) In this situation the family as a whole provides the workforce and labour surplus or surplus product is extracted from the family as a collective

unit. Within this context women's subsistence production is articulated to the agrarian class structure.

My main hypothesis is that women's subsistence production has become, once more, relatively more important in the regional economy over the past four years, than it was during the initial period of change-over to new technology, as the regional economy has faced a significant agricultural crisis after a period of short-term economic growth. Although this thesis cannot be proven definitively without further research specifically designed to describe and explain the household subsistence sector, there are adequate suggestive data on changes over the last few years which allow me to state this position with some conviction.

During the early 1970's the farm incomes of farmers in the region were very high as they geared their farming systems towards specialisation in vegetable crop production using high yield varieties (HYV's) of vegetable plants, utilising improved plastic drip irrigation techniques and biochemically based pesticides and fertilizers. This was a period of short-term economic boom as these farmers, who were among the first generation of Palestinian farmers to operate with this system, generally benefited from a market situation where vegetable commodity prices were set by less technically advanced forces of production. These new techniques produced 500-800% more crop tonnage per dunum than traditional farming methods. In this situation, where market prices were mainly set by vegetable crops using traditional methods of cultivation, the Jordan Valley peasant farmers received

relatively high farm incomes over a short period of time. Salim Tamari has estimated that a 20 dunum sharecropping land plot brought in a net income of approximately \$6,040 to peasant families during 1978. (13) While this may seem very high in terms of local wage levels, it should be remembered that this is the collective income for a group of family workers consisting of between 2-6 adult members.

When I interviewed sharecroppers in 1984 I found that, particularly in the village of Zbeidat, a large number of farmers had incurred very large debts, and they produced bills and receipts to the region's largest landlord and commission agent for between the equivalent of \$3,000-9,000. During this period farmers were making losses on the sale of eggplants and tomatoes, their two most important vegetable crops. (14) Moreover, during the 1986-87 season, the peasant farmers in Zbeidat had accumulated debts of between 7,000-9,000 Jordanian dinars (approximately US\$21,000-27,000).

With the increase in indebtedness and lack of profitability, resident peasant households were beginning to reintroduce secondary crops at the end of the normal agricultural season. This practice diminished with the introduction of HYV's as peasant farmers felt it was not worth the extra work, particularly during profitable seasons, to produce secondary crops which normally required a great deal of labour involvement and was not particularly profitable vis-a-vis HYV's. This was a classic case of diminishing marginal returns. The main secondary crop produced is maize, which is

used as both a subsistence crop and a cash crop. The increase in the production of secondary crops has led to an increase in women's subsistence production.

As well as increased subsistence labour activity related to the production and processing of secondary crops, women are again producing more preserves, pickles and dried foodstuffs, which even if not produced on the farm, are purchased in the market when prices are at their lowest and manufactured and processed in the household. However, the main point to bear in mind is that the extent of women's household production varies over time and should ultimately be conceptualised as linked to changing agricultural fortunes. If profits go down then women are more likely to be engaged in more intensive subsistence production than they would be in more profitable seasons, particularly if this decline in income is not just a marginal seasonal variation but follows a marked longer term trend. Thus women's subsistence production of foodstuffs should be seen as linked to, and susceptible to changes in, the peasant household economy as a whole, which includes both subsistence production and commodity production.

The conclusion to be drawn from this section is that the subsistence sector, after an initial period of stagnation caused by corresponding economic growth in the commodity production sector, is once again in the process of being intensely utilised as stagnation and crisis have hit the commodity production sector. Through this period the level of women's work activity has increased in both spheres and women are bearing a greater share of the burden of this increased

need for labour activity. This lack of symmetry in the burden of labour is a direct result of women's subordination to men within a very specific agrarian class context.

II. SOME NOTES ON DEVELOPMENT STRATEGY AND THE SUBSISTENCE SECTOR

There are two fundamental reasons for discussing the household subsistence economy which relate directly to development policy and issues of development strategy. First, there have been a number of discussions and workshops among grass-roots organisations, developmentalists and academics in the West Bank working in agriculture or who have an interest in agrarian development strategies. Among the issues raised in these discussions has been the need to lessen dependency on Israeli produce and to develop strategies which make the Palestinian population more reliant on their own produce for foodstuff consumption. One of the strategic elements often discussed in achieving this end is to reinforce the peasant household subsistence economy. (16) Quite often this discussion takes place in a way which idealises and romanticises peasant relations of production and proceeds as if the subsistence economy was a sphere independent of commodity production. It cannot be overemphasised that the subsistence economy exists in conjunction with and connection to commodity production. The actual balance between the two sectors is reflected in the degree of commoditisation and levels of profitability of the activity in which the peasantry are engaged. It is thus important to note that the

subsistence sector does not constitute an alternative to commodity production. This is particularly relevant in a social formation dominated by capitalist production.

While increased subsistence production, particularly if linked to village nutrition and health education programmes, could lead to improved health and nutrition and more reliance on household produced foodstuffs, it could also increase the level of peasant exploitation. This relates to the point I have previously made about the potential for peasant household subsistence production operating as a hidden income equivalent which allows landlords, merchants and usurer capital to reduce the reproduction costs of the commodity production sector. So although the expansion of the subsistence sector could conceivably lead to a lessening of the dependency of the peasant household on certain types of Israeli produced consumer goods, particularly foodstuffs, this could be achieved, contrary to the intentions of local grass-roots organisations and NGO development agencies, in a way which simultaneously increases the level of peasant exploitation. Unless such a strategy is carried out in conjunction with strategies of empowering the peasantry through cooperative organisation and other means of strengthening their bargaining and political power vis-a-vis landlords', merchants' and usurers' capital then I fear that the best efforts of local grass-roots organisations and foreign NGO's will have unintended deleterious consequences for peasant producers. For if such a strategy takes place under the existing balance of agrarian power and social relationships, then the persons most likely to benefit

directly from such a strategy are landlords, merchants and usurers. It is a serious error in development thinking to reduce the question of the subsistence economy to a nationalist issue, since the singular emphasis on the nationalist side of the equation could lead to neglect of the agrarian class aspect of peasant exploitation. The questions of dependency and agrarian class have to be addressed concurrently, particularly if we wish to lessen dependency on Israel and simultaneously improve the livelihood of peasant producers.

It should further be remembered, particularly by those grass-roots organisations and agencies who attempt to promote a development agenda which could generally be defined as "progressive" or "popular", that intensifying the subsistence sector will ultimately increase the workload of women rather than men, since as Barbara Rodgers has pointed out:

The total amount of subsistence work done by women is not recorded in most studies of the labour force, or in "manpower" studies and planning. Time-budget studies are just beginning to appear rather sporadically which do cover some or all aspects of women's work. With overwhelming uniformity, they depict rural woman as working extremely long hours, and expending energy without adequate rest on a wide variety of tasks, all of which are essential to the families' survival. In most if not all cases, women's work is seen as much more arduous and time consuming than men's. (17)

Grass-roots organisations and NGO's should be aware that the promotion of a subsistence sector based strategy, even one which adequately addresses the issue of dependency and class simultaneously, could have a negative impact on women's

subordination through the intensification of their labour burden within the peasant household.

The second reason for discussing the household subsistence economy in terms of planning and strategy is related to Rodger's point. The fact is that peasant household subsistence production is largely the preserve of peasant women and not men. It is now widely established in the development literature that planners, and it must be said grass-roots political organisations, have persistently neglected the role of women in the development process and have been consistently guilty of gender-blindness. Thus, Lina Fruzzetti has forcibly argued that:

Utilising the family as their unit of investigation, development planners have imposed their own cultural biases with respect to the sex role division and hierarchical structural models rather than using those of the developing countries they have set out to examine. Thus, their plans for agricultural development and modernisation, and the push for economic growth and progress have focused more on male participation in the production process. Here I am alluding to the classical models of division of labour with private and public spheres where male and female roles revolve around either one or the other, and where the home is clearly separated from the workplace, in this case the farm. Over the last two decades, development projects have reinforced the mothering roles of women as well as a welfare orientation in the design and implementation of programmes for them. This treatment has resulted in their exclusion from meaningful consideration in general development goals. The separately designated projects for women (and the systematic effort to exclude them from significant ones) result in a mere symbolic representation of women in whatever plans ultimately materialise. Women are neither required nor encouraged by local governments or planners to participate in any substantive sense in the development process as it relates to resource allocation. (18)

While there is a good deal of lip-service among aid agencies about the need to integrate women into the development process, development projects conducted by international agencies have most frequently tended to limit women to the domestic sphere of the economy. (19) In such contexts we often find an openly sexist variation of Lewis's dual economy thesis, where women are characterised as belonging to the "closed" or "traditional" sector, while men are characterised as belonging to the "open" or "modern" sector of the economy. In this characterisation, economic growth, progress and development are perceived as male attributes, while women are perceived as conservative, traditionalist and an obstacle to economic progress. (20) If women are perceived in such a way by planners and development workers (who are in any case most commonly male) it is hardly any wonder that they concentrate their attention, projects and funding on the male members of peasant communities.

The overall effect of such ideological caricatures among the staff of development agencies in agriculture has resulted in the greatest proportion of their attention being focussed on male farmers at the expense of women's role in the agricultural process. In an African context, Uma Lele has written that:

Agricultural extension programmes have frequently overlooked the importance of women, both as major contributors to farm labour supply and as significant family breadwinners. This oversight can be attributed most readily to a tendency among project planners and authorities to see African women in Western terms - i.e. essentially as domestic workers whose primary responsibility should be at home and not in the fields. Thus, the

goal of extension services has frequently been not the increase in farm-level productivity of women but rather finding ways to reduce their participation in agriculture through the promotion of more homebound activities. Often such efforts have the opposite results...[since]...some farming innovations may result in increasing the burden of labour on women. (21)

Thus, contradictorily, if development agencies and agricultural extension workers are not aware of the realities of the sexual division of labour in peasant agriculture, because of their ignorance and ideologically generated inability to gauge the level of women's overall involvement in the work process, then they can simultaneously, while trying to limit women's activities to a purely domestic role, increase their involvement in the commodity production sphere. The reality of women's work in the sexual division of labour in peasant communities is such that women actively work in both the domestic and commodity producing spheres concurrently, most commonly working a "double day" in the family subsistence sector and the commodity producing sector. It is often the case that development intervention, when accompanied by gender-blindness, fails to take into account women's existing work commitments and effectively results in increasing the labour time which they work. In the Jordan Valley, for example, the work load of women in the commodity producing sector has increased as a direct result of the introduction of new techniques and HYV's of vegetable seedlings, and, simultaneously, they are committed to undertaking heavier workloads in the subsistence sector as the household economy is facing the consequences of an agricultural crisis.

Moreover, often the male-centredness of extension service and agricultural workers, even when they have women extension workers and agricultural engineers, leads them to undermine the potential of their own women workers' involvement with peasant women. Thus, it is a quite common event to find those few women graduates in agronomy and agricultural engineering allotted urban based secretarial and administrative tasks rather than operating in the field with peasant women where their impact could be greatly utilised.

In the West Bank the general pattern of development intervention by grass-roots organisations and NGO development agencies has followed the classic pattern of male-centred productive development projects and intervention. If we consider the work of the foreign NGO's operating on the West Bank and Gaza, of whom more than sixty are active, we find only two have attempted to get seriously involved in income-generating projects for women. One of these projects is the Surif Women's Cooperative, initially established and funded through the Mennonite Central Committee (MCC), which produces and sells local Palestinian embroidery. (22) The other project, called "Our Production is Our Pride" Women's Cooperative which is a Norwegian government funded development project, is much more relevant to the peasant subsistence sector. This project involves women in the production of foodstuffs. This last project is very new and in the initial start-up and evaluation phase. It is based in two villages, one in Beit Hanoun in Gaza and the other in Beit Illo in the Ramallah district. This last project is the only NGO funded project which addresses the issue of income-

generation for women within, what we might loosely refer to as, a feminist problematic.

At the present time only one of the four politically affiliated women's committees in the Occupied Territories, the Women's Work Committee (WWC), is supporting the idea of income-generating projects for women. They are supporting an all-woman biscuit making "factory" established in Abassan in the Gaza region. This organisation was initially set up by six local women who provided the limited initial capital outlay for the project. The project was started on a very low key format and the "factory" premises are borrowed from the local kindergarten. At present the women only work for a short period at a time, although they hope to expand the project in the future and eventually to make enough income to cover costs and salaries. (23)

The majority of production based development projects in the West Bank and Gaza are male-centred, primarily in the agricultural sector. When NGO's get involved with women it tends to be in the areas of health, nutrition, education and welfare projects. The same thing can largely be said of grass-roots organisations. Both tend to perpetuate women's subordination rather than treat it as a political and a developmental challenge. Even the most progressive "popular forces" operating in the Occupied Territories today tend to underplay women's subordination and treat it as a marginal issue which can be adequately addressed at some time in the future once the Palestinian national issue has been resolved.

As one would expect this is a position most readily adopted by "progressive" men, although organised women have, on the whole, themselves tended to subordinate their immediate gender issues to the wider nationalist issue.

There is a wider need for understanding and appreciation of peasant women's involvement in both the commodity production and subsistence production sectors of the economy. Once developmentalists, whether they be in foreign NGO's or in local grass-roots organisations, have a wider and more concrete understanding of these issues they are more likely to be in a position to adopt developmental strategies aimed at lessening the burden of peasant women's workloads and treating them as active and equal partners (without the heavily loaded sexist connotations of the word) in the development process. One positive way forward would be to think of the subsistence sector as a potential resource base for income-generating projects for women, since this is a sector where they have developed their own skills and knowledge. If projects take place in this sector in such a manner where women themselves take the responsibility for resource allocation, setting of work schedules and labour activity then such projects could act as a means of lessening the burden of women's work. However, there is a danger that women-focussed projects will not be treated as central or with the same degree of seriousness as male-focussed production projects. The whole issue of income-generation projects is a fairly complex issue which has many dangerous pit-falls which could increase the burden of labour rather than lessen it. (23) Recent research has repetitively shown

that the welfare of families is most often best secured when women have a source of cash income, as they are much more likely to spend this income on the health and nutrition of the family than are men, who are more likely to spend extra income on consumer goods and prestige items. (24) Suffice it to say for the moment that development work aimed at assessing the impact of income-generation for women should not be ignorant of the issue of women's control over their own production and resource allocation. Income-generation based on the development of capitalist production and exchange projects will not lessen the burden of labour of women. It will certainly generate income for women but it will do so while turning them into wage-slaves, if the general experience of other Third World countries is relevant.

In the following two sections I will focus attention on the organisation of labour and labour supply in the commodity production sector of the regional economy.

III. THE ORGANISATION OF LABOUR IN COMMODITY PRODUCTION

The north Jordan Valley economy is very specialised and has a number of features of a regional export-enclave economy. It specialises in the production of a limited number of vegetable crops for the internal West Bank market and the Jordanian export market. The reason for the development of this specific form of economy goes back to the early 1970's when the Mennonite Central Committee (MCC) and Oxfam (two

NGO's, the first with an office in east Jerusalem and the second operating with a British field officer) became interested in establishing a drip-irrigation project with the aim of helping to transform backward agricultural production techniques in the hope that this would increase farm income in such a manner that it would mitigate the fairly high poverty levels among the local farm population. (25) The agencies were motivated by commendable humanitarian values and by an ideological commitment to alleviate the worst aspects of Israeli colonial rule through attempting to invigorate Palestinian agricultural production. The manner in which this intervention was undertaken was modelled on classical technological diffusionist lines.

The diffusionist model of agrarian reform and change views the problem of rural poverty and underdevelopment as essentially stemming from technological backwardness. The main policy initiatives which flow from this assumption are that poverty and underdevelopment can be checked by the inflow of highly educated agricultural extension agents into the countryside to diffuse the backlog of technological knowledge about new equipment and plant species. (26) This equipment and technique is then made available through aid transfers and grants. The approach is rationalised by technological determinism which is largely techno-centric and thus fails to take into account the affect which existent agrarian social relations might have on the problem of the generation of peasant poverty. Thus, the social groups, whose exploitative influence the policy might have been aimed at

curbing, began to adopt the same technological approach after they saw the benefits which the new techniques offered their own potential for capital accumulation.

In the Jordan Valley the combined efforts of the aid agencies, large landowners and merchants in implementing the process of technological transfer led to a virtual agrarian revolution in the late-1970's. This radical change was largely bio-chemically based and augmented by plastic water conservation systems. HYV's with saline resistant properties replaced older plant strains and inorganic fertilizers and insecticides were also widely introduced at this time. The improvements which occurred can be classified as a vegetable crop variation of the field crop based "Green Revolution" which swept through South-East Asia and Latin America in the mid-1960's and early-1970's. This revolution was based on HYV's of rice and wheat and augmented by forms of intermediate technology. (27)

These innovations as they were applied in the Jordan Valley involved a substantial changeover from the furrow irrigation system to the drip irrigation system. The affect was to alter considerably both the social and sexual division of labour on all forms of family farm in the north Jordan Valley. Some of these changes are due directly to the drip irrigation technology itself, e.g. some of the tasks of irrigation and fertilization are now semi-automatic and partially incorporated into the drip irrigation system, other labour tasks have changed because the introduction of drip irrigation has been accompanied to a large degree by

mechanisation and tractorisation, while, yet other labour tasks have become more labour intensive during the harvest period due to increased crop yields. This accompaniment is not accidental but has become both technically and financially possible with the drip irrigation technology.

Land and water are the principal factors of production combined in the agricultural labour process with seeds, insecticides, fertilizers and other agricultural inputs. These raw materials of production are combined and transformed in the labour process through the purposeful activity of men and women working upon them with the aid of tools, machinery and livestock. The way in which these elements are utilised is variable and dependent upon the type and level of technology utilised. In the context of the Jordan Valley we can conveniently distinguish between two agricultural technologies: the furrow irrigation system and the drip irrigation system.

The equipment used in the furrow irrigation system is very simple and inexpensive and could be made cheaply by local blacksmiths. Before the introduction of tractors the land was ploughed by draft power, again using very simple and cheaply constructed ploughs made of wood and metal and harnessed to draft animals, normally donkeys or mules. During this time, if farmers did not have their own animals then they would hire them. The ploughs used were very primitive and would only plough one furrow at a time, thus it would take a few days of continual labour to plough the average landholding.

Once the field was ploughed and prepared, earth furrows would be constructed to canalise water to the vegetable plants. The earth furrow system consists of a whole series of canals which are all interconnected and through which water flows along by means of gravity flow. This system is very wasteful of water since a substantial proportion of the agricultural water supply is lost through seepage and evaporation. It is also wasteful inasmuch as the system is limited in its ability to direct the water directly onto the plant root. The wastage of water and tight Israeli control of water resources was an important factor in inhibiting the development of vegetable crop production before the introduction of drip irrigation. In the past farmers with limited water supplies or whose fields were far from springs and canals would grow field crops which were mainly rain-fed, such as wheat and barley. During the pre-1970 period cereal crops and animal husbandry were the prevalent forms of agricultural activity in the region.

In conjunction with the furrow irrigation system, farmers grew local varieties of crops which were generally low in productivity and were often subject to blight because the costs of insecticides were prohibitive within the economic scale of the furrow irrigation system.

The immediate farming benefit of the drip irrigation system is that it conserves water and very little water is lost through seepage and evaporation because of the nature of the system. The system is based on a grid of plastic pipes laid out in rows about two metres apart and the water flows

through this small-bore pipe system which has small holes about every 60-90 centimetres in the pipe to let water filter through directly onto the plant root. This system is particularly important in situations where water resources are scarce, whether for natural or political reasons. In the Jordan Valley the utilisation of this system has brought immediate benefits to farmers and has resulted in significant new areas of land being brought under irrigated cultivation. The added advantage of the drip irrigation system is that it is a pressurised water delivery system which can be utilised in slightly inclined land (it can also be used effectively on sloping land). Thus, the added effect of the drip irrigation system is that it has led to the cultivation of land on which it was not formerly possible to cultivate due to the difficulties in irrigating sloping land effectively and efficiently using the furrow irrigation system of production.

However, the drip irrigation system is not merely a water conservation system but comes combined with a technological package including HYV's and inorganic fertilizers and pesticides: It is essentially a bio-chemically based revolution. The utilisation of inorganic commercial fertilizers has resulted in the diminution of the fallow land. All land is now farmed on an annual basis and the natural soil elements needed for plant growth are re-energised through the laying and spraying of chemical fertilizers. This process has led to a sharp increase in the acreage costs of farming. Indirectly it has increased the workload of farmers since more farm land is utilised annually

and none lies fallow.

The furrow irrigation system had associated financial and technical constraints which mitigated against mechanisation and tractorisation. While it was possible to plough, harrow and prepare the land for sowing with tractorised equipment, there was little daily need for tractorised equipment outside the preparatory period, since the earth furrows for irrigation had to be prepared and repaired by hand tools on a daily basis. Moreover, the levels of farm income in the pre-drip irrigation period meant that the majority of farmers did not own or have access to tractors. Thus harrowing and ploughing would normally be carried out by animal draft power. Only after the initial inflow of capital and increased profitability in the early 1970's was there an increase in the incidence of tractor ownership and increasing availability and desire for tractor rental among smaller farmers. The introduction of tractors and modern ploughing equipment has considerably cut down the labour time necessary to plough and harrow the land. Modern tractors have multi-furrow ploughs which plough the land very speedily and the work of ploughing, which previously took a number of days, can be completed in a few hours.

Before the introduction of drip irrigation the tasks of ploughing, furrowing, fertilizing, irrigating, manuring, covering manure, etc. were all work tasks which would be carried out by men using traditional methods, perhaps with the assistance of draft power, while after the introduction of drip irrigation all these tasks were largely mechanised.

The immediate impact of these changes on the family division of labour was to lessen the workload of the family male workers, since it has been the work tasks of the male family members which have been most readily adapted to mechanisation. (28) Moreover, while drip irrigation brought about a reduction in the demand for male labour associated with furrow irrigation, it has simultaneously increased the demand for labour, particularly female labour, at other periods of the year, i.e. during transplanting, weeding and harvesting.

Moreover, because of the nature of vegetable crop production, mechanisation in transplanting and harvesting remains negligible. The planting and harvesting phases of the agricultural season have remained labour intensive periods of activity which have little or no potential for mechanical innovation. Thus, sowing and transplanting, weeding, harvesting, packing and hauling have remained labour intensive activities. It is precisely in these work tasks where the labour of women is concentrated. The major change which the drip irrigation technology has brought about in the sexual division of labour has been to decrease the traditional workload of family males in the pre-sowing and irrigation phases while in fact increasing the demand for labour during the harvest period, the period when the demand for female family labour is traditionally at its peak. The overall effect has been to increase the workload of women. In fact, because of the increased productivity due to new technology and hybrid seedlings the workload at the harvest

period has intensified to an exceptionally high degree as the per dunum productivity of the major crop - tomatoes - has increased by 500 - 800%.

If we consider the agricultural organisation of labour on a seasonal basis we find that the agricultural season in the valley normally begins during late August or early September through to May or June, depending on seasonal climatic conditions. The actual seasonal work cycle is set out in Table 45. The period between June to August is exceptionally harsh with summer temperatures which reach 40 degrees centigrade. Very little agricultural activity takes place during this period. During August the male members of the household plough and prepare the fields for the coming season's agricultural production. During this period the men will plough and harrow the fields, spread fertilizers, lay out the drip irrigation lines, install the pumps and lay down the plastic ground sheeting (for moisture preservation). If they are planting field crops, as opposed to vegetable crops, they will spread manure on the fields before sowing the seeds. The vast bulk of this early preparatory work is now done by tractor and mechanical equipment, which is either privately owned or more normally rented to undertake this work.

From September until June both the men and women of the household are actively engaged in the agricultural work process. During September and October men and women family workers transplant tomatoes, eggplants and squash seedlings

Table 45: Seasonal Work Cycle*

Work activity	MONTH											
	8 Aug	9 Sept	10 Oct	11 Nov	12 Dec	1 Jan	2 Feb	3 March	4 April	5 May	6 June	7 July
Ploughing and Field Preparation	X											X
Laying drip Irrigation Lines	X											X
Laying Plastic Sheetting	X											X
Sowing and Transplanting		T, E, S, P	T, E, S, G	W, B, P	C, Wh	Wh, B	M, Wh, Hm					
Weeding		X	X	X	X	X	X	X	X	X	X	
Harvesting				S	S, E	S, E	S, E, T, G, P, C	S, E, T, G, P, C, Wm	S, E, T, P, Wh, B, M, Wm, Hm	E, T, P, Wh, B, M, Wm, Hm	Wh, B, M, Wm, Hm	M
Labour Hire						X	X	X				

KEY: T: Tomatoes, E: Eggplants, S: Squash, P: Pepper, G: Green beans, Wh: Wheat, B: Barley, M: Maize, Wm: Water melon, Hm: Honeydew melon.

* These times are subject to some marginal season variations dependent upon climatic conditions and rainfall.

which have been purchased from seedling nurseries owned by merchants and landlords. These nurseries specialise in growing HYV's of seedlings on intensive production nursery beds in plastic hot-houses where the maturation process is rigorously controlled and monitored in terms of moisture and temperature. During this period farmers might plant some hot pepper and green beans. Around November, December and January, if the household sows field crops, the men and women will sow wheat and barley, and during February they might plant some maize, water melon and honeydew melon. The busiest period of sowing activity is during the transplanting of tomato and eggplant seedlings. These crops are extensively produced on the majority of farms. Throughout this period women family workers bear a very significant portion of the burden of labour. The work of transplanting is labour intensive, backbreaking, manual work which takes place without any mechanical assistance and is undertaken with the aid of only a small pointed stick which is used to prepare a hole into which the vegetable seedling is then transplanted. The use of HYV's has led to the use of germinating seedlings rather than ungerminated seeds. This work is much more labour intensive than the sowing of seeds by harrowing since it has to be done completely by hand, and each seedling has to be carefully planted and packed into the appropriate position next to the drip irrigation seepages holes. Seedlings have to be treated very carefully so that they are not damaged in the process of transportation and transplanting.

From early September till the end of the agricultural season weeding the fields becomes an important activity. Weeds have

to be kept down as they compete with the crop for nutrients, water and sunlight. If weeds become overgrown they inhibit the natural chemical process of photosynthesis; if weeding is not carried out effectively then the productivity of the plant will drop substantially. Women play a more significant role in the work of weeding than men, since this is traditionally women's work, although men will often help in this activity. This work is non-mechanical drudgery carried out by hand. While herbicides have been developed which control the growth of weeds and they are normally included as part of the "Green Revolution" technological package, they are normally only used when labour costs are high. Thus, like the situation in the majority of peasant based economies, where farming remains labour intensive, hand labour remains the main means of controlling weeds, and it must be said hand labour can achieve the same or even better control of weeds in most situations. (29) It should be noted that in the earliest period of the growing season weeds are kept to a minimum through the use of plastic sheeting which is used to preserve soil moisture around the plant. This plastic sheeting has holes from which the commercial plant emerges and nothing grows directly under the plastic sheeting as the temperature is so high that it kills leaf-life. Thus, in the early period the use of plastic sheeting helps to keep down the growth of weeds. This however only lasts for a short period of time. Once the plant has grown the sheeting has to be lifted and the weeds compete with the plant for nutrients, water and sunlight.

The actual harvest season lasts from November till July, although the peak of the harvest season is from February until April when the production of tomatoes and eggplants are at their most intense. These crops are absolutely more productive per dunum ton than any other vegetable crop and they therefore require higher labour inputs during their harvest. During this period both male and female family workers will work harvesting the crop on a daily basis.

March till May is the harvest season for field crops such as wheat and barley. It is possible to harvest these crops by mechanised processes, although the major determinant on whether these crops are mechanically harvested or not depends on the dunumage under cultivation. If families are producing only a small amount, say one or two dunums for household subsistence use, then they will be most likely to harvest the crop by use of a hand-held scythe and then thresh the crop mechanically through one of the itinerant threshers who travel the countryside and charge a small fee for threshing the crop. However, if the field crop is extensive and produced for commercial purposes, then it is likely to be harvested by means of the rental of a combine harvester and driver.

Late in the season, between June and July, maize is harvested by those farmers who produce it. Maize is normally a second crop and in the early 1980's very few farmers went to the trouble of producing it. However, as farm profits have declined in the mid-80's, more and more farmers are choosing to grow it as a second crop since it helps to meet household

subsistence requirements and to marginally offset their falling profit margins. Quite late in the season, during May and June, water melon and honeydew melon is harvested. The production of melon is becoming more important than it was in previous seasons and it has now become an important export crop.

Any agricultural day labour which is required is normally employed during the peak season, between January and March, and is used almost solely for harvesting crops. No individual farmer is likely to employ day labourers for the whole of this period.

IV. LABOUR SUPPLY IN THE COMMODITY PRODUCING SECTOR

In this section I will describe the pattern of labour supply in the commodity production sector. First, I will consider the aggregate picture of labour supply and then I will consider the on-farm pattern of labour supply in terms of full-time family workers, part-time family workers and wage labour utilisation.

The Agricultural Workforce as a Whole

Looking at the aggregate picture of the agricultural workforce - which includes family workers of both sexes working on the farm on both a part-time and full-time basis and day labourers of both sexes - we find that women are more common in the agricultural labour force as a whole than men.

They constitute 54% of the total agricultural labour force (see Table 46). However, this figure includes part-time family workers and part-time day-labourers. If we consider only the full-time labour force then men are slightly more common in the labour force than women, constituting 52% of the full-time work force. This difference is marginal and women are just as important as men as a source of full-time agricultural workers. However, we should not let this quantitative parity blind us to qualitative differences in the forms of work and burden of labour carried out in the sexual division of labour, where women generally work harder and longer, and normally have to work a double-shift in both the commodity producing sector and the subsistence sector.

The situation is different with the labour supply of the part-time labour force. Here we find an inverse relationship between the gender of part-time family workers and part-time day labourers. Men are the predominant category of part-time family workers constituting three-fifths of the part-time family workforce, while women constitute two-thirds of the part-time day labour force.

Thus, the general quantitative picture which emerges is one where women play a marginally more important role in the aggregate labour force, men play a marginally more important role in the full-time workforce. Men play the predominant role in the part-time family labour force and women play the predominant part in the part-time (seasonal) wage labour force.

Table 46: Agricultural Work Population

	Male					Female					
	Share- cropper herd	Shep- herd	Cash tenant	Small- holder	Sub- total	Share- cropper	Shep- herd	Cash tenant	Small- holder	Sub- total	Total
Full-time family workers	622	26	81	158	887	591	19	61	134	809	1696
Part-time family workers	136	7	24	37	204	93	6	13	23	135	339
Full-time day labourers	2	-	-	4	6	8	-	-	-	8	14
Part-time day labourers	249	19	41	114	403	569	27	74	128	798	1201
Column total	1009	52	146	313	1500	1201	52	148	285	1750	3250

The numbers of full-time day labourers are insignificant and they constitute only 0.4% of the total agricultural labour force. This figure shows quite clearly that agricultural proletarianization is completely undeveloped in the north Jordan Valley and is not a feature of the regional economy. It might be possible to argue, however, that the seasonal need for day labourers has brought limited forms of proletarianization to the region, and these labourers constitute more than a third of the total labour force. If we take this point then we should be very careful not to imply that this is capitalist proletarianization (or proletarianization proper). This limited form of proletarianization does not entail capitalist relations of production in agriculture, rather it is a restricted form of the development of wage labour relations which are grafted onto non-capitalist forms of production. This limited form of wage labour is almost wholly restricted to the employment of women labourers. It is also a labour force which is extremely mobile between the farms on which the labourers are employed; with the workforce spending only a few days on any one farm during the year.

For example, a group of four or five women who are recruited under sub-contractors will work for 3 or 4 days on a farm harvesting the crop and then they will move onto another farm. The sub-contractor may have anything from 20 to 50 women working for him whom he hires out to different farmers. The relations which these women face can be highly exploitative as they receive a very low remuneration for the backbreaking toil they carry out. This is not full blown

capitalist exploitation and this limited development of the wage labour relation in agriculture is restricted to the harvest period. The amount of farm income expended on the employment of wage labour does not account for a significant portion of the annual farm budget.

If we consider the class specific picture of the constitution of the aggregate labour force we find that, 68% of the total labour force are employed in the sharecropping sector, 3% in the farming-shepherd sector, 9% in the cash tenancy sector and 18% in the smallholding sector. If we look at gender in terms of the different sectors and in terms of the different categories of workers, we find that the sharecropping sector has the closest approximation to gender parity in terms of the number of full-time family workers engaged in labour activity, with 51% of full-time family workers being male and 49% female. In the other sectors men are marginally more common in the full-time family workforce than women, with 58% of full-time family workers in farming-shepherding, 57% in cash tenancy and 54% in smallholding. However, these differences are not great and it points to the fact that women are just as important as men in the full-time family workforce as men in all agrarian class sectors.

The situation is different for the labour supply of part-time family workers. Males are the more important unit of labour supply in the part-time family workforce, accounting for 65% of part-time family workers in cash tenancy, 62% in smallholding, 59% in sharecropping and 54% in farming-

shepherding.

In all the non-capitalist forms of production units part-time female day labourers constitute the most important type of wage labour supply. However, they are particularly central to the sharecropping sector where they constitute 70% of the part-time day labour supply. They constitute 49% of the part-time day labour force in farming-shepherding, 53% in smallholding and 64% in cash tenancy. It is significant to note that gender is not an important unit of analysis in the full-time day labour force since full-time day labourers are marginal to the supply of the regional labour force.

However, the most important point which the aggregate data substantiate is that the peasant family is the singular most important source of labour supply, with 99% of the fully employed peasant agricultural labour force being supplied from the immediate peasant family itself; peasant women accounting for 48% of the aggregate figure and men constituting the remainder. Family labour accounts for almost two-thirds of all labour utilised, while seasonal waged labour accounts for slightly greater than a third of the aggregate labour force but it is only mobilised for a very short period of the agricultural season.

Workforce Supply Patterns on the Farm

If we turn to the general characteristics of the pattern of labour force employment on the farm, the data show the typical employment pattern of full-time family workers on all

forms of farm enterprises (see Table 47). The typical (most common) pattern of labour employment on the sharecropping farm is one full-time male worker (65% of farms) and one full-time female family worker (49% of farms). Interestingly, 12% of sharecropping farms do not employ any full-time female family workers, yet sharecropping farms are more likely to employ two or more full-time female family workers (45% of farms) than males (33% of farms). Less than one-third of sharecropping farms had two or more full-time male family workers and almost a quarter had two or more full-time female family workers.

It is important to remember that the family labour force supply is not a static entity in the peasant agrarian economy but is determined, in a fundamental manner, by the demographic characteristics of the household. Peasant households are constituted of different familial reproductive and generational phases. Young peasant families will be less likely to employ adult family members than older families because of biological reproductive differences. Thus, the peasant family forms a biological reproductive unit which will be internally constituted with different potential familial labour supplies at different phases in the demographic cycle of the family. This means that there is no ideal-typical or optimum familial labour base. Rather the potential household labour force is a largely generationally determined variable. The peasant household is much more likely to employ day labour if the household supply of labour is not adequate to meet the labour input requirement.

Table 47: Full-time Family Workers By Sex and Class

No. of full-time Family Workers	Male				Female				Total
	Share- cropper	Shep- herd	Cash tenant	Small- holder	Share- cropper	Shep- herd	Cash tenant	Small- holder	
0	-	-	-	-	50	3	10	19	82
1	267	7	19	52	200	6	17	38	261
2	75	5	15	20	94	5	7	15	121
3	39	3	8	11	39	1	7	14	61
4	14	-	2	4	14	-	1	2	17
5	4	-	-	2	2	-	1	-	3
6	2	-	-	-	-	-	-	-	-
7	-	-	-	1	-	-	-	-	-
10	-	-	-	-	2	-	-	2	4
Not Asc.	8	2	1	5	8	2	2	5	17
Col. Tot.	409	17	45	95	409	17	45	95	566

The utilisation of day labour will thus be a function of the elements of farm size, type of produce and household demography.

As with sharecropping, but less pronounced, the typical pattern of full-time male family worker employment in the farming-shepherd sector is for one male full-time worker (41% of farms) and one female full-time worker (35% of farms) to be employed on the family holding. The employment of two full-time workers is more common in farming-shepherding than in sharecropping and almost a third of farming-shepherd concerns have two full-time workers from both sexes. However, a higher portion of women family members did not work (18%) in any farm labour capacity. We should however bear in mind that the absolute numbers in this sector are very small.

The pattern for cash tenancy is similar but once again less uniform than the situation in sharecropping; 42% of cash tenancies have one full-time male family worker and 38% have one full-time female family worker. More than a fifth of cash tenancies do not employ female family workers on a full-time basis. A third of cash tenancies have two full-time male workers engaged on the family farm and 16% have two full-time female workers.

In the smallholding sector 55% of farms employ one full-time male family worker and 40% employ one full-time female family worker. A fifth of smallholdings employ no full-time female family workers. Slightly more than a fifth have two full-time male family workers and 16% have two full-time female

Table 48: Number of Part-time Family Workers by Sex and Class

No. of full-time Family Workers	Male				Female					
	Share-cropper	Shep-herd	Cash tenant	Small-holder	Total	Share-cropper	Shep-herd	Cash tenant	Small-holder	Total
0	312	10	30	68	420	332	10	34	77	453
1	44	1	6	14	65	31	2	5	8	46
2	22	1	6	6	35	24	-	4	6	34
3	7	-	2	2	11	2	-	-	1	3
4	3	1	-	-	4	2	1	-	-	3
5	1	-	-	1	2	-	-	-	-	-
10	1	-	-	-	1	-	-	-	-	-
Not asc.	19	4	1	4	28	18	4	2	3	27
Col. Tot.	409	17	45	95	566	409	17	45	95	566

family workers engaged on the farm.

Thus, the typical farm for all types of non-capitalist production unit employs one male and one female family worker on a full-time basis, normally the head of the household and his wife. Sharecropping is most typical in this respect.

Unlike the situation in the West Bank highland, the typical family farm in the north Jordan Valley employs no male or female family workers on a part-time basis. The reasons for this are quite clear, unlike the situation where village dwellers work for part of the year in the Israeli or West Bank non-agricultural economy and return to work on the family farm during the harvest period, this does not occur in the north Jordan Valley as there is very limited proletarianisation of members of the family on the whole. Very few people from this region work inside the Israeli economy. The absence of part-time family workers is particularly marked in the sharecropping and smallholding sectors, where 81% of sharecropping farms employ no part-time male family workers and 76% employ no part-time female family workers. The situation in smallholding is almost identical, where 81% of farms employ no part-time male family workers and 72% employ no part-time female family workers (see Table 48). Although not as strongly marked, the other forms of landholding show similar tendencies.

As I mentioned previously, full-time day labourers constitute only a tiny portion of the total labour force. There are only 16 full-time day labourers - 8 men and 8 women - in the

Table 49: Number of Full-time Day Labourers by Sex and Class

No. of full-time Family Workers	Male					Female				
	Share-cropper	Shep-herd	Cash tenant	Small-holder	Total	Share-cropper	Shep-herd	Cash tenant	Small-holder	Total
0	403	15	45	93	556	401	15	45	94	555
1	-	-	-	-	-	1	-	-	-	1
2	1	-	-	-	1	-	-	-	-	-
3	-	-	-	-	-	1	-	-	-	1
4	-	-	-	1	1	1	-	-	-	1
Not Asc.	5	2	-	1	8	5	2	-	1	8
Col. tot.	409	17	45	95	566	409	17	45	95	566

Table 50: Part-time Day Labourers by Sex and Class

No. of full-time Family Workers	Male				Female					
	Share-cropper	Shep-herd	Cash tenant	Small-holder	Total	Share-cropper	Shep-herd	Cash tenant	Small-holder	Total
0	333	12	32	66	444	248	11	23	60	342
1	9	-	-	3	12	5	-	-	1	6
2	15	-	2	6	23	23	-	1	6	30
3	14	-	1	5	20	37	-	3	9	49
4	7	-	2	3	12	20	1	5	4	30
5	10	-	2	3	15	29	-	1	8	38
6	-	2	1	2	5	3	1	2	2	8
7	1	1	-	-	2	4	1	2	-	7
8	1	-	-	-	1	2	-	-	-	2
10	2	-	1	3	6	6	1	-	-	7
12	-	-	-	-	-	-	-	1	-	1
15	1	-	-	1	2	-	-	-	1	1
20	2	-	-	-	2	-	-	-	1	1
Not Asc.	14	2	4	3	23	28	2	7	4	41
Col. tot.	409	17	45	95	566	409	17	45	95	566

regional labour force, the majority of whom work, interestingly enough, for sharecroppers (see Table 49). Thus, 98% of farms employ no full-time day labourers. It is clear from this that proletarianisation is completely undeveloped in the agricultural sector of this regional enclave.

The employment of part-time (seasonal) day labourers on farms in the Jordan Valley is widely varied and the utilization of day labour depends on a number of factors, such as the nature of the crop grown, duration of production and the availability of family labour. However, as with part-time family workers, the majority of all forms of productive unit do not employ seasonal day labourers (see Table 50). Those part-time day labourers who are employed are mainly women. However, the utilization of part-time male day labourers is also quite common, with 13% of the sharecropping sector, 18% of the farming-shepherd sector, 20% of the cash tenancy sector and 28% of the smallholding sector employing male seasonal workers. The figures for women are quite a bit higher, with 33% of sharecroppers, 24% of farming-shepherds, 34% of cash tenants and 33% of smallholders employing female seasonal workers for some period during the agricultural season. Clearly, female seasonal workers are the more important source of seasonal labour supply. This is particularly true of sharecropping where they greatly outnumber male seasonal workers.

The majority of these seasonal workers (85%) work only during the harvest season (see Table 51). A minority of seasonal workers (8%) work during both the harvest and the sowing

season. These labourers are more likely to be men than women. There are no major differences in employment patterns among the different forms of agrarian production unit, except for the fact that smallholders employ proportionately almost twice as many workers during both the harvesting and sowing seasons than any other agrarian class.

Table 51: Period of Employment of Seasonal Workers by Agrarian Class

Period	Share-cropper	Shepherd	Cash Tenant	Small-holder	Total
Harvest	158	5	23	37	221
Sowing	-	-	-	-	-
Sowing + Harvest	12	1	2	6	21
Not ascertained	6	8	1	2	17
Column total	174	14	26	45	295

Generally these day labourers commute to the region of their employment from the Tubas, Nablus and Tamun areas (see Table 52), where 62% of them have their permanent residence. Only a small portion of these seasonal workers (14%) are local residents.

The majority of these workers (53%) are recruited through labour contractors who hire the workers in the towns of Nablus, Tubas and Tamun and bus them to the region on a daily basis (see Table 53). There are no significant differences between the different agrarian production units in this form of recruitment. The actual payment to these workers is not made directly to them by the farmers on whose land they work.

but by the labour contractor who undertakes to provide farmers with so many day labourers at a set price. The contractor then pays the workers s/he has under her/him and

Table 52: Residence of Day Labourers by Agrarian Class

Residence	Share-cropper	Shepherd	Cash Tenant	Small-holder	Total
Nablus	25	1	2	3	31
Tubas	67	2	12	21	102
Tamun	20	1	2	4	27
al Fara'a	17	-	3	3	23
Nassarea	4	-	1	3	8
Local	27	1	2	6	36
Other	5	-	-	1	6
Not ascertained	15	3	3	5	26
Column total	180	8	25	46	259

Table 53: Method of Labour Recruitment by Class

Method of recruitment	Share-cropper	Shepherd	Cash Tenant	Small-holder	Total
Labour Contractor	93	3	15	25	136
Personal Recruit.	69	2	8	16	95
People Asking	4	-	-	4	8
Not ascertained	14	3	2	1	20
Column total	180	8	25	46	259

the actual wage rate is of no direct concern to the farmer on whose land they work. This also points to the undevelopment of proletarianisation, since there is no direct cash nexus between the farmer and the day labourer. The cash nexus is mediated by a third party, the contractor, who is the formal

exploiter of the day labourers. The labour of women workers in particular is exceptionally exploitative. Subcontractors normally receive 3 Jordanian dinars (approximately US\$10) per day per worker. They will then deduct the costs of transportation, which is normally a truck or Volkswagon owned by the subcontractor, and pay each women around 150 old Israeli shekels per day (approximately US\$3-4). While this subcontracting can represent a lucrative business venture for the contractor over a short-term period, it hardly constitutes a stable source of livelihood for her/him, since the season only lasts for two or three months at most even if s/he is mobile between different regions where the agricultural season comes at different phases.

SUMMARY

In this chapter I have attempted to focus on the importance of household subsistence production and the manner in which it is articulated to the commodity production sector in such a way that it can operate as a hidden income equivalent which can serve to intensify the exploitation of families in the commodity production sector by external economic and commercial forces; in realist terms this showed that the subsistence sector can act as a mechanism through which merchant capital can increase its rate of exploitation of the commodity production sector. I also attempted to bring out the importance of women's role in the subsistence sector. In Section II, I attempted to bring out some of the implications for undertaking development intervention in the subsistence sector in terms of dependency, class and gender. In sections

III and IV I considered the impact of the "Green Revolution" on the social and sexual division of labour in the household and, finally, I presented a brief statistical description of the main elements in the labour supply of the farm labour force.

While the later sections of this chapter are largely descriptive, the first sections have applied the realist methodology in an attempt to theoretically describe the subsistence sector and the commodity production sector and then to consider the countervailing effects of the articulation of these two structures upon each other.

In the following chapter I will look at the pattern of crop production in order to show that the region's agrarian economy has become extremely dependent upon vegetable crop specialisation. This chapter also highlights the fact that vegetable crop specialisation has connected the regional economy to the export market.

NOTES AND REFERENCES

1. For a general discussion of feminist-materialist analysis, see, inter alia, Mary Mackintosh, "Gender and Economics: the Sexual Division of Labour", in Kate Young, Carol Wolkowitz and Roslyn McCullagh, Eds., Of Marriage and Market (London, 1981), pp.3-16, D. M. L. Barker and S. Allen, Eds., Dependency and Exploitation in Work and Marriage (London, 1976), D. M. L. Barker and S. Allen, Eds., Sexual Divisions in Society (London, 1976), Michele Barrett, Woman's Oppression Today (London, 1980), pp. 8-43.

2. This largely corresponds to the traditional male-centric view of the household held by most international agencies who underplay the role and importance of the subsistence sector. On this question, see, Barbara Rodgers, The Domestication of Women, (London, 1980), pp.62-71.

3. Veronika Bennholdt-Thomsen, "Subsistence Production and Extended Reproduction", in Kate Young et al. op cit. p.41.

4. Ibid. p.42.

5. For further details of the domestic labour debates, see, inter alia, Michele Barrett, op cit. pp. 172-186, J. Gardiner, S. Himmelweit and M. Mackintosh, "Women's Domestic Labour", in Bulletin of the Conference of Socialist Economists, Vol 4, No 2, 1975, S. Himmelweit and S. Mohun, "Domestic Labour and Capital", in Cambridge Journal of Economics, Vol 1, 1977, Mary Mackintosh, "Domestic Labour and the Household", in J. Burnam, Ed., Fit Work For Women, (London, 1979), Maxime Molyneux, "Beyond the Domestic Labour Debate", in New Left Review, No 116, 1979, A Whitehead, "Some Preliminary Notes on the Subordination of Women", in IDS

Bulletin Vol 10, No 3, Jean Gardiner, "Women's Domestic Labour", in New Left Review, No 89, 1975, Margaret Coulson, Branka Magas and Hilary Wainwright, "'Women's Domestic Labour Under Capitalism' - A Critique", in New Left Review, No 89, 1975.

6. Carmen Diana Deere, "Rural Women's Subsistence Production in the Capitalist Periphery", in Robin Cohen, Peter C. W. Gutkind and Phyllis Brazier, Eds., Peasants and Proletarians, (London, 1979), pp. 133-34.

7. See, *ibid.* p.134.

8. See, Alison Powell, Food Resources and Food Systems in Two West Bank Villages. A report to the Arab Thought Forum, Jerusalem, (1986).

9. See, *ibid.* Table 5.3 p.39.

10. *Ibid.* Table 6.6 p.56.

11. See, Marie-Angelique Savane, "Migration", in ILO, Rural Development and Women in Africa, (Geneva, 1984), pp.29-33.

12. See, Deere, *op cit.* p.135.

13. See, Salim Tamari and Rita Giacaman, Zbeidat: The Social Impact of Drip-Irrigation on a Palestinian Peasant Community in the Jordan Valley, (Birzeit, 1980), p.25.

14. For further details, see, Alex Pollock, "Society and Change in the Northern Jordan Valley", in George Abed, Ed., Development Under Prolonged Occupation, (Geneva, Forthcoming).

15. This information comes from discussions with agricultural engineers working in the region.

16. These issues were first discussed at the "Workshop on Rural Development Strategies" held at Birzeit University

during 16-18 August 1985. They were further discussed at the "Panel on Funding Sources in the Occupied Territories" hosted by the Arab Thought Forum, Jerusalem on 12 September 1986. The Issue was substantially discussed in the paper presented to the panel by Muharram Barghouthi, "Development From a Different Perspective" (Tanmiyeh Bimafhum Mukhtalef) (Arabic), in Abdul Sattar Qassem, Ed., Funding Sources For Development in the Occupied Territories (Masader Tamweel Ittanmiyeh Fi Al Aradey Al Muhtileh) (in Arabic), (Jerusalem, 1986), pp.39-48.

17. Barbar Rodgers, op cit. pp.155-56

18. Compare, Liza Fruzzetti, op cit. p.38.

19. Rodgers, op cit. pp.81-106.

20. Uma Lele, The Design of Rural Development, (Baltimore, 1975), p.77.

21. For a brief discussion of the Surif Women's Cooperative, see, Tanmiya, Volume 1, Issue 2, March 1986, pp.2-3.

22. For a brief outline of the project, see, Tanmiya, Vol 1, Issue 5, October 1986, p.6.

23. For a discussion of income-generation for women, see, inter alia Marilee Karl, "Income Generation For Women", in ISIS, Women in Development: A Resorce Guide For Education and Action, (Geneva, 1983), pp. 95-104. Also, Marilyn Carr, Blacksmiths, Baker, Roofing Sheet Maker..., (London, 1984).

24. See, Marilyn Carr, ibid. pp.2-3.

25. For an initial Appraisal of the original project, see, Peter Oakley, "The Jordan Valley: Drip-Irrigation for Small Farmers", in Reading Rural Development Communication Bulletin, No 5, November 1978.

26. For a critical assessment of the diffusionist model,

see, Alain de Janvry, The Agrarian Question and Reformism in Latin America, (Baltimore, 1981).

27. For a concise description of the bio-chemical basis of the "Green Revolution" technology, presented in a way which is accessible to the non-scientist, see, Terry Byres and Ben Crow, The Green Revolution in India, (Milton Keynes, 1983), pp. 9-16.

28. See, Salim Tamari, op cit. pp.35-40.

29. See, Robert E. Evenson, "Obstacles and Benefits in Developing Appropriate Agricultural Technology", in Carl E. Eicher and John M. Staatz, eds., Agricultural Development in the Third World, (Baltimore, 1984), pp. 354-55.

**PAGE
NUMBERING
AS
ORIGINAL**

the extent of fruit production since the census was administered to resident producers only. The larger citrus fruit plantations in the region were generally owned by absentee land owners. Thus, an important source of citrus fruit production in Jiftlik and Frush Bet Dajan remained unrecorded in our figures. The reason why this lacuna is important in only Jiftlik and Frush Bet Dajan is due to the fact that there is a general lack of access to water of sufficient quality and quantity to grow citrus fruit in the other villages in the region. Furthermore, the fact that the Israeli authorities have imposed restrictions on the production of a number of alternative fruits in this region, e.g. vines, dates and plum trees, has caused a general lack of other alternative types of fruit production.

Table 54: Total Regional Dunumage of Types of Crop by Agrarian Class

Crop	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
Vegetables	10,478	333.5	1,327	2,035	291	14,464.5
Fruit*	46.5	26.5	24.5	332	149.5	579
Field crops	2,896.5	257.5	165.5	1,087.5	169.5	4,576.5
Col. total	13,421	617.5	1,517	3,454.5	610	19,620

* These figures do not include the land held in fruit plantations by absentee landlords.

If we consider the agrarian class aspects of agricultural crop production the data show that sharecropping households produced 72% of the total regional area of vegetable crops and vegetable crop production accounted for 78% of the total agricultural land area utilised by sharecroppers. Cash tenant

households are even more dependent upon vegetable crop production as 88% of their total land area is farmed with vegetable crops, although this accounts for only 9% of the regional total vegetable crop area. While both farming-shepherd and smallholding households have the majority of their aggregate agricultural land under vegetable crop production this was not such a significant share of their total landholding as it was for sharecropping and cash tenant households, since they farmed 54% and 59% of their total landholding with vegetable crop production, respectively. Vegetable crop production was least important in the case of farming-landlords where it constituted only 48% of their agricultural land use. However, even in this case it was the relatively, if not the absolutely, most important form of land use. Thus, vegetable crop production was both the relatively and absolutely most important form of production and land use for all modes of production and classes, with the single exception of farming-landlords for whom it was only the relatively most important type of agricultural production.

If we consider field crop production we find that of the 4576.5 dunums of field crops produced, 63% of this area was farmed by sharecropping households and this accounted for only 22% of the total area farmed by sharecroppers. Although sharecropping households farmed more field crops than any other agrarian class it is of less overall significance to their land use pattern than any other agrarian class except cash tenants, who had only 11% of their total dunumage under

field crop production. Field crop production was a more important source of agricultural production for farming-landlords, smallholders and farming-shepherds for whom it constituted between a quarter to two-fifths of their aggregate farm area. Field crop production was a relatively more important source of farming activity for farming-shepherds than any other agrarian class since it constituted 42% of their farmed land area. This is almost certainly a reflection of the need for shepherds to produce fodder crops for their animals rather than a preference on the part of shepherds for field crop based commercial agriculture, although this certainly does not rule out their entering into commercial intercourse.

Finally, if we consider fruit production, the data show that smallholding households were the most significant fruit producers as they farmed 57% of the 579 dunums of fruit produced in the region. However, this only accounts for 10% of their total farm area. Farming-landlords farmed 26% of the total area of fruit production and this, quite significantly, accounted for 25% of their farm area. The other agrarian classes produced insignificant quantities of fruit and only a very small portion of the total arable land of these groups was designated for fruit production.

Thus, the general picture which emerges from the aggregate figures is that sharecropping and cash tenant households are the predominant producers of vegetable crops. Smallholders and farming-shepherds, while mainly producing vegetable

crops, also produce significant quantities of field crops. Only farming-landlords have a more diversified and less specialised production pattern and they produce significant quantities of vegetables, field crops and fruit, although even they produce more vegetables than anything else. The main feature which stands out in the aggregate figures is the absolute importance of vegetable production in terms of the pattern of agricultural land use in the region.

II. AGGREGATE AREA OF VEGETABLE CROP PRODUCTION

In this section I will describe the regional aggregate area of vegetable crop production. The data show that the region produced 14,464.5 dunums of 14 named vegetable crops (see Table 55). Tomatoes were the single most important crop and they accounted for 39% of the total area of vegetable crop production, followed by eggplants which accounted for 16% of the total area. These two crops accounted for more than half (55%) of the total land area utilised for vegetable production. Moreover, four vegetables - tomatoes, eggplants, courgettes and cucumbers - accounted for three-quarters of the total land area used in vegetable crop production. All of these crops were largely produced using drip irrigation equipment for specialised commodity production. Vegetable staples, which might have been used for the internal consumption of the peasant household, accounted for only 0.3% of the land used; although crops produced for the vegetable commodity market would of course also be used for household subsistence consumption. Thus, the data bring out very

Table 5: Dumpage of different Vegetable Crops by Agrarian Class

Vegetable	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlords	Total
Tomato	4,018.5	200.5	531	781	106	5,637
Eggplant	1,801.5	40.5	164.5	251.5	31	2,289
Courgette	1,385.5	19.5	174.5	260.5	38.5	1,778.5
Cucumber	299.5	2.5	94	201	38	1,235
Broad beans	383	12	71.5	180.5	22	1,169
Sweet corn	383	21.5	121	63.5	9.5	598.5
Hot pepper	377	12.5	65	85	12	551.5
Beans	387.5	7.5	17	78	-	490
Melon	295.5	7	43	45.5	10	401
Jews mallow	45	5	19	30	-	99
Sweet potato	34.5	2.5	7	75	24	75.5
Onion	12	-	5	9.5	-	26.5
Potato	12	-	-	-	-	12
Garlic	7	-	-	-	-	7
Other veg.	36.5	2.5	14.5	41.5	-	95
Col. total	10,478	333.5	1,327	2,035	291	14,464.5

clearly that the phenomenon of regional specialisation in the production of tomatoes and eggplants was extremely pronounced and, further show, that regional economic activity was substantially dominated by the production of these two crops.

If we consider vegetable crop production in terms of associated agrarian class characteristics of production we find the production pattern of the different social groupings was generally similar, with farming-landlords, smallholders, sharecroppers and cash tenants farming between 36-40% of their respective aggregate vegetable crop land areas with tomatoes. The one exception was farming-shepherds who farmed 60% of their total vegetable crop landholding with tomatoes. Sharecroppers produced relatively more eggplants than any

other agrarian group, farming 17% of their total vegetable crop land area with eggplants, while the other agrarian classes farmed between 11-12% of their total vegetable crop area with eggplants. All agrarian classes, with the exception of farming-shepherds (6% of their total holding), farmed 12-13% of their total aggregate vegetable land area with courgettes. Thus, in aggregate terms, there was very little difference between the different agrarian social classes in terms of the relative distribution of the aggregate land area they use for cropping their most important vegetable crops. There was much more diversity between the agrarian classes in terms of their production of other vegetable crops which were not so clearly directed to market specialisation and for which there were no clear direct economic growth benefits based on HYV's.

III. AGGREGATE AREA OF FRUIT PRODUCTION

The data show that of the 579 dunums of land under fruit production almost the whole of this (99%) was given over to the production of citrus fruit and 1% to the production of bananas (see Table 56). One very clear reason for specialisation in citrus fruit production is the fact that the planting of vines and plum trees is prohibited by Israeli military orders. Apart from this, the area is not particularly suitable for other types of fruit. The climatic conditions are ideal for semi-tropical and even tropical fruit, although water restrictions and soil conditions mitigate against the production of more exotic fruits. Even

so, fruit production is largely limited to the villages along Wadi Fara'a (i.e. Jiftlik and Frush Bet Dajan) since these are the only villages in the region which have access to a sufficient quantity and good quality water for the purpose of citrus fruit and banana production. The water supply in the other villages in the region comes mainly from ground-water sources which are variably contaminated with salinity. This saline water is unsuitable for the production of citrus and banana plantations. Fruit production accounted for only 3% of the agricultural land used and was thus not very important in

Table 56: Distribution of Fruit by Agrarian Class

Fruit	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
Lemon	7.5	2.5	5	99	45.5	159.5
Orange	19	9.5	9.5	146.5	70	254.5
Mandarin	10	9.5	5	39.5	2.5	66.5
Clementine	10	5	5	44.5	19.5	84
Grapefruit	-	-	-	2.5	5	7.5
Banana	-	-	-	-	7	7
Col. total	46.5	26.5	24.5	332	149.5	579

the regional economy taken as a whole. In terms of the fruit economy itself, oranges were the most important single fruit produced and accounted for 44% of the total land area under fruit production. Lemons were next in importance accounting for a further 28% of the total land used for fruit production.

The agrarian class characteristics of fruit production were

very different from those found in vegetable crop production. Smallholders were the major producers, farming 57% of the land area given over to fruit production. They were followed by farming-landlords who farmed 26% of the land given over to fruit production. The other three agrarian class groupings produced a very limited amount of fruit. Moreover, the relative absence of sharecropping households from fruit production was extremely marked with less than 1% of their total dunumage given over to fruit production. Although smallholding households were the major producers of fruit, the land area given over to fruit production constituted only 10% of their aggregate landholding. Thus, it was not the most important type of productive activity smallholders were engaged in. For farming-landlords on the other hand, fruit production was relatively more important in their agrarian economy since the area given over to fruit production constituted 25% of their aggregate landholding.

IV. THE AGGREGATE AREA OF FIELD CROP PRODUCTION

The data on this section show that of the 4567.5 dunums of field crops produced 78% of the land area was given over to wheat production, 17% to barley, 4% to other field crops and 1% to corn (see Table 57). Sharecropping households were the biggest producers of field crops and they farmed 63% of the total area given over to field crop production, yet the total area which they farmed with field crops constituted only 22% of their aggregate farm area. Smallholding households worked 24% of the land given over to field crop production which

constituted 32% of their aggregate farm area. Farming-shepherd households worked 6% of the field crop area which constituted 28% of their aggregate farm area, farming-landlord households worked 4% of the total field crop area which constituted 28% of their aggregate farm area and cash tenants farmed 4% of the total field crop area which constituted 11% of their aggregate farm area. These figures show that field crop production was relatively most important in the agrarian economy of smallholders, farming-landlords and farming-shepherds and less important, but still relatively significant, in the agrarian economy of

Table 57: Distribution of field Crop Production by Agrarian Class

Field Crop	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
Corn	29	9.5	-	9.5	-	48
wheat	2,102.5	179	144	991	153	3,569.5
Barley	635.5	52	21.5	51	9.5	769.5
Other	129.5	17	-	36	7	189.5
Col. total	2,896.5	257.5	165.5	1,087.5	169.5	4,576.5

sharecroppers. Field crop production was relatively least significant in the agrarian economy of cash tenants who generally rent small plots of land which do not lend themselves to the type of extended farm units which are necessary to carry out field crop production in a commercial manner.

V. THE EXTENT OF DOUBLE CROPPING OF LAND

Since the introduction of chemical fertilizers it is now, by and large, no longer necessary to let fields lie fallow and to rotate crop production in order to naturally replenish the nutrient stock in the soil. Modern chemical fertilizers allow farmers to continuously farm the same piece of land and often to plant this land with more than one crop per year as the nutrient content can be fed into the soil artificially. The data from the study show that double cropping in the region was becoming a fairly common, although not a completely widespread, feature of farm activity in the Jordan Valley as 8% of the total arable land area was being harvested more than once in the agricultural season (see Table 58). Interestingly, sharecroppers and cash tenants were marginally more likely than the other agrarian classes to double crop a

Table 58: Dunumage Double Cropped by Agrarian Class

	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
Total No. Dunums	13,421	617.5	1,517	3,454.5	610	19,620
Dunums dbl cropped	1,357.5	33.5	154	203	48.5	1,796.5
Col. total	14,778.5	651	1,671	3,657.5	658.5	21,416.5

section of their farmland, since both double cropped 9% of their land while the other agrarian classes double cropped between 5-7% of their landholding. Further, in absolute terms

sharecroppers farmed 76% of all the land which was double cropped.

The data further show that almost half (47%) of all farmers double cropped at least some portion of their land (see, Table 59). Those who did so most commonly double cropped between 1-4 dunums, while the average area double cropped was 7.2 dunums. This aggregate statistical pattern remained fairly constant throughout the different agrarian classes as the majority double cropped an area of between 7.1 - 8.4 dunums of land on average. The only exception to this pattern was farming-shepherds who double cropped significantly less than the other agrarian classes on average.

Table 59: Number of Farmers Double Cropping (Mode and Average) by

Agrarian Class

	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
No. Farmers						
Dbl Cropping	226	7	20	37	6	296
Mode	1-4dnm	1-4dnm	1-9dnm	1-4dnm	1-4dnm	1-4dnm
Average	7.10	5.3d	8.4d	7.4d	7.8d	7.2d

There were quite important differences between the agrarian classes in terms of the incidence of double cropping. The majority of sharecroppers (56%) double cropped some portion of their land, while 45% of cash tenants and 36% of smallholders double cropped some section of their land. Only a very small section of farming-shepherds and farming-landlords, 12% and 7% respectively, double cropped a section

of their land. It appears from these figures that the most consistently exploited agrarian class groups were more involved in intensive farming techniques than any other class. This would seem to further support the thesis that sharecropping compacts are a very rational mechanism of exploitation and means of extracting surplus product from peasant households.

VI. INDIVIDUAL CROPPING PATTERNS OF VEGETABLE CROPS

In this section I will attempt to describe statistically the area of vegetable crop under production according to the crop area and the distribution of land given over to the crop in question by individual peasant households.

The data on tomato production show that 84% of all peasant farmers produced tomatoes and moreover, more peasant farmers produced tomatoes than any other crop (see Table 60). The area of tomatoes produced by the peasantry ranged in size from 1-94 dunums per farm unit. The most common area of production was 5-9 dunums while the average area of production was 10.8 dunums. Thus, tomato production was generally skewed toward the lower end of the range.

If we look at the agrarian class dimension of the cropping pattern of tomatoes, the data show that 96% of all sharecropping households, 89% of cash tenant households, 72% of smallholding households, 57% of farming-landlord households and 19% of farming-shepherd households produced

tomatoes. This brings out quite clearly the regional specialisation in tomato production among sharecroppers, cash tenants and smallholders, but particularly among sharecropping households.

Table 60: Number of Dunums of Tomatoes by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash tenant	Small-holder	Farming-Landlord	Total
1 - 4	55	1	6	16	-	78
5 - 9	150	3	9	26	3	191
10 - 14	127	3	15	17	2	164
15 - 19	29	-	2	5	2	38
20 - 24	13	1	3	4	-	21
25 - 29	6	1	1	4	1	13
30 - 34	4	-	-	1	-	5
40 - 44	2	-	2	1	-	5
60 - 64	1	-	1	-	-	2
90 - 94	1	1	-	-	-	2
Not ascert.	2	1	-	-	-	3
Col. total	390	11	39	74	8	522

The statistical range of the area of tomatoes produced varied across agrarian class lines with sharecroppers and farming-shepherds producing between 1-94 dunums, cash tenants 1-64 dunums, smallholders 1-44 dunums and farming-landlords 5-29 dunums. Thus, as well as being both relatively and absolutely the most important producers of tomatoes, sharecroppers had some of the largest areas of tomato production under their control, although there were very few households producing tomatoes over extensive land areas and tomato cropping on areas over 25 dunums were very uncommon. Farming-shepherds presented a lacuna in this respect since one farmer in the

schedule expands the statistical range in an unbalanced manner. Sharecroppers, in common with smallholders and farming-landlords, most commonly produced 5-9 dunums of tomatoes, while farming shepherds most commonly produced 5-14 dunums and cash tenants 10-14 dunums.

Cash tenants generally had relatively more of their land under tomato production than sharecroppers. Moreover, although sharecroppers produced proportionately more tomatoes than any other agrarian class, they generally had the smallest plots of tomatoes which were 10.3 dunums on average. The average size of plots for the other agrarian classes were as follows: farming-shepherds 20 dunums, cash tenants 13.5 dunums, smallholders 10.4 dunums and farming-landlords 13.3 dunums. Thus, while more sharecroppers produced tomatoes than any other class, they generally produced a smaller area of tomatoes on average than the members of the other agrarian classes who produced tomatoes. In spite of this sharecroppers produced the largest aggregate volume of tomatoes.

The data on the production of eggplants show that 67% of all farmers produced eggplants (see Table 61). Eggplants constituted the second largest area of vegetable production. The area of eggplants produced per farm ranged from 1-34 dunums with most farms producing 1-4 dunums and the average farm producing 5.1 dunums. This was less than half the average area of tomato production. As with tomato production the individual areas under production were skewed toward the bottom end of the range but with an even greater density at

the lower end of the range than with tomatoes.

Table 51: Number of Dunums of Eggplant by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	163	3	21	35	4	226
5 - 9	132	3	7	11	3	156
10 - 14	29	1	2	4	-	36
15 - 19	4	-	1	1	-	6
20 - 24	1	-	1	1	-	3
30 - 34	1	-	-	-	-	1
Not ascert.	1	1	-	-	-	2
Col. total	331	8	32	52	7	430

If we consider the class specific cropping pattern for eggplants we find that 82% of all sharecroppers produced eggplants, 14% of farming-shepherds, 73% of cash tenants and 50% of both smallholders and farming-landlords. Thus, we find that eggplant production, like tomato production, was generally more important in the farm economy of sharecroppers and cash tenants than the other agrarian classes. Moreover, eggplant production was even less important in the farm economy of smallholders and farming-landlords than tomato production, although its importance was not negligible. Eggplant production played only a marginal role in the farm economy of farming-shepherds.

The statistical range of areas varied between the agrarian class categories with sharecroppers producing 1-34 dunums, farming-shepherds 1-14 dunums, farming-landlords 1-9 dunums

and cash tenants and smallholders 1-24 dunums. However, all social classes had the same statistical mode of 1-4 dunums and the average production varied from 4.1 - 5.6 dunums.

Table 62: Number of Dunums of Courgettes by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	254	5	21	35	5	311
5 - 9	59	1	7	14	2	83
15 - 19	11	-	2	3	1	17
20 - 24	1	-	-	1	-	2
25 - 29	1	-	1	1	-	3
40 - 44	-	-	1	-	-	1
45 - 49	1	-	-	-	-	1
Not ascert.	1	1	-	-	-	2
Col. total	320	7	32	54	8	421

Courgettes were the third most extensively produced crop in the region and the data show that 67% of all farmers produced courgettes. The area of crop production ranged from 1-49 dunums per farm but with farms most commonly producing 1-4 dunums and the average farm producing was 3.9 dunums (see Table 62). Thus, an equal number of peasant households produced eggplants and courgettes.

If we look at the class specific pattern of production we find that 79% of sharecroppers produced courgettes, 73% of cash tenants, 52% of smallholders, 57% of farming-landlords and 12% of farming-shepherds produced courgettes. Once more we find that sharecroppers and cash tenants were more specialised in this crop than any other agrarian class

grouping, although the majority of the other agrarian classes, except farming-shepherds, also produced courgettes. The statistical mode across the different agrarian classes remains constant at 1-4 dunums, although cash tenants produced a larger average area of courgettes than the other social classes, producing 5.1 dunums on average. Both smallholders and farming-landlords produced 4.5 dunums on average, sharecroppers 3.6 dunums and farming-shepherds 2.8 dunums.

Table 63: Number of Dunums of Cucumbers by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	71	1	2	6	-	80
5 - 9	67	-	2	10	3	82
10 - 14	16	-	3	5	-	24
15 - 19	1	-	1	2	1	5
20 - 24	2	-	1	1	-	4
Not ascert.	3	2	-	-	-	5
Col. total	160	3	9	24	4	200

The data on cucumber production show that only 32% of the total farm population produced cucumbers. This was the fourth most extensively produced crop in the region (see Table 63). The crop area ranged from 1-24 dunums per farm. The most common area of production was 5-9 dunums and the average farm produced 6.1 dunums.

Looking at the class specific pattern of production we find

that 40% of sharecroppers, 5% of farming-shepherds, 20% of cash tenants, 23% of smallholders and 29% of farming-landlords produced cucumbers. Thus, the fourth largest area of crop production was farmed by a minority of farmers from all classes. The statistical mode between the agrarian classes was variable with sharecroppers and farming-shepherds most commonly producing 1-4 dunums, smallholders and farming-landlords most commonly producing 5-9 dunums and cash tenants most commonly producing 10-14 dunums. This variation was also reflected in average production levels between the agrarian classes with farming-shepherds producing 2 dunums on average, sharecroppers 5.5 dunums, smallholders 8.3 dunums, farming-landlords 9.5 dunums and cash tenants 10.3 dunums. However, we should be aware that the numbers of shepherds, cash tenants and farming-landlords are getting extremely small and so these figures cannot be taken to reflect general tendencies.

The data on broad bean production show that just slightly more than a third of farmers produced broad beans. The statistical range of production varied between 1-34 dunums per producer although only one farmer in each cell produced between 15-19 and 30-34 dunums (see Table 64). The most common holding was 1-4 dunums and the average area of production was 5.3 dunums.

Looking at the class specific pattern of production we find that 42% of sharecroppers, 5% of farming-shepherds, 23% of cash tenants, 33% of smallholders and 36% of farming-

landlords produced broad beans. Sharecroppers, farming-shepherds and farming-landlords most commonly produced 1-4 dunums while cash tenants and smallholders most commonly produced 5-9 dunums. There was some variation in the average size of holding among the agrarian classes, sharecroppers produced 5.9 dunums on average, shepherds 3.7 dunums, cash tenants 7 dunums, smallholders 5.1 dunums and farming-landlords 4 dunums.

Table 64: Number of Dunums of Broad Beans by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	84	2	3	15	4	108
5 - 9	71	1	5	17	-	94
10 - 14	12	-	1	2	1	16
15 - 19	-	-	1	-	-	1
30 - 34	1	-	-	-	-	1
Not ascert.	1	-	-	-	-	1
Col. total	169	3	10	34	5	221

Table 65: Number of Dunums of Sweet Corn by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	72	3	6	9	1	91
5 - 9	10	2	3	1	1	17
10 - 14	5	-	3	1	-	9
15 - 19	3	-	-	-	-	3
20 - 24	1	-	1	1	-	3
25 - 29	-	-	1	-	-	1
Not ascert.	1	-	1	1	1	4
Col. total	92	5	15	13	3	128

The data on the production of sweet corn (maize) show that only a fifth of farmers produced sweet corn and those who did most commonly produced 1-4 dunums, while the average production was 4.5 dunums (see Table 65). Only 23% of sharecroppers, 8% of farming-shepherds, 34% of cash tenants, 13% of smallholders and 21% of farming-landlords produced sweet corn. All producers from the different agrarian classes most commonly produced 1-4 dunums. There was very little difference in average production between classes except in the case of cash tenants who produced on average 7.4 dunums. All other classes produced between 3.9 - 4.9 dunums on average.

Table 66: Number of Dunums of Hot Peppers by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	132	5	10	18	2	167
5 - 9	5	-	4	4	1	14
10 - 14	1	-	1	1	-	3
Col. total	138	5	15	23	3	184

The data on the production of hot peppers show that only 29% of farmers produced hot peppers (see Table 66). The most common area of production was 1-4 dunums and the average area was 3.3 dunums. Only 34% of both sharecroppers and cash tenants, 8% of farming-shepherds, 22% of smallholders and 21% of farming-landlords produced hot peppers. All social classes most commonly produced 1-4 dunums and the average area of

production among the different agrarian classes was between 2-4 dunums.

The data on the production of beans show that 23% of farmers produced beans and that they most commonly produced 1-4 dunums and 3 dunums on average (see Table 67). Only 29% of sharecroppers, 5% of farming-landlords, 11% of cash tenants, 15% of smallholders produced beans. No farming-landlords

Table 67: Number of Dunums of Beans by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	101	3	4	16	-	124
5 - 9	13	-	1	3	-	17
10 - 14	1	-	-	-	-	1
15 - 19	-	-	-	1	-	1
30 - 34	1	-	-	-	-	1
Col. total	116	3	5	20	-	144

Table 68: Number of Dunums of Melons by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	7	-	2	3	4	16
5 - 9	20	1	3	3	-	27
10 - 14	6	-	-	-	-	6
15 - 19	1	-	1	1	-	3
20 - 24	1	-	-	-	-	1
25 - 29	1	-	-	-	-	1
Col. total	36	1	6	7	4	54

produced any beans. All those agrarian classes who produced beans most commonly produced 1-4 dunums and they produced on average between 2 - 3.5 dunums.

The data on the production of melons show that in 1983 only 9% of farmers produced melons (see Table 68). The most common area of production was 5-9 dunums and the average production was 7.3 dunums.

Only 9% of sharecroppers, 2% of farming-shepherds, 14% of cash tenants, 7% of smallholders and 29% of farming-landlords produced melons. Sharecroppers, farming-shepherds and cash tenants most commonly produced 5-9 dunums, smallholders 1-9 dunums and farming-landlords 1-4 dunums. The average production among the classes ranged between 2-8.1 dunums. Since the time the census was conducted, melon production has increased substantially, particularly for the export market.

The data on the production of Jew's mallow show that only a small portion of farmers (6%) grew Jew's mallow in commercial quantities (see Table 69). This is hardly surprising as it is a wild plant which grows quite naturally as a weed among other vegetable crops and most households gather it to supplement their household diet. Those who did grow it commercially most commonly produced 1-4 dunums and 2.3 dunums were produced on average.

Table 69: Number of Dunums of Jew's Mallow by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	18	2	2	12	-	34
5 - 9	-	-	2	-	-	2
Col. total	18	2	4	12	-	36

Only 4% of sharecroppers, 3% of farming-shepherds, 9% of cash tenants and 12% of smallholders produced Jew's mallow and no farming-landlords produced it commercially. The most common area produced was 1-4 dunums. Sharecroppers, farming-shepherds and smallholders produced an average of 2 dunums and cash tenants, average area of production was 4.5 dunums. However, the actual numbers engaged in production are too small for these figures to highlight any particular class tendencies of production, in fact if there is a general tendency it is not to produce.

Table 70: Number of Dunums of Sweet Peppers by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	11	1	-	3	4	19
5 - 9	1	-	1	-	2	4
Col. total	12	1	1	3	6	23

The data on the production of sweet peppers show that only a tiny portion of farmers (4%) produced sweet peppers, which in

any case is not part of the traditional Palestinian diet (see Table 70). Those who produced sweet peppers most commonly produced 1-4 dunums and average production was 3.3 dunums. There was no large scale farming of this crop.

Only 3% of sharecroppers, 2% of farming-shepherds and cash tenants, 3% of smallholders and surprisingly 43% of farming-landlords produced sweet peppers. Quite clearly it is not an important regional crop although it does appear for some unexplained reason to be an important item of production in the agrarian economy of farming-landlords.

The remaining vegetable crops are produced by an insignificant number of farmers. Tables 71, 72 and 73 show that the production of staples like potatoes, onions and garlic are completely marginal to the regional economy, since less than 1% of the farm population produce potatoes or garlic and only 1% produce onions. Thus, the production of these staples are not items of production in the schedules of 99% of farms in the region. Table 74 shows that only 4% of peasant households produced some other vegetable crop.

Table 71: Number of Dunums of Potatoes by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	2	-	-	-	-	2
5 - 9	1	-	-	-	-	1
Col. total	3	-	-	-	-	3

Table 72: Number of Dunums of Onions by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	2	-	2	1	-	5
5 - 9	1	-	-	1	-	2
Col. total	3	-	2	2	-	7

Table 73: Number of Dunums of Garlic by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
5 - 9	1	-	-	-	-	1
Col. total	1	-	-	-	-	1

Table 74: Number of Dunums of Other Vegetable Crops by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	9	1	3	7	-	20
5 - 9	2	-	1	1	-	4
15 - 19	-	-	-	1	-	1
Col. total	11	1	4	9	-	25

To summarize the information on vegetable crop production, the data show that specialisation has occurred in tomato and eggplant production. Sharecropping households are most highly

integrated into this pattern, with 96% of sharecroppers producing tomatoes and 82% producing eggplants, compared to 89% and 73% of cash tenant households producing tomatoes and eggplants respectively. Smallholders are also quite heavily involved in this type of specialisation with 72% and 50% of all smallholding households producing tomatoes and eggplants respectively. Farming-landlords and farming-shepherds are least linked to tomato and eggplant specialisation as only 57% and 50% of farming-landlords and 19% and 14% of farming-shepherds producing tomatoes and eggplants respectively. Courgette is also a relatively important crop and the majority of peasants from the different agrarian groups, except farming-shepherds, produced this crop. The other crops tend to be of less importance and differentially distributed among the agrarian classes although farming-landlords generally follow a more diversified cropping pattern. Thus, the data largely support the hypothesis that the introduction of the "Green Revolution" technology and HYV's of seeds and seedlings has created a general tendency toward vegetable crop specialisation in a few crops and a lack of diversity in crop production patterns.

VII. INDIVIDUAL CROPPING PATTERN OF FRUIT PRODUCTION

In this section I will describe statistically the area of fruit trees under production according to the fruit produced and the area of land used in production. The data on fruit production highlight just how marginal fruit production was to the regional economy. (See Tables 1-6 in the Appendix 3)

Only 4% of farmers produced citrus fruits (i.e. lemons, oranges, mandarins, grapefruits and clementines) and only one farmer in the whole of the region produced bananas. The data also shows the almost total absence of resident farmers engaged in large scale fruit plantations as the average area of production was 5.8 dunums of lemons, 9.2 dunums of oranges, 2.4 dunums of mandarins, 2.8 dunums of clementines and 2 dunums of grapefruits. These are not very extensive areas of production.

Although economically relatively unimportant, there were quite clear class differences in the production of fruit. Contrary to their general regional predominance, sharecroppers were not the major producers of fruit. There was almost a total absence of sharecroppers, cash tenants and farming-shepherds from fruit production. Smallholders, who account for only 17% of all peasant households, were the largest fruit producers. They produced 58% of the total area of citrus fruit. However, only 15% of smallholders were engaged in fruit production so it is still a small component of the agrarian economy of smallholding in the region. While the Jordan Valley is normally seen as a major producer of citrus fruits and bananas this role is centred in the southern region of the Valley around Jericho itself and in the middle Valley sector around al 'Oja. The northern sector remains a marginal fruit producer.

VIII. INDIVIDUAL CROPPING PATTERN OF FIELD CROPS

In this section I will briefly describe statistically the area of field crops under production according to the crop and the size of area farmed by individual peasant households. After vegetable production, the production of field crops was the second most important source of agricultural land use in the region. Field crop production accounted for almost a quarter of arable land used in the region and the area under field crop production was 4576.5 dunums in 1983.

The data on the production of corn show that corn production had the least number of producers among field crops and only 1% of peasant farmers produced corn. The actual area of corn production ranged from 1-19 dunums per farm and there was no large-scale extensive units of land under corn production. The most common area produced was 1-4 dunums (see Table 75). The majority of producers (56%) were sharecroppers although this group accounted for only 1% of the sharecropping population. There were no cash tenants or farming-landlords engaged in corn production.

Wheat farming was the single most important type of field crop production with 28% of the region's farmers producing wheat (see Table 76). The actual area of wheat production per farm ranged from 1-100 dunums with average production being 20 dunums and the most common area farmed was 5-9 dunums. Thus, wheat farming was often carried out in quite an extensive manner with the area of wheat covering relatively

large areas in terms of the average farm size in the region. Wheat production certainly covers larger areas than vegetable crops. This means that the harvesting of these more extensive

Table 75: Number of Dunums of Corn by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	2	1	-	1	-	4
5 - 9	1	1	-	1	-	3
15 - 19	1	-	-	-	-	1
Not ascert.	1	-	-	-	-	1
Col. total	5	2	-	2	-	9

areas would generally be mechanised to some degree. However, the area of wheat farming was generally small rather than large scale. Wheat farming does not incur the costs of irrigation and is very suitable for farming lands which do not have access to, or have limited supplies of, water for irrigation purposes (this also applies equally to all other field crops). Wheat is irrigated naturally by rainfall and the germination and harvest of wheat is largely dependent on natural processes and not subject to scientific management techniques in the same way that vegetable crops are.

The majority of peasant farmers (60%) produced less than 20 dunums of wheat and two-fifths produced less than 10 dunums. Only 10% of farmers produced 50 dunums or more. Farmers with larger farms used combine harvesters normally rented from commercial dealers to harvest their crop. While those

harvesting less than 4 dunums were likely to do the bulk of their harvesting manually by hand-held sickle and the majority of their wheat production was used for household subsistence consumption.

Table 76: Number of Dunums of Wheat by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	13	2	2	8	-	25
5 - 9	26	2	2	15	-	45
10 - 14	18	1	1	4	1	25
15 - 19	4	1	1	5	1	12
20 - 24	14	2	1	8	-	25
25 - 29	2	-	-	-	-	2
30 - 34	10	-	1	2	-	13
35 - 39	1	-	-	-	-	1
40 - 44	5	-	1	3	1	10
45 - 49	1	-	-	-	-	1
50 - 54	3	-	-	4	-	7
60 - 64	2	-	-	-	-	2
70 - 74	1	-	-	1	-	2
80 - 84	1	-	-	-	1	2
85 - 89	-	1	-	1	-	2
95 - 100	2	-	-	-	-	2
Not ascert.	1	-	-	-	-	1
Col. total	104	9	9	51	4	177

There were differences in production patterns and land use between the agrarian classes as 26% of sharecroppers, 15% of farming-shepherds, 20% of cash tenants, 50% of smallholders and 29% of farming-landlords produced wheat. Smallholders are relatively more important wheat producers than any other agrarian group but in absolute terms they constituted only 29% of wheat producers. Sharecroppers were the most important group of producers constituting 59% of all wheat producers.

The data on barley production show that barley is less important than wheat production with only 5% of farmers producing barley (see Table 77). Production of barley per farm ranges from 1-89 dunums with the most common area of production being 1-4 dunums and average production being 23.2 dunums. A few large producers skew the range and the average size of holding. Most producers were densely packed at the lower end of the range. As with wheat production barley is rain-fed and does not require access to irrigation supply. Sharecroppers are the major producers of barley constituting 68% of all producers, yet only a small minority of

Table 77: Number of Dunums of Barley by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	3	-	1	2	1	7
5 - 9	2	-	1	1	1	5
10 - 14	4	-	1	1	-	6
20 - 24	1	-	-	-	-	1
25 - 29	3	-	-	1	-	4
30 - 34	2	-	-	-	-	2
40 - 44	1	-	-	-	-	1
50 - 54	4	1	-	-	-	5
60 - 64	1	-	-	-	-	1
85 - 89	1	-	-	-	-	1
Not ascert.	1	-	-	-	-	1
Col. total	23	1	3	5	2	34

sharecroppers (6%) produced barley. Moreover, only 2% of farming-shepherds, 7% of cash tenants, 5% of smallholders and 14% of farming-landlords produce barley.

The data show that only 3% of peasant farmers grew "other" field crops and of these two-thirds were sharecroppers (see Table 78). The spread of production of "other" field crops ranged from 1-19 dunums with the area most commonly produced being 10-14 dunums and average production being 9.9 dunums.

Table 78: Number of Dunums of Other Field Crops by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	3	-	-	-	-	3
5 - 9	4	-	-	-	1	5
10 - 14	5	-	-	3	-	8
15 - 19	2	1	-	-	-	3
Not ascert.	-	1	-	1	-	2
Col. total	14	2	-	4	1	21

To summarize, field crops constitute 23% of productive land use and are thus quite important in the overall agrarian economy of the region, particularly for those farmers who have restricted water supply for irrigation purposes and for whom changeover to vegetable crop production is not possible under the present circumstances. Wheat production accounts for 78% of the total dunumage of field crops. Sharecroppers constitute the most significant producers of field crops in absolute terms although field crop production is relatively more important among smallholders and farming-landlords.

IX. THE EXPORT OF AGRICULTURAL CROPS

In this section I will consider the percentage of crops exported by individual peasant households from the different forms of agrarian production units.

If we consider the region's most important vegetable crop, the data show that of the 522 farmers who produced tomatoes, 13% did not export any and the vast majority (87%) exported some portion of their crop (see Table 79). The actual

Table 79: Percentage of Tomatoes Exported by Agrarian Class

	Percentage Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	38	3	8	17	-	66
1 - 4	2	-	1	2	-	6
5 - 9	3	-	-	-	-	3
10 - 14	6	-	2	2	-	10
15 - 19	9	-	-	3	-	12
20 - 24	4	1	1	1	1	8
25 - 29	13	1	3	2	1	20
30 - 34	23	-	3	4	1	31
35 - 39	7	-	-	1	-	8
40 - 44	9	1	1	2	-	13
45 - 49	9	-	-	2	-	11
50 - 54	104	2	12	20	3	141
55 - 59	3	-	-	1	-	4
60 - 64	20	-	-	3	-	23
65 - 69	4	-	1	1	1	7
70 - 74	13	-	1	1	-	15
75 - 79	16	-	-	1	-	17
80 - 84	17	1	-	2	-	20
85 - 89	1	-	1	1	-	3
90 - 94	21	-	2	1	-	24
95 - 100	64	2	1	6	1	74
Not ascert.	4	-	2	1	-	7
Col. total	390	11	39	74	8	522

portion of crop exported ranged from 1-100%, but the most common portion of the crop exported was 52%. This figure is directly in line with the Jordanian export regulations operating in 1983, which allowed farmers to export half of their product across the border bridges to Jordan. However, quite a significant number of farmers (27%) exported more than 75% of their crop to Jordan during this period and a further 14% exported between 95 -100% of their crop. Some farmers were able to avoid the Jordanian quota system, most probably by utilising existing patronage and power structures in the region, perhaps at the expense of those 17% of farmers who exported less than a third of their crop. It is clear from these figures that the tomato export market played a major role in the agrarian economy of the region and tomato production and marketing was substantially geared up and integrated to the export sector.

If we look at the class characteristics of this export pattern we find that of the 390 sharecroppers who produced tomatoes, 89% exported some portion of their crop; 73% of shepherds, 74% of cash tenants, 76% of smallholders and 100% of farming-landlords, did likewise. Thus, the export market plays a major role in the economy of all agrarian classes although it is particularly important for sharecroppers and farming-landlords. This heavy weighting of sharecroppers and farming-landlords is probably, for different reasons, a reflection of their superior access to the export market due to their specific class relations of production. In other words, sharecroppers obtain access to the export market

because of their subordination to merchant/usurer capital, while farming-landlords obtain access to the market because of their ability to act independently.

All agrarian groups most commonly exported between 50 - 54% of their crop. Sharecroppers exported more of their average product than any other class, exporting 55% on average. While cash tenants exported 38% on average, smallholders 40%, farming-shepherds 42% and farming-landlords 50%. Moreover, almost a third of sharecroppers (31%) exported 75% of their

Table 80: Percentage of Eqplant Exported by Agrarian Class

	Share- cropper	Farming- Shepherd	Cash Tenant	Small- holder	Farming- Landlord	Total
None	108	2	13	30	2	155
1 - 4	7	-	-	-	-	7
5 - 9	15	-	1	1	-	17
10 - 14	20	1	2	1	3	27
15 - 19	15	-	-	-	-	15
20 - 24	12	-	3	-	-	15
25 - 29	10	1	1	-	1	13
30 - 34	15	-	3	2	1	21
35 - 39	-	-	-	-	-	-
40 - 44	7	-	-	1	-	8
45 - 49	2	-	-	1	-	3
50 - 54	73	2	6	13	-	94
55 - 59	1	-	-	1	-	2
60 - 64	9	1	-	1	-	11
65 - 69	1	-	-	-	-	1
70 - 74	4	-	-	-	-	4
75 - 79	3	-	-	-	-	3
80 - 84	8	-	1	-	-	9
85 - 89	-	-	-	-	-	-
90 - 94	2	-	-	-	-	2
95 - 100	8	1	-	-	-	9
Not ascert.	11	-	2	1	-	14
Col. total	331	8	32	52	7	430

crop or more, while only 15% of smallholders, 13% of farming-landlords and 10% of both farming-shepherds and cash tenants did likewise. 16% of sharecroppers exported all of their crop. These figures bring out quite clearly the fact that the export market was much more important for sharecroppers. The other agrarian classes, while still heavily dependent on the export market, produced a larger portion of their tomato product for the internal market than sharecroppers.

The data on the exportation of eggplants show that of the 430 farmers who produced eggplant more than a third (36%) did not export any of their produce (see Table 80). However, the majority did export a portion of their crop. The actual portion of crop exported ranged from 1 - 100% and the most common portion exported was 50 - 54%. The average portion exported was 25%. Only a fifth of the total farming population exported 75% or more of their crop. Although not playing such a major role as tomato exports, eggplant exports played an influential part in the regional agrarian economy.

If we consider the agrarian class dimension of exportation we find that of the 331 sharecroppers who produced eggplants the majority (54%) exported some portion of their crop, while 75% of farming-shepherd producers, 53% of cash tenant producers, 40% of smallholding producers and 70% of farming-landlord producers also exported a portion of their crop. Although eggplant production played a relatively important role in the economy of farming-shepherds and farming-landlords this did not contribute a great deal to the larger economy because the

actual numbers of producers involved were very small. Eggplant production was still important in the agrarian economy of sharecroppers and thus the regional economy as a whole, but it was less important than tomato exports.

All classes most commonly exported 50-54% of their crop but the average portion of exports between the different classes was variable with farming-shepherds exporting 38% on average, sharecroppers 27%, cash tenants 21%, smallholders 19% and farming-landlords 14%. Unlike the case of tomato exports, exportation of 75% or more of their individual crop was not common. Only 13% of farming-shepherd producers (the real number is very small), 4% of sharecroppers and 3% of cash tenants exported three-quarters of their crop or more. No smallholders or farming-landlords exported such a high portion of their crop.

The remainder of the data on vegetable crop production show that 94% of those peasant farmers who produced courgettes, 90% of those who produced cucumbers, 91% of those who produced broad beans, 97% of those who produced sweet corn, 86% of those who produced hot peppers, 96% of those who produced beans, 78% of those who produced melons and 56% of those who produced sweet peppers exported none of their produce (see Tables 7-13 and 15 in the Appendix 3). The export market quite clearly does not play a significant role in the production of these vegetables. In fact, the majority of these vegetable items are produced in relatively small quantities. However, two exceptions to this statement should

be mentioned. 15% of melon producers did export some portion of their crop and the export of melons has become much more important since 1983 and more and more farmers are now producing melons, although so far we do not have access to figures to substantiate the increased area produced and the proportion of this area exported. Second, almost a third (30%) of the producers of sweet corn export some portion of their crop although the actual number of producers is small and they do not contribute significantly to the volume of export trade. Moreover, no producers of Jew's mallow, potatoes, onions, garlic and "other vegetables" exported any of their crop (see Tables 14 and 16-19 in Appendix 3). But even in terms of the internal market these items are of negligible importance.

The data in this section show that the export economy is dominated by only two crops: tomatoes and eggplant. Tomatoes are by far the most significant items in the regional export trade. The whole regional economy is dominated by these crops which together account for 55% of the total area of vegetable production. Moreover, these items are produced mostly by sharecroppers, in both relative and absolute terms.

Since fruit is not an important item of production in the regional economy it follows that the export income deriving from fruit production in the region is also insignificant. Nevertheless, the data show that on average 39% of lemons were exported, 50% of oranges, 42% of mandarins, 39% of clementines and all the bananas produced by the region's one

producer (see Tables 20-25 in Appendix 3). However, these do not contribute greatly to the region's export trade.

Field crop production was bounded by the internal market and the export of field crops was minimal. The data show that no corn or "other" field crops were exported (see Tables 26 and 29 in Appendix 3). Only one farmer exported barley (under 10% of his product) and 4 farmers (2% of the population) exported some wheat (see Tables 28 and 27 in Appendix 3). Thus, quite clearly these field crops did not significantly contribute to the "foreign earnings" of the region and the export market for field crops is virtually non-existent.

X. VEGETABLE CROP IRRIGATION SYSTEM

If we look at the irrigation systems of those crops which exceed an aggregate production of 1000 dunums, i.e. tomatoes, eggplants, courgettes, cucumbers and broad beans, we find (see Tables 30-34 in Appendix 3) that the changeover from furrow irrigation to the drip irrigation system is now almost totally complete in four out of five of these key regional crops. Thus, 95% of tomato farmers produce their crops under the drip irrigation system, 96% of eggplant producers, 95% of courgette producers and 98% of cucumber producers. The furrow irrigation system has almost wholly disappeared from the production of these crops. However, the furrow irrigation system is still widely used in the production of broad beans, where an almost equal number of peasant households used each system, with 49% using the furrow irrigation system and 48%

using the drip irrigation system.

There is very little difference between the different agrarian classes in terms of the introduction of the more modern and advanced scientific irrigation systems, e.g. between 92-100% of the five class categories used drip irrigation in the production of tomatoes and eggplants, between 86-100% used drip irrigation in the production of courgettes and between 97-100% used drip irrigation in the production of cucumbers. However, farming-landlords were the most advanced in the use of scientific irrigation techniques with all farming-landlords utilising drip irrigation for all five crops, although we should bear in mind that the actual numbers entailed are not large as the farming-landlord population constitutes only 2% of the farming population. Thus, in the four major crops we find almost universal use of modern scientific irrigation systems with its associated dependence on inorganic chemical fertilizers and pesticides and HYV's among all class grouping in the region. Only in the production of broad beans is there still major recourse to the furrow system. No farming-landlords used this system, a third of farming-shepherd producers utilised it, 47% of smallholder producers, 50% of sharecropper producers and 70% of cash tenant producers.

SUMMARY

The data in this chapter bring out the general quantitative aspects of the impact of the introduction of the "Green

Revolution" technology and HYV's on the regional economy. The two major vegetable crops produced are now being produced almost exclusively under "Green Revolution" technology. The result of this has been an exceptionally high degree of regional specialisation of tomato and eggplant production. While the region is not engaged in monoculture, specialisation is very significant since over half of the area of vegetable production is under tomato and eggplant cultivation. Moreover, these two crops account for two-fifths of the total area under cultivation in the region, i.e. including fruit, vegetables and field crops. A final aspect of the impact of the "Green Revolution" technology has been the incorporation of the region into the international export market through the sale of the regions most significant vegetable crops.

While this chapter has been largely empirical it is important to bear in mind that it is this data which allows me to sustain my theoretical account of the impact of the Green Revolution technology on social relations which I have brought out in the previous chapters of this thesis.

DURABLES

In this chapter I will bring out in a largely descriptive and quantitative manner some of the more important effects of poverty, underdevelopment and settler colonialism on the material living conditions of the peasant community in the north Jordan Valley. In the first section I will outline some of the issues associated with the problem of peasant squatters in the north Jordan Valley. In the second section I will consider the general problems of housing, housing tenure, household density, housing construction and access to household amenities. In the third section I will contrast the ownership of consumer durables in the region with the aggregate pattern of consumer ownership in the urban and rural community of the West Bank in order to highlight the general level of poverty and relative deprivation in the region. Finally, I will draw some basic conclusions from these findings and present some recommendations for intervening on the housing question from within the framework of a basic human needs strategy. The whole issue of appropriate forms of development intervention which can be accomplished among a peasant community suffering the dual aspects of economic exploitation and colonial political oppression will be brought out in the last chapter of this thesis.

I. SQUATTING

Historical and contemporary analysis adequately acquaints us with the forms of land seizure engaged in by colonial and settler colonial regimes. (1) Often in the context of colonialism we will find informal processes of redemption and reclamation being undertaken by the dispossessed, the homeless and the landless. One of the means this can take is squatting, through which the homeless and the landless undertake to occupy land illegally in order to farm it or to construct housing shelter upon it. As Charles Abrams argues:

Unlike other forms of conquest that were propelled by the pursuit of glory, trade routes, or revenues, squatting is part of the desperate contest for shelter and land. Of all forms of illegal seizure, squatting is the most condonable. (2)

Squatting may be precipitated by many factors. In an urban context it may be caused through forced migration of refugees due to fear and intimidation. (3) This is the form of squatting settlement most Palestinians became familiar with as the refugee camps spread throughout Jordan, Syria, Lebanon and the Occupied Territories of the West Bank and Gaza Strip after 1948. (4) Other reasons for the creation of urban squats are rural depression and the quest for subsistence in burgeoning urban industrial and commercial centres where people live and work on the informal and marginal pole of the urban economy, perhaps seeking social and economic mobility into the formal sectors of the economy. This process is normally accompanied by the complementary processes of proletarianisation and semi-proletarianisation. (5) In the

context of escalating land and housing prices, urban squatters are forced by economic necessity to construct illegal rude shelters on the fringe of the urban town or city, normally building on land over which they have no legal possession. This situation of illegality makes their habitat precarious and subject to eviction and demolition by municipal and state agencies.

In the north Jordan Valley we also find relatively insecure conditions of habitat associated with squatting. There are a number of squatter housing settlements in the region, particularly in the village of Jiftlik. We also find a smaller number of squatter households dispersed around the margins of the peasant farm-holding in some of the other villages. However, only in Jiftlik do we find squatters constituting a visible form of human settlement pattern. Here there is a distinct squatting community in the most southeastern sector of the village in the region known as Abu al Ajaj.

The form squatting takes in this agrarian sector is restricted to the construction of illegal shelters and does not entail illegal land seizure for the purpose of farming. Squatters are most commonly peasants engaged in sharecropping, although we find a small number of shepherds and smallholders are also squatters. These squatters have not established permanent incipient squatter settlements. Rather, they normally transmigrate on an annual basis between other regions of the West Bank and the Jordan Valley where they are

engaged in peasant agriculture and where they have established their squatter households. They will often reconstruct their shelters on a yearly basis, at the beginning of the agricultural season when they return to their farms.

In the seven villages surveyed, slightly less than half the households lived in their villages permanently (see Table 81). Only in the villages of Marj Najeh, Zbeidat and `Ain Shibli did the majority of village households remain in their farm villages throughout the year. These three villages are the smallest villages in the survey. They are also the villages whose population consists mainly of refugees from 1948 and who have established legal residential status in the region and therefore have no need to squat.

In the other four villages the level of permanent village residence ranged from just over a third to less than half the village population living in the village throughout the year. These villages are dominated by seasonal residentiality and it is among this population that we find the large majority of the regional squatter population. The closest we have to a seasonal residential and squatting village is Jiftlik where 50% of the population live in the village from six to nine months of the year - corresponding to the agricultural season. We have similar phenomena, if slightly less pronounced, in Bardala, `Ain al Beda and Frush Bet Dajan.

Table 81: Number of Months Residence on Farm per Year by Village

Months	Bardala	ʿAin al Bada	Marj Najeh	Zbeidat	Jiftlik	Frush Bet Dajan	ʿAin Shibli	Total
1	-	-	-	-	2	-	-	2
2	2	-	-	-	5	1	-	8
3	1	1	-	-	2	1	-	5
4	-	1	-	-	-	1	1	3
5	-	-	-	1	-	2	-	3
6	7	5	1	-	4	1	3	21
7	3	3	2	-	2	2	-	12
8	6	7	-	1	11	2	-	27
9	24	40	2	16	154	29	-	265
10	4	4	-	-	28	5	-	41
11	1	-	-	-	-	3	1	5
12	40	51	33	36	136	28	16	340
Not ascertained	4	2	1	-	1	-	-	8
Column total	92	114	39	54	345	75	21	740

A small number of households (2%) reside in the region for the harvest season only, staying from between one to four months of the year and commuting to their fields during the day. They normally return to their permanent homes in the evening during the remainder of the agricultural season when the agricultural workload is not as demanding. These are not squatting households and it is often only the husband or son who commutes to the farm on a daily basis or stays on the farm for a few days before returning home.

There are two secondary factors which contribute to seasonal residence and make permanent squatting settlement unappealing are: first, poor housing quality and the low level of amenities make residence in the region unappealing, particularly if the householders have access to better quality housing in other regions; and second, families with children of secondary school age have problems with their children's schooling as there are no secondary school facilities for boys or girls and no preparatory school facilities for girls in the region. Both these factors inhibit incipient and permanent squatment in the region.

The main places of alternative residence are Tubas and Tamun, where three-fifths of the squatters and seasonal residents have their alternative residences (see Table 82). Moreover, there appears, in most cases, to be a distinct empirical relation between village of alternative residence and village of farm location. The squatters and seasonal residents of Bardala and Ain al Beda reside mainly in Tubas, while a third of Jiftlik's squatters and seasonal residents also

reside there. However, Tamun is the more important location of alternative residence for the squatter and seasonal population of Jiftlik. It is also important for Frush Bet Dajan, although the majority of squatters and seasonal residents in Frush Bet Dajan normally reside in Bet Dajan. This possibly implies that Hamula and family networks are important in the land tenure contexts of these villages.

Squatting is directly linked to two determinants. First, the geographic mobility of the peasant population in the Jordan Valley is formally circumscribed by Military Order 297 which requires the population of the West Bank to obtain identity cards and to be registered as residing in a particular regional centre, municipality or village. (6) While urban residents of the West Bank have also to comply with this order, their geographic mobility is much less circumscribed and they can relatively freely move their urban residence to their area of employment. Thus, for example, urban residents registered in Bethlehem can reside and work in Ramallah and they will most probably never experience the order being applied in such a manner that they are forced to return to the region where they are registered as residing. The order does not operate so informally on those peasant farmers in the Jordan Valley who are not officially registered as residents in one or other of the regional villages. The lack of formal registration as a village resident can be used as a pretext for forcibly evicting farmers from the region. The main reason for this is that the region is one which the

Table 82.: Alternative Residence by Village

Place	Bardala	^Ain al Bada	Marj Najeh	Zbeidat	Jiftlik	Frush Bet Dajan	^Ain Shibli	Total
Tubas	17	47	-	-	70	-	-	134
Tamun	-	-	2	-	85	15	-	102
Bet Dajan	-	-	-	-	-	26	-	26
Nablus	-	-	-	-	11	1	-	12
Bet Furiek	-	-	-	2	11	1	-	14
Other	1	2	1	1	12	2	5	24
Not ascertained	34	14	3	15	21	2	-	89
Column total	52	63	6	18	210	47	5	401

Israeli military and government deem to be of supreme strategic importance and thus an area in which Palestinian human settlement should be discouraged and restricted. (7)

The necessity of squatting is also largely determined by difficulties incurred in attempting to gain official permission to construct permanent housing. It is almost impossible for the majority of peasant farmers to get a license from the military authorities to construct new housing. Thus, even though the incomes of Palestinian farmers are variable and of low annual value, lack of finance is not the major factor determining the establishment of squatting settlements and individual squats, although it most certainly plays an important role in determining the poor quality and generally low standards of squatting shelter stock which is constructed.

Thus, squatting must be seen as ultimately determined by the enforcement of military orders which prohibit the peasantry from building, improving or even repairing their houses without prior approval from the military authorities. This inhibits the geographic mobility of peasant farmers to the Jordan Valley in search of farm tenure and may actually lead to the departure of families from the region because of low standards of housing and other amenities. While many people apply for permission to construct new housing it is very often not forthcoming, and when it is forthcoming it is often used as a means of co-opting village groups and leaders under the patronage of the military authorities in such a way that these villages or groups of village residents become the

clients of the military. In all the seven villages studied, only the village of Zbeidat had been given permission - during 1982-83 - as a whole village to build new houses. In 'Ain al Beda only the village Mukhtar (Abu Azzam) and members of his family had been given permission to construct new housing. In neither of these cases was permission granted to squatters to build permanent shelters or to improve their habitat.

Moreover, the military are not slow to take action against those whom they consider to have infringed the military orders. During March 1984 the military authorities destroyed seven squatter shacks belonging to sharecroppers and the house of Tawfiq Daraghmeh in the village of 'Ain al Beda. Again, in November 1984 they destroyed the squatter dwellings of 73 sharecropping families in the Jiftlik region. (8) In other words, they destroyed over a fifth of the village shelter stock in Jiftlik. In both cases the authorities claimed that the dwellings were illegal and had been constructed without the appropriate license being obtained. The demolition of these houses has to be addressed as an infringement of human rights and basic human needs.

The actual nature of squatting tenure is variable. Some squatters own their own houses without having legal possession of the land upon which the house is constructed - although we cannot detect legal ownership with possession and legal ownership without possession from the data we have available. Even with possession the standards of dwellings

vary, but they are most commonly constructed from mud-brick adobe and were constructed before the pre-1967 period. Other squatter homes are no more than rude shelters constructed from basic materials such as plastic sheeting, scrap wood, rusty tin and sack cloth, while others are normally one room shacks about four metres by four metres often provided and owned by landlords. It is difficult to evaluate the actual cost of these constructions since there is no real estate market in housing. However, the actual materials involved in the construction of most squatting households would be considerably less than a hundred Jordanian dinars, probably ranging from 5 to 50 dinars (approximately US\$ 15-300), since the materials themselves are primitive and produced locally.

In other countries of the Third World incipient illegal squatments are allowed to persist and are often unofficially sanctioned as they provide very tangible economic benefits to industry and employers without generating pressure on government budgets to provide cheap infrastructural provision, welfare and social security services. Thus, for example, in Mexico City in 1977, over 45% of the population of one of the world's largest cities lived in self-constructed accommodation, a substantial proportion of which was illegal squatter settlement. (9) The situation of squatter settlement in the Jordan Valley is quite clearly different. Squatment is not semi-officially condoned since it is an anathema to the principles of both the Allon Plan and the overall aim of Zionist settler colonialism. Squatment, if it were allowed to develop an incipient hold in the region, would constitute an unarticulated strategy of counter-

colonisation by the indigenous Palestinian population. The Israeli authorities have allowed it to persist because it is not incipient in nature. However, if the ratio of squatters to the local registered population were to rise significantly, then we would expect the authorities to pursue a vigorous policy of demolition of squatter settlement and the eviction of the squatter population from the region. Until this time the authorities have been content to limit the numbers of squatters through creating an environment of insecurity and instability, where illegal squatting households are demolished from time to time and the owners threatened with eviction from the area without the actual eviction of the squatting population per se. Destruction rather than eviction has been the major strategy of containment.

II. HOUSING

In this section I will consider housing tenancy status, household density, housing construction and the level of household amenities available.

Housing Tenancy Status

Private ownership of housing is the most common type of housing tenancy status, with 48% of all households owning their own house (see Table 83). However, private ownership even with legal possession does not automatically confer the normal tenancy status, right to sell and dispose of the house

as seen fit, since sale must be limited to someone registered as a local village resident. The aggregate picture is subject to variation on a village level. The majority of households in Bardala, Marj Najeh, `Ain Shibli, Zbeidat and `Ain al Beda, where the squatting community is most marginal, live in privately owned houses. Also, while not predominant, private ownership was the most common form of housing tenancy status in Frush Bet Dajan. Only in Jiftlik was private house ownership relatively uncommon with less than a third of accommodations being privately owned.

Landlord-provided shelters were the main form of housing tenancy in Jiftlik where more than half of all accommodation was provided by landlords to their tenants. This is closely related to the predominance of sharecropping and squatting in the village. If we include landlord-provided accommodation, shacks and tents, two-thirds of the housing tenure is in a squatting form. Landlord-provided housing constitutes a minor part of the housing stock of the other villages, with the exception of Frush Bet Dajan. In these villages it constitutes significantly less than a tenth of housing stock, while in Frush Bet Dajan it constitutes only 15% of housing stock.

The distribution of squatter type shelters is under 10% in all villages except Jiftlik and Frush Bet Dajan where it constitutes just less than two thirds and a fifth of the village housing stock respectively. Housing rental is quite a common phenomenon in most villages. A third of houses in `Ain

Table 83: Housing Tenancy Status by Village

Tenure Form	Bardala	~Ain al Bada	Marj Najeh	Zbeidat	Jiftlik	Frush Bet Dajan	~Ain Shibli	Total
Owner	77	61	27	33	106	36	14	354
Renter	10	36	10	13	11	18	2	100
Shack	1	2	-	-	7	2	-	12
Tent	2	12	1	4	23	8	4	54
Provided by landlord	2	3	1	4	197	11	1	219
Not ascertained	-	-	-	-	1	-	-	1
Column total	92	114	39	54	345	75	21	740

al Beda, a quarter in Marj Najeh, Zbeidat and Frush Bet Dajan, over a tenth in both Bardala and 'Ain Shibli and 3% in Jiftlik, are rented. It is quite common for these houses to be rented from the Israeli Department of Absentee Property.

Household Density

If we look at the household density, we find that the most common number of rooms per accommodation is one, with almost half of all households having a one room accommodation (see Table 84). This is much higher than the general pattern for the West Bank as a whole, where only 15% of households have only one room. (10) Only 15% of houses in the region have 3 or more rooms which compares very poorly with the aggregate official figures for the West Bank as a whole. These show that, in 1983, 53% of West Bank households had three or more rooms per house. (11)

Overcrowding is an endemic problem with an average household living density of 4 persons per room. This of course varies from village to village, but overcrowding is particularly marked among the squatting population of Jiftlik. Only in Marj Najeh and Zbeidat is overcrowding not a serious problem. Overcrowding is a serious social and health problem since it exacerbates the incidence of communicable diseases and puts great social and psychological pressures on members of the household who do not have privacy to carry out sexual and toilet activities. The housing density figures in the Valley are double the density figures for the West Bank as a whole

Table 84: Number of Rooms Per Accommodation by Village

Number	Bardala	~Ain al Bada	Marj Najeh	Zbeidat	Jiftlik	Frush Bet ~Ain Dajan	Total
1	45	43	5	14	204	35	356
2	35	44	25	9	80	22	224
3	6	5	6	9	26	6	60
4	3	5	2	7	10	3	30
5	1	3	-	4	2	1	11
6	-	-	-	5	-	-	5
7	-	-	-	1	1	-	2
8	-	1	-	1	-	-	2
Not ascertained	2	13	1	4	22	8	50
Column total	92	114	39	54	345	75	740

which are 2 persons per room.

Table 85 shows quite clearly that there is an empirical correlation between the housing tenancy status and the number of rooms per house. Those living in privately owned accommodation are more likely to have access to more extensive household living space than those living either in shacks (58% of which consist of only one room), in accommodation provided by their landlords (75% of which have only one room) or in tents. While it is most common for those living in rented accommodation to have only one room (48%), the majority of households do have access to two or more rooms (52%). It is more common for those living in private accommodation to have two rooms (40%). It is interesting to note that those living in shelters provided by their landlords have to tolerate greater levels of overcrowding and are more spatially deprived than those with other forms of housing tenancy status.

Household Construction

Slightly more than half of all households live in traditional mud-brick constructions (see Table 86). These houses have usually been built by the households themselves from mud and straw and normally consist of a ceiling made from bamboo covered with mud. The houses have fairly adequate ventilation qualities and are sufficiently cool in the summer when the normal day time temperature reaches 39 degrees centigrade. However, they are very damp and cold in the winter and are

Table 85 : Number of Rooms by Tenancy Status

No. of Rooms	Owner	Renter	Shack	Tent	Provided Landlord	Not Ascertained	Total
1	128	48	7	7	165	-	355
2	142	38	2	-	42	-	224
3	46	7	-	-	7	-	60
4	22	5	-	-	3	-	30
5	9	1	-	-	1	-	11
6	4	1	-	-	-	-	5
7	1	-	-	-	1	-	2
8	2	-	-	-	-	-	2
Not ascertained	-	-	3	47	-	1	51
Column total	354	100	12	54	219	1	740

neither water-proof nor do they have good insulation qualities against the cold and rain.

Probably the most appropriate type of housing is stone constructed housing which has good insulation qualities against the extremes of temperature in both the summer and winter. However, only slightly more than a tenth of households were constructed from stone. The newer houses in the region are being constructed using concrete frames, floors and ceilings, with the main walls constructed from breeze-blocks, often manufactured from primitive dyes in the village itself. These newer constructions account for more than a tenth of the regional housing stock but they are most common in 'Ain Shibli, Zbeidat and Marj Najeh. The disadvantage with these newer types of construction is that breeze block has very poor insulation qualities because it is highly porous. Thus, these houses remain damp in winter and are overheated during the summer. Another tenth of accommodations in the region consist of makeshift shacks and a further 7% of families live in beduin-style tents, traditionally made from goat hair, but now often manufactured from sack cloth.

The aggregate regional housing picture shows some variation when it is broken down on a village level. Although the traditional mud-brick house is ubiquitous in all villages, it is the predominant housing form in 'Ain al Beda and Jiftlik where it accounts for three-quarters and slightly more than a half of the housing stock in these villages respectively. It is also the most common form of housing in Bardala (45%),

Table 86: House/Shelter Construction by Village

Form of Kitchen	Bardala	~Ain al Beda	Marj Najeh	Zbeidat	Jiftlik	Frush Bet ~Ain Dajan	Total
Stone	23	6	9	19	31	8	99
Mud-brick	41	84	15	15	193	30	383
Concrete	19	5	14	13	21	19	100
Makeshift Shelter	8	7	-	3	69	3	90
Tent	1	12	1	4	23	8	53
Other	-	-	-	-	8	7	15
Column total	92	114	39	54	345	75	740

Marj Najeh (39%) and Frush Bet Dajan (40%). Only in Zbeidat and `Ain Shibli is it not the most common form of housing.

Stone construction is the most common form of housing construction in Zbeidat where it accounts for a third of housing stock. Stone constructions are not uncommon in Bardala (21%) and Marj Najeh (23%). They are found less frequently in other villages and indeed only 5% of the houses in `Ain al Beda are constructed from stone.

Concrete and breeze block constructions are most common in `Ain Shibli where they constitute 43% of houses, however, the absolute numbers are small in this case. They are also found quite frequently in Bardala (21%), Marj Najeh (36%), Zbeidat (24%) and Frush Bet Dajan (25%). They are found very infrequently in `Ain al Beda and Jiftlik.

Jiftlik is the only village with a high proportion of seasonal residents and squatters living in makeshift shelters; here they constitute a fifth of the housing population. However, shack dwellers are to be found in all villages to some extent. Tent dwellers, who are most commonly beduin shepherds, are also found in all villages but are most common in `Ain Shibli, where they constitute a fifth of dwellings.

Table 87: Form of Kitchen by Village

Form of Kitchen	Bardala	~Ain al Bada	Marj Najeh	Zbeidat	Jiftlik	Frush Bet Dajan	~Ain Shibli	Total
Inside house	15	14	4	28	36	15	2	114
Outside house	51	40	31	12	140	16	6	296
None	26	55	4	14	165	44	12	320
Not ascertained	-	5	-	-	4	-	1	10
Column total	92	114	39	54	345	75	21	740

Table 88: Form of Kitchen by Housing Tenancy Status

Form of kitchen	Owner	Renter	Shack	Tent	Provided Landlord	Not Ascertained	Total
Inside house	73	24	1	8	16	-	114
Outside house	187	32	1	4	71	1	296
None	86	43	10	50	131	-	320
Not ascertained	8	1	-	-	1	10	10
Column total	354	100	12	54	219	740	740

Household Amenities

We can begin to gauge some idea of the poverty and deprivation levels of the peasant households in the Valley by looking at their lack of access to adequate household amenities. For example, in all the villages studied, only 55% of the housing population have any sort of kitchen facility (see Table 87). This is much lower than the rest of the rural sector of the West Bank as a whole, two-thirds of whom had kitchen facilities in 1981. (12) In the region as a whole, only 15% of households have kitchen facilities inside the house itself and 43% of households have no kitchen facilities whatsoever.

Those houses which lack kitchen facilities are predominantly one or two room constructions. In these households, the women members of the household normally prepare the food outside the house, in the courtyard in the summer and on the floor of the room used for sleeping and living accommodation in the winter. Food is normally cooked in one or two ways. Either it is cooked on a one-ring kerosene primus stove or it is cooked in the traditional taboon oven. The taboon oven is constructed from clay and food is cooked in a fire which covers the foodstuff with fuel and pebbles to help radiate and maintain the heat. Bread is sometimes cooked on a beduin-style saaj, which is a convex metal griddle placed over an open wood-fuel fire and over which a very thin dough is placed. This style of cooking produces a very light bread which is found in most peasant communities throughout the Third World, although the actual flour used may be very

different. Most families prefer to cook the coarser and heavier bread prepared in the taboon.

This aggregate picture varies when broken down on a village level. Zbeidat has the highest incidence of kitchen facilities inside the house with the majority (52%) of Zbeidati households having inside kitchen facilities. This incidence is much higher than other villages where the incidence of kitchen facilities inside the house ranges from 10-20% of households. It is generally more common for households to have kitchen facilities outside the home, indicative of the use of a taboon. Thus, four-fifths of houses in Marj Najeh, over half in Bardala, two-fifths in Jiftlik, a third in `Ain al Beda, three-tenths in `Ain Shibli and a fifth in both Zbeidat and Frush Bet Dajan have their kitchen facility outside the family home. The majority of households in Frush Bet Dajan (59%) and `Ain Shibli (57%) have no kitchen facilities whatsoever, apart from very primitive stoves.

This picture of deprivation is reinforced when we consider the type of kitchen by housing tenancy status (see Table 88). Here we find that the majority of those with kitchen facilities are private house owners. Those living in squatter type accommodation - shacks, tents and houses provided by their landlords - are the most deprived household group in this respect. More than four-fifths of those living in shacks, nine-tenths of those living in tents and three-fifths of those living in landlord-provided shelter do not have

access to any kitchen facilities while three-quarters of those living in privately owned shelters and three-fifths of those living in rented accommodation have some form of kitchen facility, either inside or outside the home.

If the situation of kitchen facilities is bad, then the situation of access to latrine facilities is even worse. Two-thirds of households have no latrine facilities and household members have to defecate in the area surrounding the village (see Table 89). Studies in other regions of the West Bank, conducted by the Birzeit University Community Health Unit, have shown this to be a serious health hazard and a rampant source of intestinal parasitosis. (13)

A comparison of these regional figures with the West Bank rural household population shows that the peasants in the Jordan Valley face higher levels of material deprivation than the rural population as a whole. In 1981, only 22% of the West Bank village population (and 12% of the urban population) had no latrine facilities, while three times this number (67%) of Jordan Valley households had no access to latrine facilities. (14) What latrine facilities were available were not connected to proper sewage systems and often septic pits were a source of drinking water pollution. Moreover, more sophisticated toilet facilities such as bathrooms, showers, baths and heated water are almost wholly absent from the region; you will spend all day searching for the normally ubiquitous solar heater in this region.

The village level breakdown is fairly constant since the majority of households, with the exception of Zbeidat, have

no latrine facilities; ranging between 50-78% of households (see Table 89). Only in Zbeidat and `Ain Shibli is it common to find a toilet inside the house with 29% of households in `Ain Shibli and 20% in Zbeidat having inside toilets.

We see, once again, that the form of tenancy is associated with the level of amenity deprivation (see Table 90). Private house owners are less deprived than non-owners as three-quarters of those with inside toilets are private owners and two-thirds of those with latrine facilities outside the home also own their own home. We should not over-emphasise this point, however, since over half of home owners have no latrine facilities. Again, those residing in squatter type shelter - shacks, tents and shelters provided by their landlords - are the most deprived in terms of access to latrine facilities, with nine-tenths of shack dwellers, four-fifths of landlord-provided shelters and almost all tent dwellers having no latrine facilities.

If we consider the household water supply we find that only 5% of all households in the Valley have water piped into the household (see Table 98). This compares once more very unfavourably with the official Israeli statistics for rural-based households, where in 1981 29% of West Bank village households had their water source piped into the house. (15) It is an interesting fact that almost a third of all households had a source of piped water supply. However, this was still less than the aggregate figure for the village household population of the West Bank, half of which had a

Table 89: Latrine Facility by Village

Latrine facility	Bardala	~Ain al Bada	Marj Najeh	Zbeidat	Jiftlik	Frush Bet ~Ain Shibli	Total
Inside house	2	4	1	11	7	6	37
Outside house	29	44	32	16	68	16	207
None	61	66	6	27	270	53	496
Column total	92	114	39	54	345	75	740

Table 90: Latrine Facility by Housing Tenancy Status

Latrine facility	Owner	Renter	Shack	Tent	Provided Landlord	Not Ascertained	Total
Inside house	29	6	-	-	2	-	37
Outside house	135	39	1	1	31	-	207
None	190	55	11	53	186	1	496
Column total	354	100	12	54	219	1	740

Table 91.: Source of Drinking Water by Village

Source	Bardala	^Ain al Bada	Marj Najeh	Zbeidat	Jiftlik	Frush Bet Dajan	^Ain Shibli	Total
Piped into house	2	2	-	18	8	-	4	34
Piped outside	82	46	-	1	75	2	2	208
Bore well	-	-	28	22	30	7	-	87
Spring or canal	-	19	1	5	201	63	13	302
Village faucet	4	46	10	7	10	3	2	82
Drip pond	-	-	-	-	1	-	-	1
Other	4	-	-	-	2	-	-	6
Settlement	-	-	-	-	16	-	-	16
Not ascertained	-	1	-	1	2	-	-	4
Column total	92	114	39	54	345	75	21	740

piped water supply either into the household or the yard. (16) In the north Jordan Valley, households most commonly (41%) got their water supply either from a spring or open canal (i.e. the al Fara'a Canal), 12% received their domestic supply from bore wells, 11% from the village faucet and 2% from an Israeli settlement.

The village level access is varied and comes from a wide range of sources. Both Bardala and `Ain al Beda in the northernmost sector of the Valley have access to piped water supplies which are linked into the Israeli water grid. In Bardala nine-tenths of households (2% inside and 89% outside) have access to a piped water supply and two-fifths of households in `Ain al Beda (2% inside and 40% outside) have access to a similar supply. However, just as many in `Ain al Beda get their supply from the village faucet and a further 17% get their supply from privately owned springs. Neither of these two villages depend on bore wells for their supply. In Marj Najeh almost three-quarters of households get their domestic water supply from bore wells. A further quarter get their supply from the village faucet. In Zbeidat a third of households get their domestic water supply piped directly into their houses from a gravitational water system, two-fifths get their supply from bore wells, 13% from the village faucet and 9% from a spring. In Jiftlik the majority of households - three-fifths - take their household water supply directly from the al Fara'a canal, a fifth from an outside piped water supply, 2% from a source piped into the house, 9% from bore wells, 3% from the village faucet and a further 5% from the Israeli agricultural settlement of Masuah. A recent

study by the Birzeit Community Health Unit found unacceptably high levels of fecal coliforms in the domestic water supplies of Jiftlik, Zbeidat and Marj Najeh. The study also reported that the water supply of Bardala and `Ain al Beda was clean. (17)

Four-fifths of the households in the region have no access to electricity (see Table 92). This compares very unfavourably with the rest of the West Bank rural community where almost half have electricity supplied for some period during the day, and where more than a quarter have electricity supplied all around the clock. (18) Only in Marj Najeh (51% of households), Zbeidat (52%) and `Ain Shibli (62%) is there a significant incidence of access to electricity supplies. Most villagers get their lighting source from car batteries, kerosene lamps and tallow candles. Electricity is never used as a heating source. It is used only for lighting, television and radio. A small number of households use it for refrigeration but this use is inefficient and also a health hazard since none of the villages have an around-the-clock supply of electricity.

This section shows quite clearly that there is a high incidence of relative deprivation of amenities among the peasantry of the Jordan Valley region in comparison to the West Bank as a whole. It also shows that the village of Zbeidat is relatively better off in terms of housing conditions and amenities in comparison to the other villages

Table 92: Electricity Source by Village

Source	Bardala	^Ain al Bada	Marj Najeh	Zbeidat	Jiftlik	Frush Bet ^Ain Shibli	Total
Grid	-	-	-	-	7	-	8
Generator	12	10	20	28	48	10	141
None	80	103	19	26	288	65	588
Not ascertained	-	1	-	-	2	-	3
Column total	92	114	39	54	345	75	740

in the region. The reasons for this is related to the history of the village which was established in 1954 by UNRWA. The result of this has been that the Zbeidati's residential and land tenure status has been much more strongly established than in other villages in the region. Zbeidat has been less subject to the depredation of Israeli colonial policy than the other villages. The village Mukhtar has moreover established stronger links with the Israeli authorities than the Mukhtars in most of the other villages in the region. This has benefitted the villagers of Zbeidat inasmuch as they have been subjects of limited Israeli military patronage and clientalism.

III. OWNERSHIP OF CONSUMER DURABLES

A useful empirical index of levels of poverty and deprivation is the extended possession of consumer durables in the household. This is useful in considering personal wealth and income where we do not have detailed accounts of individual income and wealth. The use of personal ownership of consumer durables is more useful in gauging personal wealth and income than the possession of household amenities and house ownership, since access to amenities cannot be used in this way. Access to household amenities is largely constrained by Israeli colonial policy. Thus, access to and possession of housing, housing amenities (kitchens and latrines), water and electricity supply is inhibited due to Israeli control over these items. This control is a secondary aspect of Israeli control mechanisms associated with land expropriation and appropriation. Thus, it is often not absolute poverty per se

which prevents the peasant population having access to household amenities and being able to improve their housing situation. It is rather the whole Israeli colonial project with its emphasis on preventing Palestinian human settlement which seeks to keep Palestinians from the land and makes the lives of those who remain on the land as unbearable as possible, in order that it will indirectly act as a push factor driving people from the land, i.e. other than through land expropriation and appropriation. Access to consumer durables, on the other hand, is a much more useful, if not completely theoretically precise, index of personal wealth and income. Ownership of consumer durables is not impinged on by colonial policy and is thus a more adequate reflection of disposable household income and relative deprivation.

If we draw general comparisons between the Jordan Valley and the West Bank as a whole (see Table 100), we find that 10% of the Jordan Valley population had private cars or pick-up trucks while the figures for the West Bank rural population as a whole in 1983 was only 6%, although it reached as high as 22% for the West Bank urban household population. (19) The incidence of car ownership in the Jordan Valley is quite low but slightly higher than that of the rural population of the West Bank. However, the incidence of car ownership is less than half that of the urban population. (20)

The level of television ownership at 45% of households was lower than the level for the rest of the rural population

Table 93: Ownership of Consumer Durables by Village

Consumer durable	Response	Bardala	'Ain al Bada	Marj Najeh	Zbeidat	Jiftlik	Frush Bet Dajan	'Ain Shibli	Total
CAR	Yes	7	17	8	4	29	10	1	76
	No	84	95	31	50	315	64	20	659
	Not asc.	1	2	-	-	1	1	-	5
TELEVISION	Yes	43	32	33	41	143	30	7	329
	No	49	80	6	13	201	45	14	408
	Not asc.	-	2	-	-	1	-	-	3
RADIO	Yes	57	69	32	41	245	56	11	511
	No	35	43	7	13	99	19	10	226
	Not asc.	-	2	-	-	1	-	-	4
REFRIGERATOR	Yes	11	10	7	19	52	25	3	127
	No	80	102	32	35	292	50	18	609
	Not asc.	1	2	-	-	1	-	-	4
GAS COOKER	Yes	37	58	34	35	183	43	8	398
	No	55	54	5	19	161	32	13	339
	Not asc.	-	2	-	-	1	-	-	3
Column total per item		92	114	39	54	345	75	21	740

which was 63%. (21) The level of radio ownership at 69% was also lower than the rest of the West Bank village population, which was 79%. (22) While not directly comparable with the official statistics, because these figures refer to electrical refrigerators, the level of refrigerator ownership in the north Jordan Valley was only 17%, while the aggregate level of village ownership in 1983 was 46% (92% in urban households). (23) Again, while the official figures are not directly comparable because they include gas and electrical stoves, we find that 54% of the households in the region in our study own a gas cooker, while 80% of the West Bank village population own either gas or electrical cooking ranges. (24)

These figures, if we take them as an index of relative deprivation, show that the villages in the northern Jordan Valley have a lower level of ownership of basic consumer durables (except in the case of private cars and pick-up trucks) than the West Bank rural population as a whole. The main conclusions to be drawn from this is that the village population in the Valley is generally poorer and living under conditions of greater poverty and deprivation than the aggregate rural and urban populations of the West Bank.

CONCLUSIONS

The housing conditions and access to social amenities and public utilities for the 740 households in the north Jordan Valley villages are more spartan and in scarcer supply than most other regions of the West Bank. Indeed, the general

housing conditions and access to facilities bear comparison with the slum dwelling conditions of the Third World's most poverty-stricken areas. In many respects, it is mistaken to refer to the living accommodation for significant numbers of the Valley's residents, particularly sharecropping households, as houses, since many of them are nothing more than dilapidated and makeshift squatter shelters which have very few household amenities and services. Indeed, many of the households contain a minimum of basic household furniture. This is particularly true of those families living in high density one room accommodation. In these shelters you will find nothing more than inexpensive beduin style farshat (mattresses) which serve both the sleeping and lounging needs of the family. When not in use these items are normally stacked against a wall of the house. Most houses do not contain the basic items of furniture which you will find in urban households, such as tables, chairs, carpets, etc. Food is normally consumed in a collective manner from a plastic table cloth placed upon the floor.

Given existent Israeli policies it would be very difficult to implement practical housing development policies in the region. Any attempt to construct adequate shelter for the peasant communities in the north Jordan Valley will be met with Israeli opposition. However, this is not to say that there is no need to focus on the forms of adequate shelter which could be provided for these communities. There is still a very real need for research to be undertaken into the provision of low cost housing with appropriate standards of

amenities. Thus, there is a need to make basic recommendations for the design and construction materials suitable for low cost peasant housing under the prevailing economic and climatic conditions of the Jordan valley. In view of the fact that much civil engineering and construction in the West Bank is dominated by high cost and high technological input it might be preferable if designers, in this region at least, look to appropriate alternative construction techniques and materials. It might be possible to assess the application of low cost rural housing projects which have been established in Egypt and other regions of the Third World. However, it might well be that such alternatives may not be attractive to villagers whose values and preferences may have been established by comparison with the wealthier urban community. However, given existing extremely poor housing conditions it is unlikely that such an approach would not be attractive to most villagers, particularly if costs were kept down. Any examination of the potential alternatives should attempt to incorporate as much local involvement as possible. Such a project could be possible on the basis of self-help construction projects which attempt to use traditional local construction materials (e.g. mud-brick adobe) and attempt to keep expensive construction techniques to a minimum. If such a self-help programme was eventually undertaken it would potentially be possible to recruit volunteers through the voluntary committees and community activists to assist in the construction of such projects.

However, given the existing prohibition on construction in the region, such a study would be likely to remain at the

level of a policy potentiality rather than an actuality. In order to challenge existing Israeli attitudes, a minimum of two forms of political intervention are necessary. First, the whole issue of peasant poverty and underdevelopment has to be addressed from within a wider framework of human rights. One of the more acceptable frameworks now underpinning much development thinking in the UN agencies and the World Bank is the call for development policies and interventions to meet Basic Human Needs (BHN) or Basic Needs (BN). (25) Such policies and development strategies are concerned with the impact of economic development and accumulation (i.e. economic growth) in such a way that they can quickly reduce absolute deprivation and reduce large scale inequalities of income between different sections of the community. While there is a great deal of controversy over the purposes of these policies, they could provide a very useful bench-mark for assessing Israeli obstacles and policy towards socio-economic development in the Occupied Territories. (26) If we adopt the BHN indices on development provision as outlined in some of the recent UN resolutions and articles, we should be able to show the shortcomings in achieving BHN which are imposed by Israeli colonial policy. Such an approach will probably require the submission of reports and other documents at international forums concerned with target setting, establishing and implementing a BHN agenda. The international agencies working on this agenda at the moment are the ILO, IBRD and UNEP. Other organisations adopting similar but more radical models at the present time are the Dag Hammarskjold Foundation in Sweden, the Foundation

Reshaping the International Order (RIO) in the Netherlands and the Bariloche Foundation in Argentina.

In itself, however, such an approach is likely to achieve very little other than directing institutions toward non-implimental research. Intrinsic to the BHN approach is the call for the creation of development strategies which increase the participation of the local recipients, particularly the poorer and more marginalised sections of society, in the planning, design and implementation of alternative development programmes. The actual mechanisms of achieving this participation must inevitably vary from country to country and community to community to take account of concrete political realities and obstacles on the ground in the areas where development intervention is to be undertaken. However, this process is quite clearly a political one and thus intervention and strategies should be articulated on the basis of clear political choices. In the context of West Bank political realities, the way forward is to work with local grass roots organisations whose politics of development are very close to the BHN ideal. Where more work has to be done with local grass roots organisations is on the issue of development education and development mobilisation. For, if we wish to set up alternative models of development, which ensure that the poorest and most deprived groups actively participate and benefit from economic growth and development intervention, then we have to work with or create institutions and organisations which ensure that the voices of these marginalised groups are heard and their needs clearly articulated. In order for this to be possible there

is a need to create a development movement with clear goals and aims rooted in local communities and which is aware of existing political realities and alternatives. (27) From the experience of a number of developmentalists in the region, the only organisations which are capable and willing to move in this direction, and which at the same time have the potential for forming the leadership cadre for such a movement, are the radical non-Jordanian grass roots organisations.

To summarise, I have attempted to highlight the conditions of poverty and relative deprivation among the peasant population of the north Jordan Valley by focusing on squatting and the housing question. I showed that squatting is non-incipient and related to illegal house/shelter construction rather than to land seizure. Squatting has proven to be a necessary means of action for peasants to farm in the Jordan Valley under an Israeli colonial policy which restricts Palestinian social movement and settlement in the region. I showed that living conditions for the majority of the peasant population are inadequate and that they are generally living in very overcrowded and inappropriately constructed shelters. They have no proper water, electricity, kitchen or latrine facilities. I also showed that the ownership of consumer durables is significantly less than the West Bank rural population as a whole and that this is a useful empirical index of their poverty and relative deprivation. Finally, I looked at how development strategies associated with BHN and BN might attempt to address the issue of poverty in housing.

In the following two chapters I will focus in greater detail on the question of the appropriate development strategy for socialists to pursue under settler colonialism.

NOTES AND REFERENCES

1. See, inter alia, Ibrahim Abu Lughod and Baha Abu Laban, Eds., Settler Regimes in Africa and the Arab World, (Wilmette, 1974), Maxime Rodinson, Israel: A Colonial-Settler State?, (New York, 1973).
2. Charles Abrams, "Squatting and Squatters, in Janet Abu Lughod and Richard Hay Jnr., Eds., Third World Urbanization, (New York, 1979), p.293.
3. See, *ibid* p.294.
4. See, Joy Bonds et al., Our Roots Are Still Alive, (New York, 1977), pp.67-84. Also, Rosemary Sayigh, Palestinians: From Peasants to Revolutionaries, (London, 1979), pp. 98-136.
5. See, Anthony Leeds, "Housing-Settlement Types, Arrangements for Living, Proletarianization, and the Social Structure of the City", in Janet Abu Lughod and Richard Hay Jnr., Eds., *op cit*, pp. 330-337.
6. For a brief outline of this order see, Jonathan Kuttab and Raja Shehadeh, Civilian Administration in the Occupied West Bank, (Ramallah, 1982).
7. See, William Harris, Taking Root: Israeli Settlement in the West Bank, the Golan and Gaza-Sinai, 1967-1980, (Chichester, 1980).
8. See, Al Fajr Palestinian Weekly, November 9 and 16, 1984.
9. See, P. M. Ward, "The Impact of Local Leadership Upon Squatter Settlements in Mexico City", in Development Research Digest, No. 1 Spring 1978, pp. 34-35.
10. See, Central Bureau of Statistics, Statistical Abstract of Israel 1985, (Jerusalem, 1985), p.716, Table XXVII/14.

11. See, *ibid.*
12. See, *Ibid.* pp. 716-17. Table XXVII/
13. See, Alison Condie, "A Report on Parasitosis in a Number of West Bank Villages", (Birzeit, 1986).
14. See, Central Bureau of Statistics, *op cit.*, pp. 718-19. Table XXVII/16.
15. *Ibid.*
16. *Ibid.*
17. See, Chris Smith, "The Bacterial Quality of Drinking Water in Eight Villages in the Northern Jordan Valley: An Interim Report", (Birzeit, 1984).
18. See, Central Bureau of Statistics, *op cit.*, pp. 718-19. Table XXVII/16.
19. *Ibid.*
20. *Ibid.*
21. *Ibid.*
22. *Ibid.*
23. *Ibid.*
24. *Ibid.*
25. For a detailed discussion of the BHN concept, see, Reginald Herbold Green, "Basic Human Needs: Concept or Slogan, Synthesis or Smokescreen?", in IDS Bulletin, Vol 9, No 4, 1978, pp. 7-18. Also, *inter alia*, Alex Pollock, "Aspects of Selected Strategies for Rural Development", in Birzeit Research Review, Vol 1, No 3, 1986, pp. 28-46. Richard Sandbrook, The Politics of Basic Needs, (London, 1982), pp. 7-18.
26. A number of commentators make the distinction between "radical" and "conservative" approaches to BHN. Thus, the ILO

World Employment Programme is often held up as the radical statement of the BHN strategy, while the World Bank is seen to have a much more restrictive definition of BN. See, Richard Sandbrook, *ibid*, pp. 7-10.

27. For further details of these issues addressed from a popular democratic socialist position, see, Alex Pollock, *op cit*.

CHAPTER 8: ILLITERACY IN THE WEST BANK WITH SPECIAL REFERENCE
TO THE NORTH JORDAN VALLEY PEASANTRY AND SOME ASPECTS OF
FUNCTIONAL AND FREIRIAN LITERACY STRATEGIES

A phenomenon commonly empirically correlated with poverty and underdevelopment in most Third World countries is that of high illiteracy rates, particularly among the poorest and politically most marginalised sectors of the community. Illiteracy is a very real obstacle to raising peoples consciousness and understanding of their situation of underdevelopment and exploitation. This chapter will show that illiteracy is still a serious social problem in the West Bank as a whole and particularly so in the Jordan Valley. The aim of this chapter is, first, to comment critically on the limitations of utilising existing Israeli statistics in order to gauge the depth of the illiteracy problem in the West Bank, second, to present a social profile of illiteracy in the north Jordan Valley, and, third, to assess the appropriateness of functional literacy and Freirian type literacy campaigns for raising the consciousness of the local population in such a way that they might form one strand of a more unified participatory development programme.

A considerable amount of the literature on Palestinians and their education has understandably focused on the precipitate impact of the Nakba (the disaster) on the radical change in educational orientation of the dispossessed Palestinians in the diaspora and the Occupied Territories. Among this exiled emigre population, education offered one of the main vehicles

of social and geographical mobility. (1) Indeed, much of the literature points with a growing sense of national pride to the achievements and economic transformation of a "semi-backward" peasant community into a "modern oriented" community which is among that group of "nations" with the highest per capita rates of higher education in the world. (2)

While Palestinians should be proud of the educational achievements of their dispossessed community, we should be careful that the widespread visibility and focus on academic, artistic and professionally educated Palestinians does not blind us to the reality of high rates of illiteracy among pockets of the Palestinian community. Illiteracy is still a pressing structural problem for a significant section of the Palestinian population in the West Bank and Gaza Strip. As such it presents a serious obstacle to social, political and economic development.

I. USING OFFICIAL STATISTICS: ILLITERACY IN THE WEST BANK

There has been no large-scale government or national literacy census in the West Bank and Gaza Strip since the Jordanian census of 1961. Gaza was not included in this census since during this period it was under the jurisdiction of the Egyptian authorities. The Jordanian census described, at that time, a total illiteracy rate of 67% for the governates of Nablus, Jerusalem and Hebron, in which male and female illiteracy rates were 47% and 84% respectively. These

illiteracy rates are quite clearly exceptionally high, particularly for women. (3)

While these figures provide a useful base-line to examine changing literacy patterns since this time, we are left with the difficult problem of how to assess comparative changes in the rates of literacy longitudinally given the absence of an adequate and accurate data resource base since that period. (4) This stems from the fact that the Israeli military authorities have not conducted a specific literacy census in the West Bank and Gaza in the intervening period of military occupation and colonial rule. As far as the authorities are concerned, illiteracy is largely invisible and not seen as a specific educational problem which needs to be addressed.

The fact that there are no official Israeli statistics specifically concerned with measuring the rates of literacy in the West Bank does not mean that we cannot make limited use of data sources which were constructed for other purposes. We can use these sources, but we have to approach the results of such an exercise with extreme caution, since the attempt to utilise existing official statistics entails reconstructing them to deal with a problematic which they were not designed to measure. Thus, the reconstructed data can, at best, only be treated as a statistical approximation to reality. This can best be shown by considering the official data which can most appropriately be utilised to shed some light on the extent of illiteracy.

The educational section of the Israeli census collects data on "educational levels" for both Israel and for the West Bank and Gaza Strip. These data are produced from stage B of the Census of Population and Housing. (5) In this section of the interview schedule a question is asked on the "numbers of years [of] schooling" of the respondent. While this in itself is not a question on literacy, it is the best alternative measure we have in the official statistics from which to attempt to reconstruct and assess literacy levels. Used cautiously this can provide us with an approximate aggregate picture of the illiteracy rates in the West Bank.

How can these data be utilised and reconstructed? The number of years schooling of the inhabitants of both regions of the Occupied Territories are tabulated according to the following class limits: Zero years of schooling, 1-6 years, 7-8 years, 9-12 years and 13 plus years. If we insert a ceteris paribus clause, then we can assume that persons with zero years of schooling will be illiterate. Thus, the category of zero years of schooling we will call, for the purposes of our reconstruction of the official data, the minimum rate of illiteracy. However, we cannot assume that this "minimum rate of illiteracy" will correspond to the actual real rate of illiteracy, since it fails to take into account persons who became literate through attending literacy classes or kuttab (Koranic reading classes), etc. It also fails to take into account those persons who attended school for some period in their lives yet never became literate.

Moreover, since literacy and semi-literacy are highly perishable commodities which, if not accompanied with regular opportunities to read and write, are very often lost, we can assume that significant numbers of those who went to school for only a short period in their lives will remain illiterate. Thus, we have to find some way of including those people who attended school for some period in their lives, but who never reached a level of literacy or who lost that basic literacy which they had achieved. The actual rationale for doing this must remain largely arbitrary, although it is now widely recognised by UNESCO that the majority of students with four or less years of formal schooling are likely to remain illiterate. (6) In fact, sustained literacy only begins to be adequately acquired in the post-elementary school educational phase. In order to take account of this aspect of illiteracy reproduction, I will use the class limit of 1-6 years of schooling as being the upper limit on illiteracy rates. I use the 1-6 years class limit because this is the class limit used in the official data, clearly a class limit of 1-4 years would be much more suitable. However, in the absence of such a class limit being available, I will call 0-6 years of schooling the maximum rate of illiteracy. It is intuitive that, ceteris paribus, the actual real rate of illiteracy will fall somewhere between the minimum and maximum rate of illiteracy. The reconstructed data is presented in Table 94.

Table 94: Illiteracy Rates Of The West Bank Adult Population (14+)*

Years	Males (%)		Females (%)		Total (%)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
1961**	44.5	44.5	86.7	86.7	66.4	66.4
1970	62.6	27.8	84.0	65.1	73.9	47.5
1975	50.7	20.2	74.3	52.8	62.8	37.0
1980	43.0	14.2	66.6	41.8	55.3	28.5
1983	39.9	13.5	62.7	38.9	51.7	26.6

* The data for 1970-83 were constructed from Table XXVII/42, "Population Aged 14 and Over, by Years of Schooling, Age and Sex". Statistical Abstract of Israel 1984, pp. 786-787.

** The data for 1961 are abstracted from K. Mashi and R. Rihan (1980).

We can see from the above table that illiteracy levels have been declining since 1961, at which time the total adult illiteracy ratio was 2:3 of the population. Since this period there has been an initially steep downward sloping curve which tapers off in the later period. Thus, if we consider the "maximum illiteracy rate" of the total adult population, we find a drop in the illiteracy rate of 11.1% between 1970-75, of 7.5% between 1975-80 and of a further 4.6% between 1980-83. The "minimum illiteracy rate" depicts a similar decline with a drop of 10.5% between 1970-75, of 8.5% between 1975-80 and of a further 1.9% between 1980-83. Although the longitudinal decline is substantial, the actual illiteracy ratio remains high with between 1:4 to 1:2 of the adult population illiterate at the beginning of the 1980's. The "maximum illiteracy rate" is comparable to illiteracy rates in some of the world's "lower middle-income economies" such as Kenya and Egypt. Moreover, it is even comparable to "lower-income economies" such as Uganda, Rawanda and

Madagascar. (7) The "minimum illiteracy rate", on the other hand, is comparable to illiteracy rates in the "upper middle-income economies" such as Brazil and Portugal and "middle income-economies" like the Philippines and Jordan. (8)

If we look at the gender specific rates of illiteracy we also find an initially steep downward sloping curve for both men and women. If we look at the case of men, first, using the "maximum illiteracy rate", we find that the rate of illiteracy dropped by 9.6% between 1970-75, by 7.7% between 1975-80 and by a further 3.1% between 1980-83. Second, using the "minimum illiteracy rate", we find a fall of 7.6% between 1970-75, a fall of 6.0% between 1975-80 and a further fall of 0.7% between 1980-83. This fall from the 1961 male illiteracy rate of 44.5% to between 13.5-39.9% in 1983 is quite significant, particularly if measured in terms of the minimum level.

The situation of female illiteracy is more marked. If we use, first, the "maximum illiteracy rate" among women we find illiteracy fell by 9.7% between 1970-75, by 7.7% between 1975-80 and by a further 3.9% between 1980-83. Second, with the "minimum illiteracy rate", we find a fall of 12.3% between 1970-75, a fall of 11.0% between 1975-80 and a further fall of 2.9% between 1980-83. Thus, the female illiteracy rate of 86.7% in 1961 fell to between 38.9-51.7% by 1983. While the actual percentage drop is very significant, the ratio of illiterate women in the population

still remains unacceptably high.

The reasons for the rising literacy levels among the population of the West Bank is not due to effective literacy programmes and campaigns, but rather to a combination of two factors. First, as attitudes to the education of children among parents becomes more positive, then the younger educated adult group entering the bottom end of the population pyramid reduces the actual numbers and rates of illiterates in the aggregate population profile. Second, simultaneously, the higher mortality rates among older persons, who are in general also the most illiterate group, substantially reduces the illiteracy rate over time. However, we should bear in mind that although there have been dramatic changes in attitudes in regard to the education of children, this has been less marked in the case of girls than for boys. This is particularly so for female children in the rural sector which is still dominated by traditional attitudes in which the education of female children is a fairly low family priority.

II. ILLITERACY IN THE NORTH JORDAN VALLEY

In the following section of this chapter I will look at the dimension of illiteracy among the adult population of the north Jordan Valley. While it is normal in literacy surveys for respondents to be given a standard piece of writing to read to assess their literacy competence, this was not a feasible option in our study because the extensive size of

the study precluded spending time on a more sophisticated literacy survey. Thus, in order to assess the literacy competence of respondents I have adopted two measures. The first measure is based on the subjective response of the respondent as to whether s/he was literate. However, there are some problems with this method since many persons are liable to feel embarrassed and ashamed of not being able to read and write, particularly if the persons administering the question are from higher social and educational status groups - e.g. as is the case with most interviewers employed in field work. Thus, the subjective response is likely to underestimate the real rates of illiteracy. In order to compensate and check the subjective response rate, I have also used the UNESCO method of treating all those persons who neither went to school or who left school before completing the fourth grade as illiterate. (9) In this section we then consider the difference between the subjective illiteracy rate and the objective illiteracy rate.

Subjective Illiteracy Rate

The general subjective literacy levels among the peasant villagers in the Jordan Valley are higher than the national average, only 52% of the adult population claim to be literate (see Table 95). The gender specific rates of claimed illiteracy show that women are more than twice as likely to be illiterate as men. The subjective illiteracy rates for both men and women are unacceptably high at 30% and 64% respectively.

The village level subjective literacy pattern in the majority of villages largely conforms to the general pattern for the adult village population as a whole. The majority of villages have adult illiteracy rates of over 50% (see Table 103). The three exceptions with adult subjective literacy rates of less than 50% are 'Ain al Beda (43%), Marj Najeh (30%) and Jiftlik (47%). The case of the significantly lower rate of subjective illiteracy among the adult population in Marj Najeh is particularly striking given the generally high rates overall. It is possible that Marj Najeh has higher literacy rates than the other villages because of direct long-term UNRWA involvement in educational provision for the village. Marj Najeh was originally established by UNRWA as a refugee village in 1956. None of the other villages, apart from Zbeidat, have this status and it is not inconceivable that UNRWA service and infrastructural provision are now making themselves felt on the level of overall literacy levels within the village community. This superiority is relatively marked, all the more so given the almost total absence of adequate government or private educational facilities for the other villages in the region. However, UNRWA has nothing to

Table 95: Subjective Literacy by Gender

Read and Write?	Male	Female	Total
Yes	913	480	1393
No	400	871	1271
Not ascertained	1	2	3
Column total	1314	1353	2667

Table 98.: Objective Literacy by Village

Literacy?	Bardala	'Ain al Bada	Marj Najeh	Zbeidat	Jiftlik	Frush Bet Dajan	Other	'Ain Shibli	Total
Never Attended school	154	157	41	114	530	133	2	41	1172
1st elementary	5	2	1	2	7	2	-	1	20
2nd elementary	15	6	1	7	22	1	-	-	52
3rd elementary	17	17	6	7	27	16	-	3	93
4th elementary	26	24	8	9	85	26	2	3	183
Illiterate	217	206	57	139	671	178	4	48	1520
Literate	104	147	70	71	425	92	8	19	936
Not ascertained	26	34	11	16	104	12	-	8	211
Column total	347	387	138	226	1200	282	12	75	2667

be complacent about in this respect since illiteracy levels of 30% are still very high.

Objective Illiteracy Rate

As I mentioned above, the subjective illiteracy rate is likely to underestimate the real level of illiteracy. Thus, in order to check the subjective responses of respondents we can create an "objective" index by categorising those with zero years of schooling and those who left school before completing fourth grade as illiterate. Table 96 allows us to check the subjective responses against a more objective measure. Here we find, as expected, that the subjective response rate significantly underestimates the real illiteracy level. This is particularly true in the case of

Table 96: Objective Literacy by Gender

Literacy?	Male	Female	Total
Never Attended School	372	800	1172
1st elementary	8	12	20
2nd elementary	19	33	52
3rd elementary	46	48	93
4th elementary	112	71	183
Illiterate	556	964	1520
Literate	583	353	936
Not ascertained	175	36	211
Column total	1314	1353	2667

men who have much more to lose by way of social status if

they are unable to read and write. Thus, instead of the claimed male illiteracy rate of 30% we find an objective rate of 42%. While there is not the same social pressures on women to exaggerate the extent of their literacy, since it is normally concomitantly accepted as an aspect of their lower social status and general gender subordination, we still find that the subjective female illiteracy response rate of 64% rises to 71% when measured objectively.

Also, the aggregate subjective illiteracy response rate of 52% should be upgraded to 57% when measured objectively. Thus, the objective illiteracy rates for the region as a whole are very high and comparable with some of the poorer African and Asian countries. This is hardly an acceptable standard in a region which has a much higher per capita "foreign aid" input than the poorer African and Asian states.

If we allow that these figures are generally accurate, we should note that there are no post-school or adult education programmes operating in the region which would radically alter the inferences from this general "objective" measure. Table 97 shows that only 24 persons (less than 1% of the adult population) learned to read and write outside school; 17 men learned to read and write in koranic reading classes (kuttab) in the mosque, 4 women learned to read and write through attendance at a literacy programme and 3 others (2 men and 1 woman) learned to read and write in some other unspecified context.

Table 97: Place of Learning Outside School by Sex

Method	Male	Female	Total
Kuttab	17	-	17
Literacy programme	-	4	4
Other	2	1	3
Not ascertained	4	1	5
Column total	23	6	29

If we now consider the revised objective village level literacy rates, we find that the objective illiteracy rate in Bardala is 63% not 52%, in 'Ain al Beda 53% not 43%, in Marj Najeh 41% not 30%, in Zbeidat 62% not 55%, in Jiftlik 56% not 47%, in Frush Bet Dajan 63% not 52% and in 'Ain Shibli 64% not 60%. Thus, the subjective statements of illiteracy rates underestimate the objective illiteracy status by a factor of 9% on average (see Table 98). This means that in all villages except Marj Najeh the general village adult illiteracy rates are above 50%. Moreover, in the majority of villages they are above 60%. Even by conservative standards these figures are deplorably high.

III. ASPECTS OF LITERACY STRATEGIES

From the previous two sections of this chapter, which were largely statistical descriptions of the extent of the illiteracy problem, I have established the fact that illiteracy is an endemic structural problem. This problem is exacerbated by numerous educational and cultural factors.

Table 98: Subjective Literacy by Village

Read and Write?	Bardala	'Ain al Bada	Marj Najeh	Zbeidat	Jiftlik	Frush Bet Dajan	Other	'Ain Shibli	Total
Yes	168	218	97	101	634	135	10	30	1393
No	179	167	41	125	565	147	2	45	1271
Not ascertained	-	2	-	-	1	-	-	-	3
Column total	347	387	138	226	1200	282	12	75	2667

Working on the basis of the reconstruction of the official data, I estimate that there was a population of between 109,885 - 213,573 illiterate adults in the West Bank in 1983. Of this population between 27,828 - 82,248 persons were male and between 80,509 - 129,766 were female. (10) In the north Jordan Valley there were 1520 illiterate adults during the same period, 556 of whom were male and 964 of whom were female.

The majority of literacy classes which do exist are directed toward women. In 1980 there were only 30 male literacy classes in the West Bank and by 1982 the majority of these had closed down and only seven classes continued to operate, all of which were centred in Hebron. (11) The literacy classes which are run for women are normally run by charitable associations, e.g. In'Ash al Usra, womens' unions, the Union of Charitable Societies and a number of experimental classes operated by the Birzeit Literacy Unit. Normally the teachers have not had specialised training in literacy teaching. The work of literacy teaching has been largely left to develop in an ad hoc manner. So far there has been no attempt to integrate programmes and provide specialised professional training in literacy and adult education. The exception to this is the programme in the Adult Education and Literacy Office at Birzeit University. However, this facility is largely undeveloped and still in the early stages of evolution and the staff have so far not received the kind of in-service training and staff development which could lead it to become a centre of

excellence and a central focus for directing literacy and adult education work in the West Bank and Gaza. One of the major problems facing this institution is that literacy has not been given a high priority in terms of national politics and thus it has been unable to draw on the resources, finance and "aid" which is available to other national institutions and centres.

In this section I will attempt to raise some basic issues on the problem of illiteracy "eradication" which relates the issue of literacy to a wider concern encompassing both development and political consciousness-raising. This approach stands in stark opposition to those approaches which view literacy solely as a mechanical problem of the technical mastery of the written word and numeracy. The problem with such traditional programmes is that they have a very limited vision of what literacy is for. Very often there is an unbridgeable disjuncture between literacy and wider adult educational programmes which attempt to include vocational training in employment skills and a broader cultural education in a more extensive educational field beyond the basic skills of reading, writing and numeracy. In traditional approaches to literacy, which are divorced from a wider adult educational component, making the illiterate "literate" is often seen as the end of a process rather than the beginning of a continuing educational process which attempts to equip students with the skills and education for living in a changing cultural and economic environment. One is left wondering what becomes of those men and women, normally older

peasant and refugee women, whose highpoint of literate achievement is to recite a passage from the Koran at their graduation ceremony. Surely the whole idea behind literacy has to be advanced beyond such limited visions? If this is all literacy programmes set out to achieve it is hardly any wonder that the majority of students drop out from them. Most people attend literacy classes in order to improve their standard of living, to increase their income, to improve their employment prospects or to improve their standards of health. If literacy programmes do not help them to meet these basic human goals then the programme will fail since people will soon see the irrelevance of the programme to their immediate needs.

Quite a considerable amount of research on the problem of illiteracy in the West Bank has been concerned with the reasons for high drop out rates among persons attending literacy classes. (12) While I do not wish to deny that there are motivational and individual issues associated with drop out rates, I feel that a much more appropriate method of problematising the issue is not to focus on the individual and their "subjective" judgements about reasons for drop out but rather to make a comparative assessment of different literacy curricula, teaching styles and pedagogies. If we categorise in this manner we can test the hypothesis that drop out rates are related to educational practices rather than to individual motivational characteristics.

Another issue associated with traditional literacy programmes

is that the pedagogic style and curricula are very often irrelevant to teaching adult learners. A cursory acquaintance with the general educational system in the West Bank shows the predominance of authoritarian pedagogy and curricula based on rote learning and memorisation, both of which are directly related to a colonial educational heritage, which is still largely existent today in schools and even in the institutions of higher education. (13) If such pedagogy and curricula forms are transferred into adult educational programmes they are likely to meet with very limited success.

Paulo Freire has referred to this concept of educational practice as the "banking concept of education". This is based on the notion that the illiterate or student is a passive recipient of a "knowledge bank" from the omniscient teacher. Freire defines this style of education thus:

Education thus becomes an act of depositing, in which the students are depositories and the teacher the depositor. Instead of communicating, the teacher issues communiques and "makes deposits" which the students patiently receive, memorize and repeat... They do, it is true, have the opportunity to become collectors and cataloguers of things they store. But in the last analysis, it is themselves who are filed away through the lack of creativity, transformation, and knowledge in this (at best) misguided system. (14)

For Freire this style of teaching is perceived as repressing the creativity of students in the learning process and as such is an education for "domestication" rather than an education for "liberation": it is a pedagogy of oppression

rather than a pedagogy of the oppressed.

Over the last two decades, two distinct approaches to adult education and literacy teaching in the Third World have emerged which go some way to transcending the limitations inherent in traditional literacy strategies. These are functional literacy programmes and Freirian literacy programmes. Both of these have their intellectual roots in the successes of the Cuban literacy campaign of 1961. (15)

The basic principles behind the approach of functional literacy is the belief that the literacy curricula should be practical or vocational in nature and directly linked to the economic and social self-interests of the illiterate student. The World Conference of Ministers of Education on the Eradication of Illiteracy, held in Tehran in 1965, defined the goals of functional literacy in the following terms:

Rather than an end in itself, literacy should be regarded as a way of preparing man [sic] for a social, civic and economic role which goes beyond the limits of rudimentary literacy training consisting merely in the teaching of reading and writing. The very process of learning to read and write should be an opportunity for acquiring information that can immediately be used to improve living standards; reading and writing should lead not only to elementary general knowledge but to training for work, increased productivity, a greater participation in civic life and a better understanding of the surrounding world. (16)

It is claimed that functional literacy tends to be more successful in meeting its basic goals than traditional literacy programmes because it offers tangible benefits to

the economic situation of students over and above the acquisition of basic literacy skills. Functional literacy projects have been carried out with varying degrees of success in Africa where there have been functional literacy type projects undertaken in Algeria, Botswana, Tanzania and Zambia.

If we outline the Zambian functional literacy project as an example of what functional literacy aims to achieve and how it was organised then this might give us a more concrete understanding of how functional literacy efforts operate. (17) The Zambian project was developed for literacy education among rural farmers, both men and women. Women's integration into the agricultural labour process is much more central in Africa, where it is estimated that women produce about 90% of domestically produced food in the subsistence economy, than it is in most Third World countries. The actual programme was divided into two stages. During the first phase, from March until October, farmers were given a practical training in methods to improve the production of maize. This first phase consisted of three curricular components. The first component was classes in which the student-farmers studied basic literacy texts and primers which incorporated information on maize production as a core component in the content of the curriculum. This was also supplemented with posters, flip-charts, radio programmes and group discussions to highlight these new methods. The second component consisted of a demonstration plot of land on which students observed and practiced the new production methods. The third component

consisted of half-acre plots on which the students could put the new methods of production into practice. The seeds and fertilizers needed to work this plot were provided free of charge. Thus, from November to December, the local agricultural season, the students spent their time working their own plot of land.

During the second phase of the project, from the following March until October, the students learned about other crops and spent a greater proportion of their time developing mastery of literacy and numeracy. By the end of the programme the students were expected to have completed six workbooks before being tested for their certificates. During this period they were also taught how to use natural manure, how to harvest other crops and how to use insecticides.

While there were many teething problems associated with training, teaching competence, distribution of materials and access to radio programmes, the maize yield of the student-farmers doubled. However, the evaluation of the literacy component of the project during this period remained inconclusive, but the project itself was seen as having greater development potential than traditional literacy programmes and this in itself was enough to encourage this type of project to gain favour in a number of Third World countries and in the thinking of international agencies and aid donors.

Although this functional literacy project was developed to

operate in the rural context of a "developing" Third World country, there is no reason why the basic principles could not be developed in the context of functional literacy projects in the rural sectors of the West Bank and Gaza. It would also be possible to develop similar functional literacy projects around vocational training in light engineering and construction industry skills in order to help promote the combined goals of illiteracy eradication and the creation of industrial manpower. Thus, for example, it is potentially conceivable to develop literacy programmes with agricultural extension work in the West Bank rural sector. It is also potentially conceivable to develop functional literacy projects around such basic engineering skills as motor mechanics, plumbing, solar heating, etc. and construction skills such as bricklaying, carpentry, electricity, etc.

However, it is wise to introduce a note of caution here since there are potentially regressive aspects to such projects. Projects of this sort could end up being wholly focused on men, who are relatively speaking generally more literate than the female population. In terms of numeric weighting the problem of illiteracy is much more a women's issue than a men's issue. Further, even if we wish to, it may be much more difficult to develop functional literacy projects for women because of cultural factors which limit the role of women in agricultural production and the industrial labour market. Although the rationale behind these cultural factors has been lessened to some extent as women have been increasingly integrated into the informal sectors of the economy,

particularly finishing off commodities in the textiles industry. If this did present a major problem in meeting functional literacy programmes for women, it would be possible to develop alternative functional literacy programmes around such women centred issues as family and child health and household production for income generation.

It would also be wise to take note of the criticism that such programmes could result in increased underdevelopment and integration of Palestinian workers into the Israeli economy if such projects met the labour market demands of the Israeli labour market rather than providing a workforce for a "self-reliant" Palestinian economy. This whole issue is a very complex one in the context of colonialism. In the context of "developing countries" generally, Carol and Lars Berggren suggest that one of the functions of functional literacy is "to make people become more efficient and productive citizens and workers under prevailing governments." (18) A much clearer critique of functional literacy based on its commensurability with the interests and desires of Third World national bourgeoisies and international business interests in creating a pliant and skilled working class, is to be found in the work of Barbara Bee who argues that:

Functional literacy is more a donation to the people, a creation by experts which is handed down to a selected groups to serve a definite purpose. The educational contents and methods are adapted to keep the participants at a level which donors consider desirable. Its originators are often closely allied to private business enterprises which have financial interests in developing

countries. (19)

It is clearly possible that functional literacy projects may be deflected from the goal of universal literacy and activated at a policy level to serve the limited economic interests of groups within the economic system. In such a context literacy programmes are likely to be based on selectivity rather than on universality. This is contrary to egalitarian themes on literacy which treat literacy as a basic human right and a universal human need, which even the traditional approaches to literacy treat as axiomatic.

It is also possible to argue that functional literacy tends to neglect the cultural component of education and develops a concept of literacy education based on the inculcation of narrow mechanical and technical skills which in their turn are viewed as a prerequisite to economic growth and development. While this criticism should be seriously addressed, we should be careful that such criticisms do not lead to a radical rejection of functional literacy on the simplified grounds of ultra-socialist or ultra-culturalist reasoning. It is quite possible for functional literacy programmes based on selectivity to serve the interests of capitalists and industrialists in the Third World, but there is nothing inherently capitalist-centred about the development of industrial vocational skills, since they are just as central and necessary to socialist-centred development as to capitalist development. The determinant factors in the form functional literacy programmes take, are

dependent upon the political and economic context in which literacy programmes are undertaken rather than in the approach per se. Ideally, literacy should be composed of both practical and cultural elements. It should attempt to maintain a balance in terms of the "science-culture" dichotomy and not be established on the basis of narrow technical skills.

The second approach to illiteracy eradication which starts from quite a different set of principles is the work of Paulo Freire. (20) Freire is a Brazilian adult educationalist who established radical literacy programmes among the peasantry of the Brazilian North-east. (21) This region was among the most backward and underdeveloped region of the country. (22) For Freire, literacy education is perceived as a tool at the forefront of the political struggles of the powerless against the powerful. In this context Freirian literacy projects are always grounded in concrete realities of specific communities and their historical struggles. In the Brazilian North-east Freire based literacy around and in the struggles faced by the North-east peasantry in their situation of economic exploitation and political and ideological domination.

Freirian literacy programmes begin from the basic premise that literacy education is not about reading and writing per se but about developing pedagogic methods which help people to think critically in order that they can reflect upon and analyse the cultural milieu in which they exist. This, of course, involves the formation of reading and

writing skills in the development of the educational practice, but the form and content of the curricula and pedagogic methods employed is based on dialogue and communication between teacher-learners and learner-teachers. These methods attempt to give articulation and meaning to the culture of the oppressed rather than imposing "culture" as an alien implant. The manner of producing primers and texts to express the culture of the oppressed is achieved through educators selecting generative words which have the greatest resonance and meaning for the groups involved in the literacy process. These generative words allow the learners critically to decode the world in which they live and decode the relationships in which they are involved in their daily lives.

The Freirian project normally consists of several phases. In the first phase, research is undertaken in the region where the programme is going to be established in order to discover the words, sayings and phrases which give clearest expression to the existential meaning and emotional life of the region. These words, phrases and sayings should reveal to the researchers the range of experiences and emotions of the group being studied. During the second phase educationalists and researchers select generative words from the regional vocabulary studied according to the following criteria:

(a) phonemic richness

(b) phonetic difficulty (the words should reflect the phonetic difficulties of the language and be ordered sequentially from words of lesser to words of greater

phonetic difficulty)

(c) pragmatic tone, which relates words in an engagement with social, cultural and political contexts.

In phase three, "codifications" are created which represent typical existential situations of the learning group. These codifications are meant to reflect encodements of problem-situations which occur in the daily life of the group, and these are then decoded by the study group. Discussions of these codifications should lead the group to develop a critical awareness of their own existential situation while simultaneously learning to read and write. The codifications incorporate generative words graded according to phonetic difficulty. In phase four, curriculum agendas are set to aid coordinators in the literacy process. In phase five, discussion cards are prepared which break down generative words into phonetic families. In the final phase the material is prepared in visual form (using slides, flip-charts, posters, etc.) and the team coordinators and supervisors are instructed in the methods of the programme. (22)

The essence of the Freirian programme is based upon the combined principles of rigorous literacy methodology produced in a manner which leads to a critical awareness of the world in which men and women live and work. A core component of this project is to incorporate the humanitarian concern to show that the world of work involves a cultural transformation of nature. It is through this cultural transformation of nature that men and women enter into social

relationships in which they are exploited and oppressed. The strategy is designed to create literacy while students critically question their own existential situation. For Freire the purpose of literacy is not merely to name the world but to change it.

It is clear from this basic outline that this approach to literacy is also a means of mobilisation and communication through which the poor and illiterate begin to understand in a literary concise manner the reasons for their existential situations. This being the case, it also provides them with the communication skills and consciousness to wish to change this situation. The activist component of Freirian literacy programmes has a great deal to offer nationalist development and political strategies. (23)

This is no less true for the Occupied Territories. In the context of peasant communities in the Occupied Territories it would be potentially possible to conduct a programme based on Freirian techniques. The political benefits of such a programme in terms of wider nationalist consciousness-raising hardly needs to be stated. However, a strategy based on Freirian pedagogy and curricula is liable to be opposed by the military authorities who have no wish to see an upsurge in peasant nationalist consciousness. (24) Nor would such a strategy be appealing to Palestinian landlords, commission agents or the Jordanian authorities who have no wish to see peasants and workers reflecting upon the mechanics of their exploitation and oppression, let alone reaching a level of

social consciousness and political mobilisation where they might actively attempt to make sustained challenges to the whole system of exploitation, unequal exchange and oppression which characterises their existential situation. To set out to establish Freirian literacy programmes would be to set out indirectly to challenge powerful vested interests.

SUMMARY AND CONCLUSIONS

In this chapter I attempted to show in descriptive statistical terms that illiteracy is still an endemic structural problem in the West Bank, where between approximately 27-52% of the adult population remain illiterate. I also described the illiteracy problem in the north Jordan Valley where illiteracy is even more entrenched. In this region 57% of the adult population are illiterate. I also, very briefly, described two contemporary approaches to illiteracy eradication which have gained favour among educationalists and Third World governments in recent years. The first, functional literacy, places emphasis on a practical and vocational element in the construction of the curricula of literacy programmes, which help to promote economic growth and development through providing training in basic skills which are considered necessary to agricultural and industrial development. The second, Freirian literacy programmes, prioritise the process of "conscientization" or raising the consciousness of the poor in such a way that they understand the causes and determinants of their underprivileged position in society.

These two strategies are often viewed as mutually exclusive and serving different ends. While there is some truth in this, since if either the vocational element in functional literacy is overemphasised or the culturalist element in Freire's approach is overemphasised then we are left with dichotomous entities: one based on productivist priorities and the other based on cultural-politician ones. In terms of their potential contribution to nationalist development strategies, I feel however that, they should not be viewed as mutually exclusive, although there is always the danger that they may become so in practice, since any nationalist development strategy has to include aspects of vocational training which can help to promote "self-reliant" economic development as part of a strategy attempting to break with dependency and underdevelopment, and at the same time, consolidate its nationalist hegemony through sustaining the consciousness of the people along nationalist lines. A literacy strategy which combines the basic principles of functional and Freirian literacy could be a potent instrument in the promotion of both economic development and Palestinian national consciousness.

If Palestinian socialists are to combat the external interventions being made into the economic sphere of the Occupied Territories in order to dissipate Palestinian nationalist hegemony and to foster the interests of Jordan, America and Israel, then it has to learn to prioritise development issues in its own political practice. A radical approach to literacy offers one of the components in a

development strategy for achieving this goal. The question of socialist approaches to development strategies will be discussed more thoroughly in the following chapter.

NOTES AND REFERENCES

1. See, Khalil Nakhleh, "Palestinian Intellectuals and Revolutionary Transformation", in Khalil Nakhleh and Elia Zureik, Eds., The Sociology Of The Palestinians, (London: 1980), pp. 186-195.

2. Jamil Tahrir estimates that the ratio of Palestinian university students has increased from 11.4 students per 1000 population in 1966 to 15.7/1000 in 1978 and to 18.8/1000 in 1981/82. This contrasts remarkably well with the 8/1000 in England and 9/1000 in France. See, Jamil Tahrir, "An Assessment of Palestinian Human Resources: Higher Education and Manpower", in Journal of Palestinian Studies. Vol XIV, No 3, 1985.

3. For details about this data, see, Khalil Mashi and Ramzi Rihan, "Education: Elementary and Secondary", in Emile Nakhleh, Ed., A Palestinian Agenda For The West Bank And Gaza, (Washington: 1980), pp. 52-53.

4. A number of small scale studies have been undertaken since this period which give some idea of the extent of the problem of illiteracy. In 1971 a study of illiteracy in five villages in the Tulkarm District was undertaken which showed illiteracy rates of between 25-40% for men and 45-61% for women. Another study of one village in the Hebron District, the town of Ramallah and four villages and a refugee camp in the Ramallah district, undertaken by Birzeit Literacy and Adult Education Office (BLAEO) during 1976-77, showed illiteracy rates of 15-37% for men and 26-58% among women. For details on these studies see, K. Mashi and R Rihan, *ibid.*

Another study undertaken by BLAEO during 1979-80 of 41 villages in the West Bank and Gaza Strip found illiteracy rates of 21% for men and 53% for women. For details, see, David Hurford, "Rural Illiteracy In The Occupied Territories: Dimensions and Research Problems", in Birzeit Research Review, Vol 1, No 3 1986.

5. See, Central Bureau of Statistics, Statistical Abstract of Israel 1984, (Jerusalem: 1984) p.95.

6. See, UNESCO, Literacy as a Factor in Development, (Paris: 1965).

7. See, World Bank, World Development Report 1983, (Oxford, 1983), pp. 148-49, Table 1.

8. See, *ibid.*

9. This approach to the measurement of illiteracy has been widely adopted in literacy surveys undertaken in the West Bank, particularly at the Birzeit Literacy and Adult Education Office. See, David Hurford, *op cit* p.53.

10. The figures presented here do not balance exactly due to the manner of compilation of the Israeli statistical data which are presented in cumulative percentage rather than in absolute numbers. However, the difference is small and does not make an important difference to the general pattern.

11. See, Sami Khader, "The Dropping-Out of Adults in Literacy Courses". Unpublished mimeo. (Birzeit, 1983) (in Arabic).

12. *Ibid.*

13. See, *inter alia*, Thomas Ricks, "Palestinian Education: Directions and Areas of Research", in Birzeit Research Review, Vol 1, No 1 1985, also, Sarah Graham-Brown,

Education, Repression and Liberation: Palestinians, (London, 1984), pp. 16-21, 62-81

14. Paulo Freire, Pedagogy of the Oppressed, (London, 1972), pp.45-46.

15. For a detailed account of this campaign, see, Richard Fagen, The Transformation of Political Culture in Cuba, (Stanford, 1961) pp.33-68. For an even more interesting first-hand account of the Nicaraguan Literacy Crusade of 1980, which led to a reduction in the national illiteracy rate from 50% to 12%, see, Sheryl Hirshon with Judy Butler, And Also Teach Them To Read, (Westport, 1983).

16. The Final Report of the World Conference of Ministers of Education on the Eradication of Illiteracy, quoted in, Michael Young, Hilary Perraton, Janet Jenkins and Tony Dodds, Distance Teaching in the Third World, (London, 1980), pp. 81-82.

17. The information on the Zambian project is abstracted from Michael Young et al. *ibid.* pp. 82-83.

18. See, Carol and Lars Berggren, The Literacy Process: A Practice of Domestication or Liberation?, (London, 1975), p.28.

19. Barbara Bee, "The Politics of Literacy" in Robert Mackie, Ed., Literacy and Revolution: The Pedagogy of Paulo Freire, (London, 1980), p.48.

20. For the historical context to the background of Freire's work on literacy, see. Clift Barnard, "Imperialism, Underdevelopment and Education", in Robert Mackie, *ibid.* pp. 12-38.

21. Freire's most important works (available in English)

are, Pedagogy of the Oppressed, (London, 1972), Education: The Practice of Freedom, (London, 1976), The Politics of Education, (London, 1985), and, Pedagogy in Process, (London, 1978).

22. See, Paulo Freire, Education: The Practice of Freedom (London, 1976), pp. 48-58.

23. The clearest example we have of Freirian methods being used to explicitly foster nationalist consciousness and the promotion of socialist reconstruction is the case of Guinea-Bissau in the period of post-colonial rule. Freire, as head of the Department of Education of the World Council of Churches, worked in and advised the Guinea-Bissauan literacy campaign with the Institute For Cultural Action during 1975. For details, see, Paulo Freire, Pedagogy in Process, (London, 1978).

24. In fact, the Israeli military authorities during the early 1980's attempted to utilise the "peasant factor" against Palestinian nationalism through the creation of the "Village Leagues" in an attempt to by-pass the patronage and support of PLO-funding. According to Salim Tamari this was an attempt to use the weakest link in post-1976 nationalist hegemony by attempting to "storm the radical towns with reactionary peasants", which he very appropriately termed Lin Piao's Maoist theory in reverse. See, Salim Tamari, "Israel's Search For A Native Pillar: The Village Leagues", in Naseer Aruri, Occupation: Israel Over Palestine, (London, 1984), pp. 377-390.

CHAPTER 9: SOME ASPECTS OF SELECTED STRATEGIES FOR RURAL DEVELOPMENT AND AN OUTLINE OF A SOCIALIST ALTERNATIVE

In the previous chapters I considered how poverty and underdevelopment were determined by the articulation and subsumption of the non-capitalist modes of production to merchant and usurer capital. I also showed how the familial sexual division of labour in the subsistence sector of the farm economy enabled the level of exploitation in the commodity producing sector to be increased. Further, I presented some basic comparative indices of the overall level of poverty and underdevelopment in the region. In this chapter I will outline the background of a selection of some of the most important agrarian development strategies which have been promoted by one or other of the national and international agencies at various times in their attempts to eradicate poverty and promote development. My purpose in doing this is to raise a number of questions of a general nature which might contribute towards an understanding of some of the specific problems associated with rural poverty and agrarian underdevelopment, which we can then begin to address through outlining the basic principles of a socialist alternative to these which could form the first principles of a rural development programme. In order to tease out the issues associated with agrarian underdevelopment I will summarily review three well established rural development strategies and put forward what I consider to be an outline of a non-statist socialist alternative to them. These strategies are: 1. Community Development; 2. The Green

Revolution and; 3. Basic Needs.

I. COMMUNITY DEVELOPMENT

The community development based rural development strategy consisted of a peculiar mix of often conflicting and contradictory elements.(1) This strategy was an ideological mosaic which drew on elements of Gandhian socialism, anti-communist cold-war ideology, de-radicalised participatory populism, European adult education and social welfare programmes, and a diffusionist model' of technological transfer.(2)

The initial themes of the community development strategy were formulated at the end of the British colonial era in Africa. During this period the British colonial administration was interested in leaving some kind of positive legacy in Africa, partly to compensate for their years of plunder and exploitation of the African populace and, more importantly, to bring the newly independent African states back into the British sphere of influence under the sway of neo-colonialist and cooptationist foreign policies. (3)

The community development strategy began to be implemented in a widespread institutionalised manner during the early 1950's. This institutionalisation was quite clearly designed as a western alternative to the successful peasant-inspired Chinese revolution. Western governments and United Nations officials (it should be remembered that during this early

period the UN agencies were not the seed-bed of Third World radicalism and opinion which a few of them became in the 1970's) were worried by the prospect of widespread socialist based revolutions and regimes in the peasant countries of the Third World. The community development strategy was considered by the western governments as a non-revolutionary alternative to revolutionary agrarian change and socialist development. (4)

It was not only the Western bloc countries that the community development strategy appealed to. It also had implicit virtues for the leadership and elites of Third World nations who, according to L. E. Holdcroft:

"...were looking for an ideology and technique to improve the living conditions of rural people. Community development held forth the promise not only of building "grass roots" democratic institutions but also of improvement in the material well-being of the rural poor - without revolutionary changes in the existing political and economic order." (5)

Thus, the community development strategy grew throughout the 1950's and, by the early 1960's, there were community development programmes in over sixty Third World countries, over thirty of which were directly supported by U.S. bilateral aid.(6) The western based imperatives of these programmes can be readily induced from the list of major funding institutions: the Ford Foundation, the United States Foreign Economic Assistance Agency (later called US-AID) and, latterly, the United Nations Department of Economic and Social Affairs.

The strategy itself consisted of two important elements - one technical and one socio-political - which were often in direct conflict with one another. These were:

- (a) A diffusionist model of technological transfer, and,
- (b) An espousal of limited forms of participatory democracy.

The Diffusionist Model of Technological Transfer

The community development school inherited traditional academic, urban, and western assistance programme biases and stereotypes of the peasantry. Peasant farmers were largely seen as irrational, poor technical innovators and poor factor resource allocators who were lacking in good farm management techniques. Combined with this was the belief that the peasant farmer was essentially fatalistic about technical, environmental and socio-economic change.

This perspective engendered direct implications for programme policy and management. Thus, in order to combat the inherent fatalism and lack of innovative activity on the part of peasants, it was felt necessary to introduce outside assistance and expertise in order to plan, implement and evaluate local village based development projects. In this context it was thought feasible to directly transfer agricultural technology and models of agricultural extension services from the developed capitalist countries to rural communities in the Third World rather than working directly with the peasant farming population to develop alternative indigenous farming systems and techniques. In this model the

agricultural extension agent was seen as an essential educational and technical catalyst who would introduce extrinsic knowledge of new techniques, new plant varieties, machinery and equipment, ecological factors, farm management, cost efficient resource allocation and improved budgetary techniques. The model assumed that peasants could improve their productivity and income only through a combination of the adoption of better farm management, scientific techniques and relatively capital intensive farming.(7)

Participatory Democracy?

The socio-political element in the community development strategy attempted to establish village level institutions which were bounded by minimal forms of democratic participation in which the village community could express their "felt needs". It was hoped that by setting up a village level grass roots framework, the village would become more self-reliant in meeting local needs. In order for such an approach to operate effectively it was deemed necessary for a specially trained animateur to be placed in the village to act as a catalyst who "... would guide and assist villagers in identifying their felt needs into village development plans and finally implementing these plans - always working through the active village leaders." (8)

By and large, the community development strategy failed to meet both its technical and socio-political goals. On the technical side, the diffusionist model of technological

transfer failed to increase significantly the level of farm incomes. The reasons for this have been pointed out by numerous commentators, who argue forcibly that in the majority of Third World countries there are entrenched structural obstacles which mitigate against the fruits of increased productivity through technical developments accruing to the poorer peasantry. Among these obstacles are: inequitable and overexploitative land tenure systems, punitive tax regimes on the poor, the concentration of market outlets in the hands of urban merchants and the concentration of political power in the hands of urban elites.(9)

Moreover, Shultz, in his book Transforming Traditional Agriculture, exploded the myth of the irrational fatalistic peasant. He has shown, through an analysis of a number of concrete studies, that Third World peasant farmers are, by and large, extremely rational economic actors who tend to weigh the economic advantages and disadvantages of different agricultural techniques. He has further shown, that although Third World farmers are less productive in per capita terms than western farmers, they do make the most efficient use of the traditional technology they operate with, and this technology tends to be extremely well suited to the constraints of the ecological systems under which they operate.(10)

There are two major criticisms which may be addressed to the community development incorporation of the diffusionist model of technological transfer. First, technique is not a neutral

force but one which tends to be adapted to the requirements of the more powerful groups within the agrarian social structure. Thus, when new techniques are introduced, it is quite often the case that the poor often become poorer rather than better off. Second, and more importantly, the utilisation of the diffusionist model did not achieve its stated economic aim of increased productivity and food production.(11)

On the socio-political side, the community development cadres proved incapable of attaining their "democratic" aims. Village based animateurs tended to identify with local elites and strengthened the position of village leaders rather than widening the power base through the mobilization of participation in the decision-making processes. The village based animateurs were generally paternalistic and managerially oriented. Rather than proving a catalyst for village based participation, the village level animateurs often acted as petty bureaucratic officials who managed village affairs and paid little regard to the principles of participation and democracy.(12)

By the mid-1960's, community development was in decline and had very little international support. The food crisis of the 1960's brought about a change in direction of the development strategies being pursued by the international agencies. During this period more and more large grants were being awarded for basic research into plant biology and genetics. Since it was now thought that the best way out of the food

crisis was through the development of higher yielding varieties of crop. The outcome of this strategy was the so-called Green Revolution. (13)

II. THE GREEN REVOLUTION

The Green Revolution strategy, as it became known, was essentially a technologically determined agricultural development strategy. As such, it was not particularly interested in the social aspects of agricultural development. The underlying logic of this model assumed that the greatest hope for solving the Third World food crisis lay, not in merely transferring western models of technology and agricultural extension to the Third World, but, in developing Third World agriculture through sustained programmes of scientific biological and technological research. (14)

The impetus for the widespread adoption of the Green Revolution strategy was established in Mexico at the (largely United States staffed) Office of Special Studies (OSS). (15) This programme was funded by US-AID and the Rockefeller Foundation. The operational goal of the OSS was "... to quickly obtain a large increase in national wheat production. All other concerns were to be subordinated to this general goal." (16) The general purpose was to achieve Mexican self-sufficiency in wheat production.

OSS made important scientific advances through increasing the yield potential of a series of wheat varieties. This higher

yield potential was only achieved when accompanied by other elements in a combined "technological package". This technological package was a causal production-efficiency module which operated on plant biology through the natural process of photosynthesis. The package consisted of three biochemical innovations and one essential mechanical innovation, although it was possible to combine the package with various levels of agricultural mechanisation. The biochemical innovations consisted of, first, improved plant selection, breeding and hybridization which increased potential crop yield per plant and second, organic fertilizers, which were used as a means of increasing the nutrient content of the soil. This was important since higher nutrient levels were a necessary chemical component if the new varieties were to attain their full yield potential. Third, the extensive use of pesticides was necessary to control weeds and insects. Weeds in particular compete with plants for space, water, nutrients and sunlight which are the key elements in the process of photosynthesis. Last, the important mechanical innovations were improved water and drainage techniques which linked water-use to optimum efficiency in the development of the plant.(17)

Considered from the macro-economic level of national account statistics, the Green Revolution strategy achieved spectacular results. During the 1940's, for example, Mexico was importing about 50% of the national foodgrain requirement and was not exporting any grain at all. Yet by the 1960's, after the introduction of the Green Revolution, more than 12%

of all the wheat and maize being produced were exported and the level of foodgrain imports fell to insignificant levels.(18)

The spectacular success in Mexico resulted in the export of the Green Revolution strategy to India, Indonesia, Sri Lanka, Malaysia, Tunisia and the Philippines during the early 1970's. The success of the new varieties of wheat led to the establishment of other specialised international research institutes, such as CIMMYT (Wheat Improvement Centre), Crops Research Institute for the Semi-Arid Tropics and IRRI (Rice Research Institute). Improved varieties of rice quickly followed the new varieties of wheat. In recent years we have seen similar techniques being introduced for vegetable production, as the new varieties of tomatoes and eggplants now used in West Bank agriculture highlight.(19)

At first sight, at least seen through national production accounts, the Green Revolution strategy appears to be a powerful new policy instrument which would allow government and non-government agencies to resolve the world food crisis resulting in national food self-sufficiency for the great number of Third World countries. However, most recent micro-level studies, in the countries which were subjected to the sweep of the Green Revolution strategy, show that the strategy has been much less successful - in human terms at least - than aggregate analysis points to. While there has certainly been a significant increase in production (and this growth is expected to continue in the future), the benefits

of increased production and income have been extremely unevenly distributed. (20)

In most of the countries where the Green Revolution strategy was adopted, government policy was not geared to making sure that the rural poor and marginal peasant groupings benefitted from its implementation. The general result has been that the rich peasantry, landlords and urban merchant groups have been the direct beneficiaries of the Green Revolution strategy. The actual manner in which these different groups have benefitted varies from country to country and even from village to village. However, I think we can outline some general patterns of why these groups benefit, rather than the peasantry as a whole.

The rich peasant normally has at her/his disposal greater financial resources and thus is able to purchase all the elements of the Green Revolution technological package. S/he normally has access to a greater quantity and better quality of land and is thus more able to benefit from economies of scale which are not available to the smaller peasant farmer. Rich peasants are generally more literate and therefore have better and more immediate access to knowledge of new techniques and changing patterns of market demand structures. The rich peasant normally has few problems in gaining access to institutional credit, while the poorer peasant farmer, because of her/his lack of asset endowment, will be more likely to seek non-institutional and extremely usurious forms of credit, e.g. through money lenders, landlords and

merchants.(21)

Landlords often gain more from the introduction of new techniques and increased production than the peasantry because they are able to exploit existing power and patronage structures to ensure that they receive the largest share of the income coming from increased production. This is particularly true in the case of sharecropping. Landlords often increase their share of income derived from the peasantry through moving into other activities such as money lending, renting equipment, processing crops (e.g. owning threshing mills and storage facilities). Landlords, moreover, often combine their landholder function with those of merchants and middlepersons. Furthermore, landlords have the important power of eviction which they can use to coerce and threaten the peasant into giving up a larger share of her/his income. In numerous cases the threat of physical violence is also present.(22)

Urban merchants and middlepersons are often able to charge the poorer peasantry higher prices than the more institutionally and market mobile rich peasantry through their monopoly and oligopolistic control of local market outlets. If the peasant is not able to take her/his own crop to the market then the merchant can charge relatively high costs for transportation, selling and auctioning crops. Merchants often hold monopoly control over input markets, particularly where local markets are underdeveloped. The merchant often lends funds to the poorer peasants to purchase

inputs at high rates of interest, for example at higher rates than they would have to pay a local co-operative if they had access to credit from this source.(23)

All of these agrarian class factors can, and most commonly do, mitigate against the increased rewards from improved productivity of the Green Revolution technology accruing to the peasantry. The previous chapters of this thesis have demonstrated a number of these elements operating in the context of the agrarian economy of the north Jordan Valley.

There are other factors which can intercede against the interest of the peasantry. For example, the Green Revolution strategy tends to involve specialization in one or two crops and this tends to push the peasantry into wholly market dominated agricultural production. This is often accompanied by a move away from household subsistence production. Thus, the peasant comes under the total sway of market forces and even household food consumption is now purchased in the market rather than produced on the farm. Specialisation also means that climatic and ecological problems can take on the force not merely of a seasonal set back but of an unmitigated disaster. In a bad season, either brought about by marketing, climatic or ecological change, if the peasant is unable to sell or harvest her/his crops then s/he may not have enough cash income to purchase the household food requirement and s/he may have no household based production to see her/him through to the next season.(24)

While the Green Revolution strategy incorporates the technical conditions for a great number of Third World countries to achieve food self-sufficiency, it has tended to do so at the expense of the smaller, poorer and least powerful elements among the peasantry. The Green Revolution strategy has often been accompanied by the harrowing sight of peasant hunger in Third World countries which, while producing enough foodstuffs to maintain national food self-sufficiency, export vast quantities of their food production while sectors of the peasantry and landless labouring population go hungry.

III BASIC NEEDS

In recent years the majority of international agencies working in the Third World have - through their public statements and through their official and semi-official publications and reports - been arguing in words, if not in deeds, for development strategies which take the meeting of basic needs as a component in their construction. Thus, the World Bank, the International Labour Organisation and the United Nations Economic Programme have been promoting the notion of basic needs. This interest in basic needs on the part of the international agencies is also mirrored in the development ideologies of the largest non-government organisations (NGO's) providing aid, e.g. NOVIB, Oxfam, CCFD, etc. This concern is also found in the work of such bodies as the International Council for Adult Education and the World Council of Churches. (25)

The basic needs strategy has grown out of dissatisfaction with the failures of previous development strategies, particularly strategies based on economic growth models, to solve the fundamental problems facing the rural and urban poor. There is a general feeling of frustration and sometimes anger that the best efforts of the international agencies have not even begun to affect the lives of the poorest and most underprivileged sectors of Third World communities in a positive manner. The "trickle down effect" which was an implicit premise of the majority of economic growth models was shown to be nothing more than a convenient economic myth. In fact, it is often claimed that the work of the international agencies, particularly the World Bank and the International Monetary Fund, has increased the level of impoverishment and destitution of the Third World poor through their aid and lending policies. Recently, a number of Third World governments have drawn direct conclusions from this and are now calling for the establishment of a New International Economic Order (NIEO) which will allow their countries to break out of this cycle. The basic needs strategy is sometimes incorporated into this call for a NIEO. (26)

The basic needs approach argues that development strategies should increasingly attempt to understand and combat the causes of poverty in the Third World through including policy instruments in the design of development strategies which will fulfill the basic needs of the poor. As a corollary of this it is often argued that governments can only

meaningfully talk about development if the basic needs of the poorer members of society are being met. A programme for meeting basic needs is normally expected to include economic and non-material indicators.

Reginald H. Green has argued that the basic needs strategy encompasses five broad target areas. These are: first, the provision of basic consumer goods, e.g. adequate food, clothing, housing, basic household equipment and other socially and culturally defined necessities; second, universal access to basic services, e.g. primary and adult education, pure water, preventative and curative health programmes, sanitation, infrastructure and communications systems; third, the right to productive employment which results in enough productivity and equitable enough wages for each household to meet its consumption requirements from the household income; fourth, an infrastructure capable of producing the goods and services required, generating a surplus capable of financing basic communal services, providing investment sufficient to increase the productive forces needed to reach self-reliance in meeting basic needs; finally, mass participation in decision-taking and the implementation of projects. (27)

It is clear from these elements that the basic needs approach to development is widely conceived. The main feature of the approach is that it is grounded on a humanistic as opposed to an economic rationality. However, the very breadth of issues it covers leads to a certain amount of ambiguity as to what a

concrete basic needs strategy would look like and consist of. To my knowledge we do not as yet have a successful working model of a basic needs strategy in operation. (28)

The basic needs strategy certainly incorporates, at an ideological level at least, a progressive element which previous development strategies did not concern themselves with, i.e. a concern with the impact of social change on the lives and living conditions of the poor. However, the emphasis placed on this aspect varies from agency to agency. For example, the World Bank, although expressing a commitment to the basic needs concept and commissioning a number of reports on basic needs, holds an extremely restricted and conservative interpretation of basic needs. Indeed, only a marginal proportion of the World Bank's development funds are spent on projects and programmes which are designed along the lines of a basic needs strategy. The majority of the World Bank's biggest aid recipients - Indonesia, Brazil, Mexico, the Philippines and South Korea - are not widely known for development policies which favour the poorer sectors of their communities. The World Bank has often provided loans to some of the most repressive regimes in the world, e.g. the Pinochet regime in Chile and the Mobutu regime in Zaire. Yet, at the same time, the World Bank has been extremely restricted in granting loans to governments - such as Nicaragua, Cuba, Angola, Vietnam and Mozambique - which are quite clearly committed to eradicating poverty in their own countries. The World Bank and its sister agencies are clearly bent on pursuing strategies which are capitalistic in

orientation, and the basic needs component is merely an ideological foil against the most rapacious elements entailed in capitalist development.(29) Colin Leys has argued that the World Bank's commitment to basic needs, as reflected in the statements of the Bank's president, Robert McNamara, are nothing more than a thinly disguised attempt to create a legitimation of the mechanism of cooptation.(30)

The ILO, particularly through its World Employment Programme (WEP), represents a more progressive and radical approach to the basic needs strategy.(31) It is committed to bettering the conditions of the poor through the establishment of employment programmes. The ILO has shown itself willing to support both capitalist and socialist versions of basic needs. However, the ILO seems to have invested a great deal of time and effort in developing empirical indicators of basic needs without outlining clearly what such a programme would consist of. There is a fairly vacuous empiricism underlying the ILO's work in this area.(32)

The main problem with the basic needs approach is that it is very difficult to find any concrete examples of its application in non-socialist countries. It remains, largely, a moral bound critique of the worst conditions of poverty and deprivation. So far it has had little programmatic value. This is not to say that a moral critique cannot be developed into a concrete programme. An institution like the Dag Hammarskjold Foundation, for example, is working directly to this aim.(33)

However, it seems to me that if one seriously accepts the basic principles entailed in the basic needs strategy - i.e. universal literacy, education as a human right, health services for all, the right to adequate shelter, the right to meaningful employment, redistribution of income, civil liberty, freedom of speech and association, etc. - then one is essentially espousing some, if not all, of the basic principles on which the European socialist movements were established during the late nineteenth and early twentieth centuries. In fact, it is the Third World socialist countries of Tanzania, Vietnam, China, Mozambique, Algeria and Cuba whose development strategies and programmes most approximate to the basic needs ideal.

What the basic needs strategy generally fails to address is the issue of power. Poor people are not poor because of some natural or geographical accident. Poor people live in conditions of poverty and destitution because they lack access to power. They do not have the institutions, organisations and government support to challenge the people who exploit them. Until the basic needs philosophy addresses this question it can hardly fail to advance beyond a moral critique of the condition of the Third World poor. However, it would be wilful to dismiss moral critiques in general since moral visions are not in themselves inappropriate in bringing about changes in iniquitous social structures. (34)

All of the strategies which we mentioned have what we might term a "hard side" and a "soft side". On the hard side, these

development strategies have become a tactical component in the international foreign policy instruments of the developed capitalist nations, most importantly the USA. (35) As such, these strategies are an element in the changing "aid" policies which have done so much to maintain the power, influence and economic dominance of western governments, foreign corporations and business interests in the countries of the Third World. On the soft side, all of the strategies invariably contain an ideological element which has a strong humanitarian and compassionate content which very often expresses a fundamental interest in mitigating the worst aspects of underdevelopment, poverty and social degradation. However, this general humanitarian content is normally constrained by the instrumental form of western government international policy.

In general, we often find western non-government organisations (NGO's) singularly committed to the humanitarian element of development ideologies and strategies. Sometimes these organisations will also attempt to address the issue of power and control and state quite clearly in their policy statements that poverty and underdevelopment cannot be eradicated without a fundamental restructuring of economic resource and political power in the countries of the Third World. However, if they attempt to work seriously with political groups which are working with, organising and attempting to empower the poorest and most underprivileged groups through their programme budgets and projects, then they are likely to meet direct interference in their work if

this is contrary to their governments' foreign policy. This would normally be done in an indirect way, although it has not been above the British government, to give one example, to refer organisations to the "charity laws" which prohibit charitable organisations from openly working with (left-wing) political organisations.(36)

Leaving aside the special case of some of the US NGO's (the Ford Foundation, for example), the NGO's of most western countries do not work directly with or directly toward their own governments' interests in the Third World. They are not an agency of their government. The relationship between NGO's and their respective national governments is a contradictory relationship. Where government-to-government and World Bank type assistance programmes represent the harsher reality of imperial exploitation and capital resource transfer to the developed nations, the NGO type aid has a "missionising" factor centred around the idea of human resource development with a "people orientation". The one side emphasises profit and trade, while the other side emphasises human welfare. While these two elements would appear to be in a continual state of ideological conflict the appearance is deceptive. The human content of NGO aid represents a positive picture of the developed countries which often obscures the real imperialist relationship of surplus extraction and resource transfer. Moreover, the "autonomous" nature of the NGO's often allows them to make indirect contact with groups on behalf of their governments with whom their governments have no formal diplomatic contact.(37)

IV. ALTERNATIVES

Moving beyond the global issue of the link between development strategies and imperialism I wish to raise a number of ideas which criticism of these agrarian development strategies raises for constructing appropriate alternative paths to agrarian development and the eradication of rural poverty under conditions of occupation. My central concern here is to discuss a socialist politics of agrarian intervention and organisational form rather than a politics of socialist transition.

Although I have given the community development strategy short shrift, I believe that if we shed all the cooptationist, bureaucratic, technocratic and elitist elements entailed in its previous practice we would discover that it has radical roots which are compatible with the Utopian socialist tradition. Thus, there is an exceptionally valuable liberatory core which, though it requires substantial rethinking, could be fruitfully promoted in order to set development agendas under the constraints of occupation. The radical core of both the community development strategy and Utopian socialism is the idea of participatory or popular democracy. Participatory democracy embodies the Rousseausque notion of direct control and popular mobilisation in organisational structures without the necessary mediation of the institutions of representative democracy. This model of political action and control could be an important means of organising for development

intervention under occupation, for the simple reason that it is based on the idea of by-passing the domain of state control and authority.(38) It is premised on a radical challenge to the state as the legitimate organ of power and authority.

For historical reasons this model of political organisation has been out of favour with socialists in both the western and eastern bloc governments. The majority of socialists in both the eastern and western bloc countries have adopted a conception of the state which is instrumentalist and centralist. These broad conceptions are to be found in both the Leninist and social democratic traditions. There are, of course, differences in emphasis in both these traditions, for example, social democracy emphasises the interventionist role of the state in the field of political economy in order to resolve key problems and contradictions which affect the efficient operation of the capitalist economy, whereas, Leninism emphasises the global planning role of the state in the management of the socialist economy and political life.

Neither of these two models has any direct bearing on a development strategy under the context of occupation, since both depend on the direct intervention of centralised and hierarchical state agencies. Thus, while they might be appropriate models of supplanting occupational control, in themselves they have nothing to say about the appropriate mode of political action and development intervention under occupation. This is exactly what the participatory democracy

model does offer, it opens up the terrain of popular action and strategy in a way which does not flow easily from the centralist and statist models of Leninism and social democracy. However, the popular democracy model need not be a complete alternative to the other models but may in fact offer an interim political programme in the absence of indigenous state structures. However, it is only right to note that in its more radical form the participatory democracy model is trenchantly anti-centralist and anti-statist.

To move from the general model of participatory democracy to one which is organically linked to an agrarian development programme requires an extremely large conceptual, motivational and organisational shift. The central premise of such a model is the belief that it is possible to mobilise sectors of the rural population and organisations working among the rural population around a critical understanding of social and economic development in such a way that the communities themselves learn to set the agendas, create the organisational forms necessary for development intervention and open up knowledge and decision-making processes to the wider population. Such a project is extremely difficult to achieve in practice since it means attempting to empower people in such a way that they can redress the balance of power and control over the institutions and individuals who oppress and exploit them. The actual development content of such a strategy has to emerge from the experience and knowledge of the actors concerned. But quite clearly it is

likely to consist of struggles around some of the key elements suggested in the basic needs strategy, e.g. health, education, literacy, housing, employment, income redistribution, agricultural improvement, etc.

No matter what the development content of such a programme consists of, it could only succeed and make fundamental political sense if it is established as part of a widely based development movement. There are a number of inherent dangers in the creation of such a development movement. For example, if the movement is not guided by a clear national and socialist programme then it could very easily get bogged down in a purely peasant centred populist ideological focus. Such a development movement has to locate problems and issues not only at the village or peasant household level but also to connect these issues with the wider socio-economic and political context. In other words, such a movement has to connect a socialist agrarian strategy with the wider national issues and aspirations, since anything less than this would lead to the peasant population being largely divorced from wider socialist economic and political objectives (which is exactly what the agrarian strategies of the western regimes were designed to do).

The major issue which underpins all development work is the fact that development intervention is an implacable political action; an action in the field of practical political economy. As we saw in the previous chapters, development intervention, whether purely technical or social, has a

tendency to bring about changes in social relationships and on the differing levels and types of economic exploitation and income distribution. Thus, development intervention must not be allowed to hide behind apolitical terminology and slogans, e.g. "aid", "technical improvement", "economic growth", "progress", "grassroots", "meeting basic needs", "social welfare", etc. One must continually ask the political questions - Development for whom? Development for what? - so that we can discern the actual social costs and consequences of development. If we continually bear these questions in mind the spurious expertise of the development professionals and technocrats can be seen for what it really is: a concealed politicism.

Socialist, like capitalist, development strategies and interventions should be designed in such a manner that they should clearly attempt to prefigure the types of social relationships which people wish to establish and live under in both an economic and moral-political sense. This prefigurative dimension of socialist development strategies is not discussed very often or with much clarity among socialists working in the Third World. The political and economic Right, on the other hand, have already "prefigured", in the so-called neutrality of the conceptual frameworks of their political economy, the type of society they wish to establish: a capitalist one in which profit and exploitation is the main, if not the only, motor force in the economy.

There are many reasons why socialists have been blind to the

prefigurative dimension, but perhaps the most important one has been the conditioned statist reflex which leads socialists to reason - and while there is a strong element of truth in this reasoning it is not the whole truth, nor necessarily the most important part of it - that it is necessary to transform exploitative relationships once and for all on a global scale through the seizure of state power. This focus on the necessity of establishing a socialist state has meant that most pre-state socialist programmes have not focused either intellectually or organisationally on the form and content of non-exploitative cooperative and communalist forms of production, economics and politics. Anything which takes away from the singular focus of the political organisation for the seizure of state power is ridiculed as reformist or worse, utopian. Yet, it seems to me that if socialists want to change society, and be taken seriously by the people they are working with, it is not enough to say that society can only be changed after the nature of the state itself has been radically transformed from a capitalist or colonialist state to one which is socialist. While this may be a necessary condition to establish on a global scale the socialised nature of the economy, it is still possible to develop experimental forms of non-exploitative relations of production, democratic forms of collective participation and cooperative forms of organisation which struggle for justice and equality in the here and now; forms which I have briefly outlined in previous chapters. In the end I believe that it is incumbent on socialists not merely to establish a socialist state but to show and educate people in the

meantime, through experience in concrete institutional structures and production units, just exactly what such a state would be attempting to achieve in a generalised way. There is nothing utopian in this. It may be difficult to achieve, as the failure rate of such experiments shows, but there is nothing inherently utopian in such an approach. It does require an intense amount of personnel, financial, intellectual and moral input which has not been encouraged in contemporary socialist movements dominated by the social democratic and Leninist traditions. On a personal level I feel that both social democracy's and Leninism's rejection of the political and intellectual entrepreneurship which is necessary to create such an alternative has culturally and morally emaciated the struggle for socialism in both the west and the Third World.

It is necessary for a vibrant socialist movement to continually develop and explore this prefigurative dimension of social relationships. This is no less true for a socialist agrarian development movement. While it is not possible to lay down a concrete programme for such a movement, I think we have brought out enough concrete details in this study of the social relations in the agrarian sector of the region, in order to outline some of the major concerns. At the level of international relations, the movement will try to highlight and explain the inter-relatedness of the problem of underdevelopment and dependency. It would explain, for example, that although financial and technological transfers from the developed capitalist countries might at first sight

look like a modernising force, they create and maintain in reality the structural conditions of underdevelopment and dependency because they are premised on the fact that much of the income from production finds its way out of the country and back to the developed and/or colonial country through the mechanism of repayment on loans, salaries to foreign experts and the repatriation of profits from foreign companies, etc. On the national and local level the movement will be concerned to highlight and challenge the nature of social relations which are exploitative and reinforce the conditions of rural poverty and underdevelopment. In order to promote this aim it will be necessary to establish peasant leagues, unions and associations which can organise against the forces which exploit the peasantry. Such organisations will attempt to establish cooperative and market ventures on the principles of just distribution, egalitarianism and democratic control and management in order to by-pass the power of landlords, merchants and urban-elites. On the technical level, grassroots organisations will be very careful about introducing technical improvements willy-nilly into the agrarian sector, since they know from the experience of their own and other Third World countries that most technological development has redistributive effects which tend to favour the wealthier farmers, landlords and merchants. An effective agrarian movement would always attempt to gauge the likely effects of new techniques and biochemical developments on the relations of production, the social division of labour and employment, market structures, farm eco-systems, health risks, etc.

The major distinction between socialist and capitalist roads to development is that under capitalism (in all its Third World forms, i.e. imperialism, neo-colonialism and colonialism) development is a technical-instrumental problem of capital management and the creation of profit. While for socialists, development is a problem of politico-conscientization: a problem of people. Thus, the main distinction between socialist and capitalist development strategies is whether one develops production for the benefit of a wealthy few or whether one develops production for the benefit of the population as a whole. While it is clear that people cannot develop a decent human life without fairly sophisticated levels of shared production, people do exist in de-humanising conditions of squalid impoverishment under capitalist and colonialist regimes of consumptive plenitude. For socialists this is unacceptable on moral, political and economic grounds.

NOTES AND REFERENCES

1. For a detailed study of the community development strategy, see, Lane E. Holdcroft, "The Rise and Fall of Community Development, 1950-65: A Critical Assessment", in Carl K. Eicher & John M. Staatz, Eds., Agricultural Development in the Third World, (Baltimore, 1984), pp.46-57.
2. Peter Worsley, The Three Worlds: Culture and World Development, (London, 1984), pp.145-47.
3. Holdcroft, op cit. p.47.
4. Worsley. op cit. p.145.
5. Holdcroft, op cit p.49.
6. Ibid. pp.50-51.
7. Alain de Janvry, The Agrarian Question and Reformism in Latin America, (Baltimore, 1981), p.3. Also, Vernon R. Ruttan, "Models of Agricultural Development", in Eicher & Staatz, op cit. pp.41-42.
8. Holdcroft, op cit. p.49.
9. Michael Lipton, Why Poor People Stay Poor, (London, 1977).
10. Theodore W. Schultz, Transforming Rural Agriculture (New Haven, 1964), p.39.
11. Holdcroft, op cit. pp.52-54. Also, Ajit K. Ghose, "Agrarian Reform in Developing Countries: Issues of Theory and Problems of Practice", in Ajit K. Ghose, Ed., Agrarian Reform in Contemporary Developing Countries, (London, 1983), pp.3-7.
12. Worsley , op cit. p.146. Also, Gerrit Huizier, "Community Development, Land Reform and Political

Participation", in Teodor Shanin, Ed., Peasants and Peasant Society, (London, 1973).

13. Holdcroft, op cit. pp.51-53.

14. There are a number of key monographs on the impact of the "Green Revolution", among them are; Andrew Pearce, Seeds of Plenty Seeds of Want, (Oxford, 1980), Keith Griffin, The Political Economy of Agrarian Change, (London, 1974), and, B. H. Farmer, Ed., Green Revolution? Technology and Change in the Rice Growing Areas of Tamil Nadu and Sri Lanka (London, 1977).

15. Terry J. Byres & Ben Crow, The Green Revolution in India, (Milton Keynes, 1983), pp.7-8.

16. Quoted in Ibid. p.8.

17. Ibid. pp.9-16 for a detailed explanation of the biological nature of the Green Revolution.

18. Ibid. p.9.

19. Alex Pollock, "Sharecropping in the North Jordan Valley: Social Relations of Production and Reproduction", forthcoming in Pandeli and Kathy Glavanis, Eds., Agrarian Relations in the Middle East, (London, forthcoming).

20. See, John Harriss, Capitalism and Peasant Farming, (Oxford, 1982), pp.149-210.

21. Ibid. pp.149-50.

22. Griffin, op cit. pp.48-61.

23. Ibid. pp.27-30, 38-39, 226-229.

24. See, Henry Bernstein, "Notes on Capital and Peasantry", in John Harriss, Ed., Rural Development (London, 1982), pp.160-77.

25. The most sustained critical analysis in the social

sciences which utilizes the basic needs concept within a more general framework of political economy is, Richard Sandbrook, The Politics of Basic Needs, (London, 1982).

26. D. P. Ghai, "What is a Basic Needs Approach to Development all About?", in ILO, The Basic Needs Approach to Development, (Geneva, 1977), pp.1-8.

27. Reginald H. Green, "Basic Human Needs: Concept or Slogan, Synthesis or Smokescreen", in IDS Bulletin, 9, 4 (June 1978), pp.7-8.

28. Sandbrook, op cit. pp.16-18

29. Ibid. pp.7-8.

30. Colin Leys, "Challenging Development Concepts", in IDS Bulletin, 11, 3 (July 1980), pp.21-22.

31. The ILO has produced an enormous amount on the conceptualization and measurement of basic needs, in fact most of their country analyses now attempt to incorporate the basic needs concept.

32. Sandbrook, op cit. pp.9-13.

33. See, Marc Nerfin, Ed., Another Development: Approaches and Strategies, (Uppsala, 1977).

34. See, Sandbrook op cit. pp.16-18.

35. In 1982 the USA provided 8302 million US dollars for official development assistance. This is more than twice the amount of any other OECD country. The combined official development assistance for the 17 member countries of the OECD was 27,919 million US dollars and the USA portion accounted for almost 30%. Thus we can see the importance, in raw statistical terms at least, of the USA in channelling development aid. Source, "Table 18. Official Development

Assistance from OECD and OPEC Members" in World Development Report 1983 (New York, 1983), pp. 182-83.

36. The exception to this rule are the West German political foundations (Stiftungen) which directly support groups for political reasons. See, Veronica Forrester, "The German Political Foundations" in Christopher Stevens and Joan Verloren van Themaat, Eds., Pressure Groups, Policies and Development (London, 1985), pp. 40-60.

37. Christopher Stevens and Joan Verloren van Themaat, "Non-Governmental Influences on Euro-South Relations" in Stevens and Themaat, Eds., *ibid.* pp. 2-5.

38. I am not trying to imply that this is the only possible form of political action under conditions of occupation. Nepotism and the underground political cell can be equally efficacious methods of organisation. However, for a mixture of political, moral, social and developmental reasons I would personally promote the popular democratic socialist ideal for agrarian development under conditions of occupation.

CONCLUSIONS

In producing this thesis I have attempted to make a methodological intervention into the debates around some key concepts of Marxist discourse, particularly those debates dominated by rationalist epistemology and global structuralism (or Marxist General Theory). While many of the substantive texts produced by the rationalist tradition are wonderfully rich works of synthesis and are extremely complex and multifaceted in terms of the levels of determination they bring out in the social formation, they suffer from one major weakness which may be taken as an indictment of their underlying project. The substantive content of their discourse is nearly all derived from other studies and very seldom contains original empirical research.

Moreover, the studies which they utilise are most often produced within a completely different problematic and indeed very often within the bete noire of rationalism: empiricism. In this intellectual division of labour it looks like the empiricist researcher is playing the role of under-labourer to the rationalist/theorist journeywo/man. The methodological core of a text constructed in such a manner will always remain epistemologically and methodologically contradictory and grounded in juxtaposition rather than on logical connection. The empirical data is always treated as a demonstration of a theoretical position or hypothesis rather than being produced from a theoretical hypothesis in order to corroborate it. The demonstration of a theory with a

selective set of empirical data tends to replace the application of a theory to a concrete context. Logic replaces history or logical determination replaces real determination.

In order to resolve these issues on a methodological level, I attempted to critique both rationalist and empiricist epistemology from the position developed by epistemological realism. Realism develops a set of methodological protocols which attempts to do equal justice to both theory (the transitive domain) and concrete research (the intransitive domain) in scientific discourse. These protocols are developed to apply theory to concrete research agendas.

In this thesis I have attempted to replicate this process by laying down a research agenda for the application of a realist interpretation of the key concepts of the debate over the articulation of modes of production. This entailed reinterpreting the key concepts of the debate in a manner in which they could be applied to an analysis of the Palestinian peasantry in the north Jordan Valley.

The first point of reinterpretation was to criticise both global structuralism and formalism. The global structuralist position is outlined most clearly in the work of Alavi and to a lesser extent in the works of Banaji and Bettelheim. The global structuralist has a theoretical tendency to subsume the different levels of causality in the social formation to the general tendencies generated from the capitalist mode of production, i.e. there is a tendency to explain events and

structures as being generated from one central generative mechanism rather than seeing causality as structured and stratified by a plurality of generative mechanisms and their interactions. This is most clear in the case of Alavi who develops a general theory of the colonial mode of production to explain the underdevelopment and disarticulation of the Indian economy to British imperialism. But, as Bob Jessop has shown in a different context, this method "actually entails conflating the determinancy of the real world with determinancy as a property of a given theoretical system, thereby aiming to explain the former in terms of the latter.

In order not to fall into this trap of theoretical subsumption and to resolve the issue on both a conceptual and methodological level, I work with a restricted concept of mode of production which is concerned to explain social relations in the process of production and use the concept of articulation to explain the causal interaction and effects which occur between different generative mechanisms and structures (instances). In this way, we can work out the effects of different structures upon each other without recourse to reductionism or theoretical subsumption. Thus, I show how the different forms of non-capitalist modes of peasant production have been formally subsumed by merchant/usurer capital. I also show how the familial sexual division of labour (based almost exclusively on the subordination of women) in the subsistence production sector of the economy has facilitated the intensification of exploitation and appropriation in the commodity production

sector. The method of articulation (retroduction) allows us to look at the internal dynamics of these structures (i.e. modes of production, circuits of commercial and interest-bearing capital and subsistence production) and explain the effects their interaction has both in the internal structures and on the relations between the different structures.

In attempting to lay down this research agenda I think I can claim that I have been relatively successful in applying this methodology to chapters 1-5 of the thesis. There are of course still a number of problems with my presentation which I have not adequately resolved. The most important of these has to do with the research method adopted rather than with the conceptualisation per se. The empirical data for the production of this thesis were largely constructed from a regional census. There are some problems with this source. The most serious drawback is that, while I have an abundance of statistical data on a variety of elements entailed in the relations of production and reproduction of social relationships, these data do not allow us to look in great detail at the social relationships themselves. They allow us to quantify social relationships without looking at the quality and nuances between social relationships. The method has led to a focus on the technical and economic components of social relationships without examining in detail the political, cultural and ideological components in any real conceptual and empirical depth. To do this effectively would have required research methods based on participant observation or field work using an ethnographic approach. To

compensate for these failings I did a number of in-depth interviews with selected informants. However, these are subject to the biases and ideological proclivities of the informants and are not particularly objective. Having said this, I still feel that the methods I have used have facilitated the identification and explanation of the economic level of articulation. However, the thesis does remain weak at the political and ideological levels of articulation.

The function of the remaining chapters in the construction of the thesis was to serve a different purpose. Chapter 6 is necessary inasmuch as the empirical data contained in it sustain a number of hypotheses - crop specialisation, increasing dependency on the export market and the changeover to plastic irrigation systems - associated with the impact of the Green Revolution on the region.

The final three chapters (7-9) attempt to bring out some of the implications of attempting to engage in development work under settler-colonialism and long-term occupation. Chapters 7 and 8 look at strategies related to the problem of squatting/housing and literacy. The final chapter addresses the issue of attempting to establish alternative non-statist socialist development strategies in the region. This is done by way of an examination and critique of the development strategies associated with Community Development, Green Revolution and Basic Needs programmes.

The strategic dimension is not logically linked to the analysis of the articulation of modes of production in the region in the sense of being necessarily connected. Indeed it is impossible to make this type of connection between analysis and prescription logically deductive. The analysis of the social formation on the basis of the forms of articulation found in the region describes the structures and relationships which are present and operating in the region. The socialist strategic alternative is largely a prescriptive approach about how to change these conditions and structures in a way which empowers the peasantry and qualitatively decreases their relations of exploitation without transforming the basic relations of production in a structural way, i.e. it is not a revolutionary programme. These prescriptions could equally be based on another set of goals. Whichever development agenda is finally settled on will be the result of the struggles (ideological, political, economic and military) between the Palestinian peasantry and their "representatives" and the groups who exploit and oppress them.

APPENDIX 1

NORTH JORDAN VALLEY DEVELOPMENT STUDY

COMPUTER CODE BOOK

Compiled and designed by ALEX POLLOCK

Variable No.	Column No.	Content
Village 1	1	Village Name: 1. Bardala 2. 'Ain al Beda 3. Marj Najeh 4. Zbeidat 5. Jiftlik 6. Frush Bet Dajan 7. Other 8. 'Ain Shibli 9. Not ascertained
HOUSE 2	2-4	Household Number
PERSN 3	5-6	Person Number
QSECT 4	7	Questionnaire Section: 1. A, 2. B, 3. C, 4. D, 5. E, 6. F, 7. G.
CARD 5	8-9	Card No. 01.
RHDHS 6	10-11	Relation to Head of Household: 01. Head of household 02. Wife 03. Son 04. Daughter 05. Mother 06. Father 07. Mother- in-law 08. Father-in-law 09. Son-in-law 10. Daughter-in-law 11. None 77. Other 99. N.A.
AGE 7	12-13	Age (real number) 99=NA
SEX 8	14	Sex: 1. Male 2. Female 9. NA
NSTAT 9	15	Marital Status: 1. Married 2. Single 3. Widowed 4. Divorced 9. NA
YRMAR 10	16-17	Years Married (Females only) 00. inapplicable 99. NA
CLAN 11	18-20	Clan (Hamula) Name: (refer to page)
WCLAN 12	21-23	Wifes Clan before marriage (refer to page)
WFHUS 13	24	Wifes Relation to Husband: 0. Inapplicable 1. First Cousin-fathers-side 2. First cousin-mothers-side 3. Second cousin- fathers-side 4. Second cousin-mothers-side 5. Other relation 6. None 9. NA
REFUG 14	25	Refugee? 1. Yes 2. No 9. NA
RFORG 15	26-27	Refugee Origin: 00. Inapplicable 01. Aarar 02. Ararah 03. Arah 04. Arrabah 05. al Aabassiyyeh 06. al Asjah 07. al Falujeh 08. al Hawareth 10. al Khdera 11. al Lid 12. al Nfeaat 13. al Sakhneh 14. al Sawyeh 15. al Ssajaiyyeh 16. al Saammua 17. Ajjur 18. Bassat al Faliq 19. Beer Sheba 20. Bet Natif 21. Biddo 22. Bissan 23. Burha 24. Habla 25. Haifa 26. Hamamneh 27. Ijzim 28. Jaffa 29. Jamasin 30. Karkur 31. Khderat 32. Marj Benaamer 33. Natanya 34. Qaun 35. Qalqun 36. Qaqun 37. Qoseen 38. Ramla 39. Rtemat 40. Shekh Muannes 41. Umm al Fahm 42. Umm al Zenat 43. Wadi al Hawari 44. Yattah 45. Zirain 77. Other 99. NA
OCORG 16	28	Occupational Origin: 0. Inapplicable 1. Self-employed 2. employer 3. Wage worker 4. Family worker 7. Other 9. NA
CORGS 17	29	Sector of Occupational Origin: 0. Inapplicable 1. Agriculture 2. Commerce 3. Industry 4. Government 7. Other 9. NA
EDUC 18	30	Read and Write? 1. Yes 2. No 9. NA

001. Aajajreh	002. Aajarmeh	003. Aajjuri
004. Aannuz	005. Aaskar	006. Aatawneh
007. Aazazmeh	008. Abed Alnabi	009. Ainabussi
010. Anabseh	011. Atiyyat	012. Ayaydeh
013. Aawadeh	014. Abdel Jalil	015. Abu Amaweh
016. Abu Ateweh	017. Abu Aumran	018. Abu Dhele
019. Abu Halwon	020. Abu Haniyyeh	021. Abu Hantash
022. Abu Hatab	023. Abu Hayka	024. Abu Hilal
025. Abu Jabber	026. Abu Jarrar	027. Abu Jesh
028. Abu Karsh	029. Abu Kbash	030. Abu Khmayyes
031. Abu Kishek	032. Abu Krayyem	033. Abu Maammar
034. Abu Mazua	035. Abu Mbarak	036. Abu Nadi
037. Abu Rqebe	038. Abu Shaaban	039. Abu Saadah
040. Abu Salim	041. Abu Samrah	042. Abu Sarris
043. Abu Sef	044. Abu Shbab	045. Abu Sitteh
046. Abu Thabet	047. Abu Zahu	048. al Aabdalat
049. al Aabed	050. al Abessi	051. al Annuz
052. al Aayed	053. al Aenabussi	054. al Air
055. al Arayshi	056. la Aumari	057. al Balawneh
058. al Bderaf	059. al Daessat	060. al Dalaykeh
061. al Haj Muhammad	062. al Hassan	063. al Hebin
064. al Hilu	065. al Jahhalin	066. al Jberat
067. al Shekh Khalil	068. al Khatib	069. al Mahhurah
070. al Mkahall	071. al Najjar	072. al Rammadin
073. al Rarabta	074. Al Rumha	075. al Shaaer
076. al Shakaa	077. al Samaaneh	078. al Tayaha
079. Awwad	080. Bahrawi	081. Bakhit
082. Balawneh	083. Bani Aodeh	084. Bani Hamdan
085. Bani Manneh	086. Bani Mattar	087. Barayqah
088. Bassah	089. Bsharat	090. Dabaybe
091. Daghamin	092. Dammen	093. Damma
094. Dammas	095. Daraghmeh	096. Darwish
097. Dredi	098. Fahameh	099. Frehat
100. Fugha	101. Gharaybeh	102. Ghawadreh
103. Ghawam	104. Ghawanme	105. Hamed
106. Hanayshe	107. Hawareth	108. Hassan
109. Hindome	110. Hneneh	111. Hwetat
112. Jabar in	113. Jaber	114. Jamaat
115. Janajreh	116. Jazi	117. Jimri
118. Kaabneh	119. Kanaan	120. Kanuri
121. Kashef	122. Kayyal	123. Khaayush
124. Khashmar	125. Khatatmeh	126. Khatatriyeh
127. Khderat	128. Khderi	129. Khmayyes
130. Kurdiyyeh	131. Maharmeh	132. Malalha
133. Masahre	134. Massaaid	135. Massalhah
136. Massarweh	137. Mirai	138. Mletat
139. Naemat	140. Nassassrah	141. Nbasslat
142. Nfeaat	143. Nserat	144. Qashrah
145. Qatatweh	146. Qdedi	147. Qteshat
148. Rabayaah	149. Raweshdeh	150. Rtimat
151. Saadeh	152. Sakakyeh	153. Salabi
154. Salameh	155. Sallamin	156. Salman
157. Samarah	158. Saqer	159. Sarabta
160. Sawaftah	161. Sawarakeh	162. Sbehat
163. Sbitan	164. Shahin	165. Shallafeh
166. Shanableh	167. Shbeb	168. Shurafa
169. Smerat	170. Squr	171. Sulieman
172. Tahayneh	173. Tarrabin	174. Tarriq

175. Tassiq
 178. Tubassi
 181. Zaban
 000. Inapplicable

176. Tayasiri
 179. Whedat
 182. Zaghayreh
 777. Other

177. Tayyan
 180. Yuness
 183. Zbeidat
 999. NA

EDUC 19	31	Read Newspapers? 1. Yes 2. No 9. NA
EDUC 20	32	Basic Arithmetic? 1. Yes 2. No 9. NA
EDUC 21	33	Attended School? 1. Yes 2. No 9. NA
EDUC 22	34-35	Age of Leaving School?
EDUC 23	36-37	Last Class Attended? 00. Inapplicable 01. First Elementary 02. Second Elementary 03. Third Elementary 04. Fourth Elementary 05. Fifth Elementary 06. Sixth Elementary 07. First Preparatory 08. Second Preparatory 09. Third Preparatory 10. First Secondary 11. Second Secondary 12. Third Secondary 99. NA
EDUC 24	38	Tawjihi? 1. Yes 2. No 3. Fail 9. NA
EDUC 25	39	Reason For Leaving School: 0. Inapplicable 1. Tradition 2. Father Died 3. Lack of Finance 4. No School in Area 7. Other 9. NA
EDUC 26	40	Post-school Education: 0. Inapplicable 1. University 2. Training College 3. Trade School 7. Other 9. NA
EDUC 27	41	Are You Using Your Post-school education? 0. Inapplicable 1. Yes 2. No 9. NA
EDUC 28	42	Where You Learned To Read Outside School: 0. Inapplicable 1. Kuttab 2. Literacy Programme 7. Other 9. NA
EDUC 29	43	Type of Training School: 0. Inapplicable 1. Israeli Government 2. Histadrut 3. UNRWA 4. Voluntary Agency 5. Charitable Society 7. Other 9. NA
EDUC 30	44	Period of Training: 0. Inapplicable 1. 1-3 Months 2. 3-6 months 3. 6-12 months 4. 1-2 years 5. 3 years plus 7. Other 9. NA
WRKST 31	45	Work Status: 1. Employed 2. Unemployed 3. Retired 4. Sick or Disabled 5. Student 7. Other 8. Never worked 9. NA
UNEMP 32	46	Length of unemployment: 0. Inapplicable 1. 1-4 weeks 2. 1-3 Months 3. 3-6 months 4. 6-12 months 5. 1-2 years 6. 2 years plus 7. Other 8. Never Worked 9. NA
WKSEC 33	47	Work Sector: 0. Inapplicable 1. Agriculture 2. Commerce 3. Industry 4. Government 5. Social Services 6. Construction 7. Other 9. NA
EMCAT 34	48	Employment Category: 0. Inapplicable 1. Self-employed 2. Employer 3. Wage Worker 4. Family Worker 5. Student 7. Other 9. NA

AGLL 35	49	Landlord? 1. Yes 2. No 9. NA
AGSMH 36	50	Smallholder? 1. Yes 2. No 9. NA
AGSCP 37	51	Sharecropper? 1. Yes 2. No 9. NA
AGSHD 38	52	Shepherd? 1. Yes 2. No 9. NA
AGCSH 39	53	Cash Tenant? 1. Yes 2. No 9. NA
SEWRK 40	54-55	Self-employed (apart from agriculture) Number of Family Workers. 99=NA
EMWRK 41	56-57	Employer (apart from agriculture) Number of Wage workers. 99=NA

Section B

VLLGE 42	1	Village Name: 1. Bardala 2. 'Ain al Beda 3. Marj Najeh 4. Zbeidat 5. Jiftlik 6. Frush Bet Dajan 7. Other 8. 'Ain Shibli 9. NA
HOUSE 43	2-4	Household Number
PERSN 44	5-6	Person Number
QSECT 45	7	Questionnaire Section: 2=b
CARD 46	8-9	Card Number = 02.
MLHME 47	10-11	No of Male Children at home
MLAGE 48	12-13	Age First Male Child at Home
MLAGE 49	14-15	Age Second Male Child at Home
MLAGE 50	16-17	Age Third Male Child at Home
MLAGE 51	18-19	Age Fourth Male Child at Home
MLAGE 52	20-21	Age Fifth Male Child at Home
MLAGE 53	22-23	Age Sixth Male Child at Home
MLAGE 54	24-25	Age Seventh Male Child at Home
MLAGE 55	26-27	Age Eighth Male Child at Home
MLAGE 56	28-29	Age Ninth Male Child at Home
MLAGE 57	30-31	Age Tenth Male Child at Home
FMHME 58	32-33	No. of Female Children at Home
FMAGE 59	34-35	Age First Female Child at Home
FMAGE 60	36-37	Age Second Female Child at Home
FMAGE 61	38-39	Age Third Female Child at Home
FMAGE 62	40-41	Age Fourth Female Child at Home
FMAGE 63	42-43	Age Fifth Female Child at Home
FMAGE 64	44-45	Age Sixth Female Child at Home
FMAGE 65	46-47	Age Seventh Female Child at Home
FMAGE 66	48-49	Age Eighth Female Child at Home
FMAGE 67	50-51	Age Ninth Female Child at Home
FMAGE 68	52-53	Age Tenth Female Child at Home
MLOUT 69	54-55	No. Male Children Outside Home
MOAGE 70	56-57	Age First Male Outside Home
MOAGE 71	58-59	Age Second Male Outside Home
MOAGE 72	60-61	Age Third Male Outside Home
MOAGE 73	62-63	Age Fourth Male Outside Home
MOAGE 74	64-65	Age Fifth Male Outside Home
MOAGE 75	66-67	Age Sixth Male Outside Home
MOAGE 76	68-69	Age Seventh Male Outside Home
MOAGE 77	70-71	Age Eighth Male Child Outside home
MOAGE 78	72-73	Age Ninth Male Child Outside Home
MOAGE 79	74-75	Age Tenth Male Child Outside Home

VLLGE 80	1	Village Name: 1. Bardala 2. 'Ain al Beda 3. Marj Najeh 4. Zbeidat 5. Jiftlik 6. Frush Bet dajan 7. Other 8. 'Ain Shibli 9. NA
HOUSE 81	2-4	Household Number
PERSN 82	5-6	Person Number
QSECT 83	7	Questionnaire Section 2=b
CARD 84	8-9	Card (line) No. 03.
MORES 85	10-11	No. Males Outside Home Living in West Bank
MORES 86	12-13	No. Males Outside Home Living in Jordan
MORES 87	14-15	No. Males Outside Home Living in the Gulf
MORES 88	16-17	No. Males Outside Home Living in Rest of the Middle East
MORES 89	18-19	No. of Males Outside Home Living in Europe
MORES 90	20-21	No. Of males Outside Home Living in USA
MORES 91	22-23	No. of Males Outside Home Living in Other Place
FMOUT 92	24-25	No. Females Outside Home
FOAGE 93	26-27	Age of First Female Outside Home
FOAGE 94	28-29	Age of Second Female Outside Home
FOAGE 95	30-31	Age of Third Female Outside Home
FOAGE 96	32-33	Age of Fourth Female Outside Home
FOAGE 97	34-35	Age of Fifth Female Outside Home
FOAGE 98	36-37	Age of Sixth Female Outside Home
FOAGE 99	38-39	Age of Seventh Female Outside Home
FOAGE 100	40-41	Age of Eighth Female Outside Home
FOAGE 101	42-43	Age of Ninth Female Outside Home
FOAGE 102	44-45	Age of Tenth Female Outside Home
FORES 103	46-47	No. of Females Outside Home living in West Bank
FORES 104	48-49	No. of Females Outside Home Living in Jordan
FORES 105	50-51	No. of Females Outside Home Living in the Gulf
FORES 106	52-53	No. of Females Outside Home Living in rest of the Middle East
FORES 107	54-55	No. of Females Outside Home Living in Europe
FORES 108	56-57	No. of Females Outside Home Living in USA
FORES 109	58-59	No. of Females Outside Home Living in Other Countries
MDTH 110	60	No. of Male Children Who Died
FDTH 111	61	No. of Female Children Who Died
MSCRG 112	62	No. of Miscarriages
PREG 113	63	Pregnant Just Now? 1. Yes 2.No 9. NA
DBRTH 114	64-65	When Was Last Child Born. 1 = 1 year or less.
ALIVE 115	66	Is Last Child Living? 1. Yes 2. No 9. NA
ILNSS 116	67	During the Last Two Weeks How many People Were Ill?
ILNSS 117	68-69	What Illness? 00. Inapplicable 01. Respiratory Diseases (tonsillitis, Chest Colds, Bronchitis) 02. Stomach and Intestinal (Diarrhoea, Vomitting, Constipation, Ulcer, etc.) 03. Eye Disease 04. Skin Disease (Rash Redness, Skin Ulcer) 05. Congenital Disease 06. Chronic Disease 07. Pregnancy Problems 08. Contagious Childrens Disease (Measles, Smallpox, Mumps, etc.) 77. Other 98. More Than One Disease 99.NA

Section C

VLLGE 118	1	Village Name: 1. Bardala 2. 'Ain al Beda 3. Marj Najeh 4. Zbeidat 5. Jiftlik 6. Frush Bet Dajan 7. Other 8. 'Ain Shibli 9. NA
HOUSE 119	2-4	Household Number
PERSN 120	5-6	Person Number
QSECT 121	7	Questionnaire Section 3=C
CARD 122	8-9	Card Number 04.
ALTER 123	10	Alternative Place of Residence: 0. Inapplicable 1. Tubas 2. Tamun 3. Bet Dajan 4. Nablus 5. Bet Firiek 6. Jenin 7. Other 9. NA
PERD 124	11-12	No. of Months Spent on Farm Per Year?
HSE 125	13	Category of House: 1. Owned 2. Rented 3. Self Constructed Shack 4. Tent 7. Other 9. NA
TITLE 126	14	Title Deeds? 0. Inapplicable 1. Yes 2. No 9. NA
ROOMS 127	15	No. of Rooms in House (not including kitchen)
KTCHN 128	16	Kitchen Facility? 1. Inside House 2. Outside House 3. None 7. Other 9. NA
LTRNE 129	17	Latrine Facility? 1. Inside House 2. Outside House 3. None 4. Other 7. None 9. NA
HCNST 130	18	House Construction: 1. Stone Brick 2. Mud Brick 3. Concrete 4. Wood, Plastic and Miscellaneous Material 5. Tent 7. Other 9. NA
WATER 131	19	Source of Cooking and Drinking Water: 1. Piped into House From Grid 2. Piped Outside House From Grid 3. Bore Well 4. Spring-canal 5. Village Faucet 6. Drip Irrigation Pond 7. Other 8. From Settlement 9. NA
ELECT 132	20	Electricity Supply: 1. Grid Supply 2. Generator 3. None 7. Other 9. NA
OWNER 133	21	Owner of Generator: 0. Inapplicable 1. Self/family 2. Village 3. Private Owner 7. Other 9. NA
NOHRS 134	22-23	No. of Hours of Electricity per Day
CAR 135	24	Do You Have a Car? 1. Yes 2. No 9. NA
TV 136	25	Do You Have a TV? 1. Yes 2. No 9. NA
RADIO 137	26	Do You Have a Radio? 1. Yes 2. No 9. NA
FRDGE 138	27	Do You Have a Refridgerator? 1. Yes 2. No 9. NA
GAS 139	28	Do You Have Gas? 1. Yes 2. No 9. NA
SHPNG 140	29	Place of Shopping: 1. Local 2. Nablus 3. Tubas 4. Jericho 5. Tamun 7. Other 9. NA

Section D

VLLGE 141	1	Village Name: 1. Bardala 2. 'Ain al Beda 3. Marj Najeh 4. Zbeidat 5. Jiftlik 6. Frush Bet Dajan 7. Other 8. 'Ain Shibli 9. NA
HOUSE 142	2-4	Household Number
PERSN 143	5-6	Person Number
QSECT 144	7	Questionnaire Section 4=D
CARD 145	8-9	Card Number 05.
DNMSC 146	10-12	Number of Dunums Sharecropped. 999=NA
DNMCR 147	13-15	Number of Dunums Cash Rented. 999=NA
DNMOW 148	16-18	Number of Dunums Owned. 999=NA
DPRSN 149	19	Dispersion of Land: 1. Parcelled 2. Adjacent 9. NA
PRCLS 150	20-21	Number of Parcels. 99=NA
DSTNC 151	22-23	Distance from House (kilometre)
RGSTN 152	24	Form of Registration: 0. Inapplicable 1. Tabu 2. Tax Receipt Only 3. None 7. Other 9. NA
CTLLD 153	25-27	Cash Tenants Landlord:

000. Inapplicable	001. N A R Aamran	002. Saaid Abdallah
003. Assad Abdoh	004. Hasan Abessi	005. Abu Aizat
006. Hafez Aleyyan	007. Must. Abu Alweh	008. Fakri Aodeh
009. Farid Aodeh	010. Marzuq Aodeh	011. S M Aodeh
012. Y M Aodeh	013. Sulfeman Aossak	014. Najfi Atiyeh
015. Abu Authman	016. Y A Aziz	017. M A Abdallah
018. Mu. A Abdallah	019. Radi Abdallah	020. A R Abdallah
021. S A Abdeljabil	022. I Abu Aldub	023. Abu Handan
024. Abu Hasham	025. Abu Hatab	026. Aref Abu Jesh
027. M S Abu Jesh	028. Abu Ali Khderi	029. S Abu Kutaibah
030. M Abu Majid	031. Abu Mamduh	032. S Abu Manzur
033. I Abu Rajab	034. I Abu Rajab	035. M S Abu Rihan
036. K Abu Saada	037. M S Abu Rihan	038. H Abu Sati
039. Abu Shamat	040. Abu Sayyel	041. T Abu Thabet
042. H Abu Zaydeh	043. Agr. Eng Coop	044. Bassam Ahmad
045. Hamed Ahmad	046. Saleh Ahmad	047. Ahmad al Aaabed
048. Saïd al Aammuri	049. Sadeq al Aïssa	050. Husni al Aosak
051. Issa al Aamawe	052. Ali al Dabber	053. Abbas al Dammen
054. Adham al Dammen	055. A T al Dammen	056. Ghaleb al Dammen
057. Nawaf al Dammen	058. M A al Dammen	059. Mithqal al Dammen
060. Saaid al Dammen	061. S. al Dammen	062. M H S al Dreaf
063. Hassan al Fahd	064. A F al Ghazzawi	065. Abdoh al Ghazzawi
066. Jawad al Ghazzawi	067. W al Ghazzawi	068. W A al Ghazzawi
069. Abed al Hafez	070. Saaid al Hajji	071. Yehia al Hamameh
072. Ahmad al Hassan	073. Nimer al Hassan	074. Sadeq al Hassan
075. A R al Hussieni	076. Ibrahim Ali	077. Muhammed Ali
078. Saud Ali	079. H al Jawhari	080. Ainad al Masri
081. Aizzo al Masri	082. Ali R al Masri	083. F R al Masri
084. J O al Masri	085. J R al Masri	086. Nawwash al Masri
087. Walid al Masri	088. Wassef al Masri	089. Ahmad al Mbasslat
090. Falah al Naji	091. Sayyel al Nimer	092. M S al Qaffaf
093. Z W al Qamhawi	094. A K al Rahayle	095. A al Ratrut
096. Abed al Saaydeh	097. A al Saaydeh	098. al Saaid
099. H al Shakaa	100. Saaid al Tamimi	101. al Tayeh
102. al Turabi	103. Husni al Yazdi	104. Nimer al yussef
105. Samih al Zagha	106. M S al Zamel	107. Lufti al Zuabi

- | | | |
|------------------------|----------------------|--------------------------|
| 108. Rafiq al Zuabi | 109. Sidqi al Zuabi | 110. J M Abdel Aziz |
| 111. Mustafa Bakir | 112. M S Bsharat | 113. Ali Abdallah Dammen |
| 114. Ghalen Dammen | 115. S A Q Dammen | 116. M H Dammen |
| 117. M J Dirgham | 118. Darwish Fahd | 119. G I Fugha |
| 120. J A Fugha | 121. S A Ghani | 122. Hamdallah Haider |
| 123. Hassan Hamed | 124. S Hamed | 125. H M hassen |
| 126. Husni M Hassan | 127. Khalid Hidmi | 128. A R A Hussein |
| 129. Muhammed Hussein | 130. A F Ibrahim | 131. Mahmud Ibrahim |
| 132. Mahmud Ibrahim | 133. M M Ibrahim | 134. Muhammed Ibrahim |
| 135. Israeli Govt. | 136. Muhammed Issa | 137. Sidqi Jesh |
| 138. G I Abdel Karim | 139. I Abdel Karim | 140. M abdel Karim |
| 141. Bassel Kaanan | 142. Ibrahim Kassab | 143. Abed M Kayed |
| 144. M M Kayyili | 145. Ahmad Khader | 146. Ali Khalil |
| 147. Hassan Ali Khderi | 148. Yunes A Khderi | 149. Yussef A Khderi |
| 150. Ahmad Mahmud | 151. Amin Mahmud | 152. Muhammed Mahmud |
| 153. Yehia Mahmud | 154. Yussef Mahmud | 155. Turki Majed |
| 156. Khalid Massaud | 157. Sharif Massaud | 158. Abdel Mfaddi |
| 159. Adel Mfaddi | 160. Majid Mfaddi | 161. Yasser Mfaddi |
| 162. Abu F Mifleh | 163. Mahmud Mifleh | 164. Abdallah Mirai |
| 165. Ahmad Q Mirai | 166. M Yusef Musa | 167. Aqab Mustafa |
| 168. Ahmad Mustafa | 169. Mahmud Mustafa | 170. S al Haj Mustafa |
| 171. Sadeq Naaim | 172. Fathallah Naji | 173. Awad Nasan |
| 174. Mahmud Nayyef | 175. Ahmad Nayyef | 176. N Saleh Nimer |
| 177. Bashir Omar | 178. Ahmad al Qassem | 179. Amin M Qassem |
| 180. Mahmud Qassem | 181. M al Haj Qassem | 182. Ali al Haj Radwan |
| 183. M Abdel Rahamn | 184. M Abdel Rahman | 185. R Abdel Rahamn |
| 186. S Abdel Rahman | 187. Ahd Rashid | 188. Samih Rashid |
| 189. M Ali Rizq | 190. Khalid Rushdi | 191. Fayez Saaid |
| 192. Ahmad M Saleh | 193. I M Ali Saleh | 194. M I Saleh |
| 195. S S Sale | 196. Sayyid Saleh | 197. Sulieman Saleh |
| 198. Sulieman Saleh | 199. M Y Salameh | 200. Kheri A Salem |
| 201. Aziz Sarris | 202. Lubad Sarris | 203. Ahmad M Sawafta |
| 204. M I Sawafta | 205. M S Sawafta | 206. Muhammed Shael |
| 207. Yussef Shahin | 208. Jamal Sharif | 209. Jamal Sharif |
| 210. Hafez Shakaa | 211. Raja Shakaa | 212. A al K Smerat |
| 213. Abed Sulieman | 214. Abed Sulieman | 215. Mahmud Taha |
| 216. Aleyyan Tawfiq | 217. Ibrahim Tawfiq | 218. Radi Tawfiq |
| 219. Muhammed Thiban | 220. A R T Yuness | 221. Badia Yuness |
| 222. J al Haj Yuness | 223. Mahmud Yuness | 224. Ziyad |
| 777. Other | 999. Not Ascertained | |

LLLCN 154 28

Location of Landlord:

0. Inapplicable 1. Local Palestinian 2. Local Settlement 3. Nablus 4. Tamun 5. Tubas 6. Jerusalem 7. Other 8. Jericho 9. NA

PRDLS 155 29

Period of Lease (years) 9=NA

CPRDL 156 30-31

Cumulative Period Leased (years)

LLFRM 157 32

Does Landlord Farm:

0. Inapplicable 1. Yes 2. No 3. Don't Know 9.NA

LLWTR 158 33

Does Landlord Provide Water?

0. Inapplicable 1. Yes 2. No 9. NA

LLPMP 159 34

Does Landlord Provide Pump for Water?

LLSER 160 35

Does Landlord Provide Other Services?

0. Inapplicable 1. Yes 2. No 9. NA

INCRS 161 36

Would you Like to Increase the Amount of Land You Rent?

0. Inapplicable 1. Yes 2. No 9. NA

PRVNT 162	37	Does Lack of family Labour Prevent You From Renting More Land? 0. Inapplicable 1. Yes 2. No 9. NA
PRVNT 163	38	Does Lack of Wage Labour Prevent You From Increasing the Amount of Land Which you Rent? 0. Inapplicable 1. Yes 2. No 9. NA
PRVNT 164	39	Does Lack of Profit Prevent You Increasing the Amount of Land You Rent? 0. Inapplicable 1. Yes 2. No 9. NA
PRVNT 165	40	Do Other Reasons Prevent You From Increasing the Amount of Land You Rent? 0. Inapplicable 1. Yes 2. No 9. NA
SCPLL 166	41-43	Sharecropper's Landlords Name (See Landlord List)
SCLLL 167	44	Sharecroppers Landlords Location: 0. Inapplicable 1. Local Palestinian 2. Local Settlement 3. Nablus 4. Tamun 5. Tubas 6. Jerusalem 7. Other 8. Jericho 9. NA
SCLP 168	45	Period of Lease (years)
SCCLP 169	46-47	Cumulative Period of Lease (years)
SCPY 170	48-49	Percentage of Net Yield Paid to Landlord
DNMSC 171	50-51	No. Of Dunums Sharecropped 1981-82
DNMSC 172	52-53	No. of Dunums Sharecropped 1980-81
DNMSC 173	54-55	No. of Dunums Sharecropped 1979-80
DNMSC 174	56-57	No. of Dunums Sharecropped 1978-79
DNMSC 175	58-59	No. of Dunums Sharecropped 1977-78
LLFRM 176	60	Does Landlord Farm? 0. Inapplicable 1. Yes 2. No 9. NA
CTRCT 177	61	Type of Contract With Landlord: 0. Inapplicable 1. Handshake/verbal 2. Written 3. None 7. Other 9. NA
LLWTR 178	62	Does Landlord Provide Water? 0. Inapplicable 1. Yes 2. No 9. NA
LLPMP 179	63	Does Landlord Provide Pump for Water? 0. Inapplicable 1. Yes 2. No 9. NA
LLPMP 180	64	Does Landlord Provide Fuel for Pump? 0. Inapplicable 1. Yes 2. No 9. NA
LLSER 181	65	Does Landlord Provide Any Other Services? 0. Inapplicable 1. Yes 2. No 9. NA
SCSER 182	66	Do You Provide Your Own Labour? 0. Inapplicable 1. Yes 2. No 9. NA
SCSER 183	67	Do You Provide Family Labour? 0. Inapplicable 1. Yes 2. No 9. NA
SCSER 184	68	Do You Provide Day Labour? 0. Inapplicable 1. Yes 2. No 3. NA
SCSER 185	69	Do You Provide Any Other Services? 0. Inapplicable 1. Yes 2. No 9. NA
CHCON 186	70	Whay Changes Would You Like to see Introduced into Sharecropping? 0. Inapplicable 1. No Change 2. Landlord Employing Wage Labour 3. Landlord Sharing Drip Irrigation Costs 4. Greater Share to Cropper 5. Abolition of Sharecropping 7. Other 9. NA
INCRS 187	71	Would You Like to Increase the Amount of Land You Sharecrop 0. Inapplicable 1. Yes 2. No 9. NA

FMLAB 188	72	Do You Have Enough Family Labour to Work a Larger Farm? 0. Inapplicable 1. Yes 2. No 9. NA
CRLPLS 189	73	Do You Crop Lease Land? 0. Inapplicable 1. Yes 2. No 9. NA
NMCPL 190	74	Name of Crop Leaser: 0. Inapplicable 1. A S Abdoh 2. S M al Hawi 3. Israeli Cooperative 4. Fawzi Massaid 7. Other 9. NA
CLBUS 191	75	Leaser Business: 0. Inapplicable 1. Retailer 2. Wholesaler 3. Israeli Marketing Company 7. Other 9. NA
TYPCL 192	76	Category of Leaser: 0. inapplicable 1. Israeli Individual 2. Israeli Company 3. West Bank Arab 4. Israeli Arab 7. Other 9. NA
DNMLD 193	77-78	No. of Dunums Leased
CRPLD 194	79	Crop Leased: 0. Inapplicable 1. Citrus fruit 2. Other Fruit 3. Vegetables 4. Field Crop 7. Other 9. NA
FRQCL 195	80	Frequency of Crop Leasing: 0. Inapplicable 1. Once 2. Every Year 3. Most Years 4. Seldom 7. Other 9. NA
VLLGE 196	1	Village Name: 1. Bardala 2. 'Ain al beda 3. Marj najeh 4. Zbeidat 5. Jiftlik 6. Frush Bet Dajan 7. Other 8. 'Ain Shibli 9. NA
HOUSE 197	2-4	Household Number
PERSN 198	5-6	Person Number
QSECT 199	7	Qestionnaire Section 4=D
CARD 200	8-9	Card 06.
RSNCL 201	10	Reasons for Crop-leasing: 0. Inapplicable 1. Shortage of Labour 2. Day Labour Too Expensive 3. Less Work 4. More Profitable 7. Other 9. NA
SERLR 202	11	Services Provided to Leaser: 0. Inapplicable 1. None 2. Care of Crop Until Harvest 3. Water/irrigation 4. 2 + 3 7. Other 9. NA
SERLR 203	12	Services Provide by Leaser: 0. Inapplicable 1. Wage Labour 2. Harvesting 3. 1+2 4. None 7. Other 9. NA
FMWRK 204	13-14	No. Male family Workers (Full-time)
FMWRK 205	15-16	No. Female Family Workers (Full-time)
FMWRK 206	17-18	No. Male family Workers (Part-time)
FMWRK 207	19-20	No. Female Family Workers (part-time)
PRDSN 208	21	Period Seasonal Workers Work: 0. Inapplicable 1. Harvest 2. Sowing 3. 1+2 7. Other 9. NA
DYLAB 209	22-23	No. Male day labourers (full-time)
DYLAB 210	24-25	No. Female Day labourers (full-time)
DYLAB 211	26-27	No. Male Day Labourers (part-time)
DYLAB 212	28-29	No. Female Day Labourers (part-time)
DLRES 213	30	Residence of day labourers: 0. Inapplicable 1. Nablus 2. Tubas 3. Tamun 4. al Far'a 5. Nassarea/Aqrabanea 6. Local 7. Other 9. NA

RCRT 214	31	How Do You Recruit Workers? 0. Inapplicable 1. Labour Contractor 2. Personal Recruitment 3. People Asking 7. Other 9. NA
FTECH 215	32-33	How Do You Find Out About New Techniques? 00. Inapplicable 01. Radio or TV 02. Extension Agents 03. Charitable Societies 04. Marketing Cooperative 05. Landlord 06. Contact With Israeli Settlement 07. Other Farmers 08. Magazines 77. Other 99. NA
FSDS 216	34-35	How do You Find Out About New Seeds, Insecticides and Pesticides? 00. Inapplicable 01. Radio and TV 02. Extension Agents 03. Charitable Societies 04. Marketing Cooperative 05. Landlord 06. Contact With Israeli Settlement 07. Other Farmers 08. Magazines 09. Commission Agents 10. Product Dealer 77. Other 99. NA
AGGRP 217	36	Membership of Agricultural Organisation: 0. Inapplicable 1. Jericho marketing Cooperative 2. Village League 3. None 7. Other 9. NA
AGENG 218	37	How Often Do You Meet Agricultural Engineers? 1. Every Week 2. Every Month 3. Every 3 Months 4. Every 6 Months 5. Once per Year 6. Less Than Once Per Year 7. Other 8. Never 9. NA
LLADV 219	38	Does Landlord Advise on labour Use? 0. Inapplicable 1. Yes 2. No 9. NA
LLPRD 220	39	How Do You Agree What Crop to Produce With Your Landlord? 0. Inapplicable 1. Landlord Decides 2. Tenant Decides 3. Produce the Same Every Year 4. Mutual Agreement 7. Other 9. NA
LLVST 221	40	No. of Visits by Landlord During Sowing and Harvesting? 0. Inapplicable 1. Never 2. Every day 3. Once Per Week 4. Once Per Month 5. Less than Once Per Month 7. Other 9. NA

Section E

VLLGE 222	1	Village Name: 1. Bardala 2. 'Ain al Beda 3. Marj Najeh 4. Zbeidat 5. Jiftlik 6. Frush bet Dajan 7. Other 8. 'Ain Shibli 9. NA
HOUSE 223	2-4	Household Number
PERSN 224	5-6	Person Number
QSECT 225	7	Questionnaire Section 5=E
CARD 226	8-9	Card 07.
LLFRM 227	10-12	How Much land Do You Own?
ARABL 228	13-15	No. Of Dunums Arable
NONAR 229	16-18	No. of Dunums of non-arable Land
LCNLD 230	19	Location of land: 0. Inapplicable 1. Bardala 2. 'Ain al Beda 3. Marj Najeh 4. Zbeidat 5. Jiftlik 6. Frush Bet Dajan 7. Other 8. 'Ain Shibli 9. NA
HRTGE 231	20-23	How Much Land Did You Inherit?
NHRTG 232	24-26	No. Dunums non-inherited Land

BGHT 233	27	When was This Land Bought? 0. Inapplicable 1. Before 1948 2. After 1948 but Before 1967 3. 1967-70 4. 1970-75 5. 1975- 80 6. 1980-83 9. NA
TITLE 234	28	Form of Title Deed? 0. Inapplicable 1. Tabu 2. Tax Receipt Only 3. 1+2 7. Other 9. NA
CNTRL 235	29-30	No. of Cash Rentals
TARNT 236	31-33	Total Area Cash Rented
CTSER 237	34	Services to Cash tenant: 0. Inapplicable 1. None 2. Water 3. Pump 4. Fuel for Pump 5. 2 to 4 7. Other 9. NA
SHCRP 238	35-36	No. of Sharecroppers
TOTSP 239	37-40	Total Area Sharecropped
CNTCT 240	41	Form of Contract With Sharecropper: 0. Inapplicable 1. Verbal Contract 2. Written 3. None 4. More Than One 7. Other 9. NA
SCSER 241	42	Services to Sharecropper: 0. Inapplicable 1. None 2. Water 3. Pump 4. Fuel for Pump 7. Other 9. NA
SCSER 242	43	Services Provided by Sharecropper: 0. Inapplicable 1. Own Labour 2. Family Labour 3. Wage Labour 4. 1+2 5. 1+3 6. 1+2+3 7. Other 9. NA
YRSSC 243	44-45	No. of Years Renting to Sharecroppers?
ADVSE 244	46	Do You Advise on Production Techniques? 0. Inapplicable 1. Yes 2. No 9. NA
FRQNC 245	47	Frequency of Visits to Farm: 0. Inapplicable 1. Never 2. Every Day 3. Once Per Week 4. Once Per Fortnight 5. Once Per Month 6. Less Than Once Per Month 7. Other 9. NA
FARM 246	48-50	No. of Dunums Farmed?
FLCN 247	51	Farm Location: 0. Inapplicable 1. Bardala 2. 'Ain al Beda 3. Marj Najeh 4. Zbeidat 5. Jiftlik 6. Frush Bet Dajan 7. Other 8. 'Ain Shibli 9. NA
FMNGR 248	52	Do You Have a Farm Manager? 0. Inapplicable 1. Yes 2. No 9. NA
CRPLS 249	53	Do You Crop Lease? 0. Inapplicable 1. Yes 2. No 3. NA
CLNME 250	54	Crop Leasers Name: 0. Inapplicable 1. A S Abdoh 2. S M al Hawi 3. Israeli Cooperative 4. Fawzi Massaid 7. Other 9. NA
CLBUS 251	55	Crop Leasers Business: 0. Inapplicable 1. Retailer 2. Wholesaler 3. Israeli Company 7. Other 9. NA
DNMLD 252	56-58	No. Dunums Leased
CRPLD 253	59	Crop Leased: 0. Inapplicable 1. Citrus Fruit 2. Other Fruit 3. Vegetables 4. Field Crops 7. Other 9. NA
FRQLD 254	60	Frequency of Leasing: 0. Inapplicable 1. Once 2. Every Year 3. Most Years 4. Seldom 9. NA
RSNLD 255	61	Reason For Crop Leasing: 0. Inapplicable 1. Shortage of Labour 2. Labour too Expensive 3. Less Work 4. To Raise Cash 5. More Profitable 7. Other 9. NA

SERLE 256	62	Services of Leasee: 0. Inapplicable 1. None 2. Water/irrigation 3. Care of Crop Until Harvest 4. 2+3 7. Other 9. NA
SERLR 257	63	Services of Leaser: 0. Inapplicable 1. Wage Labour 2. Harvesting 3. 1+2 4. None 7. Other 9. NA
FMWRK 258	64-65	No. of Male Family Workers (full-time)
FMWRK 259	66-67	No. of Female Family Workers (full-time)
FMWRK 260	68-69	No. of Male Family Workers (part-time)
FMWRK 261	70-71	No. of Female Family Workers (part-time)
WRKR 262	72-73	No. Of Male Day labourers (full-time)
WRKR 263	74-75	No. of Female Day labourers (full-time)
WRKR 264	76-77	No. of Male Day labourers (part-time)
WRKR 265	78-79	No. of Female Day labourers (part-time)
VLLGE 266	1	Village name: 1. Bardala 2. 'Ain al beda 3. Marj Najeh 4. Zbeidat 5. Jiftlik 6. Frush Bet Dajan 7. Other 8. 'Ain Shibli 9. NA
HOUSE 267	2-4	House Number
PERSN 268	5-6	Person Number
QSECT 269	7	Questionnaire Section 5=E
CARD 270	8-9	Card 08.
PRDSL 271	10	Period Seasonal Workers Work: 0. Inapplicable 1. Harvest 2. Sowing 3. 1+2 7. Other 9. NA
DLRES 272	11	Residence of Day labourers: 0. Inapplicable 1. Nablus 2. Tubas 3. Tamun 4. al Far'a 5. Nassarea/Aqrabanea 6. Local 7. Other 9. NA
RCRT 273	12	How Do You Recruit Workers: 0. Inapplicable 1. Labour Contractor 2. Personal Recruitment 3. People Asking 7. Other 9. NA
FTECH 274	13-14	How Do You Find Out About New Farm techniques: 01. Radio and TV 02. Extension Agents 03. Charitable Societies 04. Marketing Cooperative 05. Contact With Israeli Settlements 06. Other Farmers 07. Magazines 77. Other 99. NA
FSDS 275	15-16	How Do You Find Out About New Seeds, Insecticides and Fertilizers: 01. Radio and TV 02. Extension Agents 03. Charitable Societies 04. Marketing Cooperative 05. Contact With Israeli Settlements 06. Other Farmers 07. Magazines 08. Commission Agents 09. Product Dealers 77. Other 99. NA
AGMAG 276	17	What Agricultural Magazines do You Read: 1. None 2. Pamphlets From Israeli Government 3. Jordanian Pamphlets 7. Other 9. NA
AGGRP 277	18	Membership of Agricultural Organisation: 1. Jericho Marketing Cooperative 2. Village League 3. None 7. Other 9. NA
AGENG 278	19	How Often Do You Meet Agricultural Extension Agents: 1. Every Week 2. Every Month 3. Every 3 Months 4. Every 6 Months 5. Once Per Year 6. Less Than Once Per Year 7. Other 8. Never 9. NA

Section F

VLLGE 279	1	Village Name: 1. Bardal 2. 'Ain al beda 3. Marj najeh 4. Zbeidat 5. Jiftlik 6. Frush Bet Dajan 7. Other 8. 'Ain Shibli 9. NA
HOUSE 280	2-4	Household Number
PERSN 281	5-6	Person Number
QSECT 282	7	Questionnaire Section 6=F
CARD 283	8-9	Card 09.
TOMDM 284	10-11	No. of Dunums of Tomatoes
TOMSC 285	12-13	SOurce of Seed/lings (See Code List)
01. Asaid Saaid		02. Abu Hantash
04. Abu Samrah		03. Abu Hasham
07. S M al Hawi		05. Abu Shammat (his)
10. al Nasser		06. Abu Shammat (nursery)
13. al Salem		08. al Ittifaq
16. Agricultural Grp		09. al Masri
19. Israeli Cooperative		11. al Saadeh
22. M Salameh		12. al Shaarawi
25. Ashdod		14. al Shakaa
28. Israel		15. Agr. Engineers nursery
31. Jet		17. Amer Nursery
34. Khishek		18. Y Abdel Aziz
37. Qalansuah		20. Fawzi Massaud
40. Taybeh		21. Misbah Hisbeh
43. Tulkarm		23. Shantir hisbeh
		24. Abed Sulieman
		26. Baqah
		27. Betah Tikua
		29. Jenin
		30. Jericho
		32. Qalqilya
		33. Kufr Khalil
		35. Nahhas
		36. Qaadan
		38. Qalqilyah
		39. Sabri
		41. Tireh
		42. Tubas
		77. Other
		99 NA
TOMEX 286	14-15	Percentage Exported
TOMIR 287	16	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
CUCDM 288	17-18	No. Dunums of Cucumber
CUCSC 289	19-20	Source Seed/ling
CUCEX 290	21-22	Percentage Exported
CUCIR 291	23	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
EGGDM 292	24-25	No. Dunums Eggplant
EGGSC 293	26-27	Source of Seed/lings
EGGEX 294	28-29	Percentage Exported
EGGIR 295	30	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
CRGT 296	31-32	No. Dunums Courgette
CRGTSC 297	33-34	Source of Seed/ling
CRGTEX 298	35-36	Percentage Exported
CRGTIR 299	37	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
HTPDM 300	38-39	No. Dunums Hot Pepper
HTPSC 301	40-41	Source Seed/ling
HTPEX 302	42-43	Percentage Exported
HTPIR 303	44	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA

SWPDM 304	45-46	No. of Dunums of Sweet Pepper
SWPSC 305	47-48	Seed/ling
SWPEX 306	49-50	Percentage Exported
SWPIR 307	51	Type of Irrigation Sytem: 1, Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
BBNDM 308	52-53	No. Dunums of Broad Beans
BBNSC 309	54-55	Source Seed/ling
BBNEX 310	56-57	Percentage Exported
BBNIR 311	58	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
BNSDM 312	59-60	No. Dunums Beans
BNSSC 313	61-62	Source Seed/ling
BNSEX 314	63-64	Percentage Exported
BNSIR 315	65	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
SWCDM 316	66-67	No. Dunums of Sweet Corn
SWCSC 317	68-69	Source Seed/ling
SWCEX 318	70-71	Percentage Exported
SWCIR 319	72	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
JEWDM 320	73-74	No. Dunums Jews Mallow
JEWSC 321	75-76	Source Seed/ling
JEWEX 322	77-78	Percentage Exported
JEWIR 323	79	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
VLLGE 324	1	Village Name: 1. Bardala 2. 'Ain al Beda 3. Marj Najeh 4. Zbeidat 5. Jiflik 6. Frush Bet Dajan 7. Other 8. 'Ain Shibli 9. NA
HOUSE 325	2-4	Household Number
PERSN 326	5-6	Person Number
QSECT 327	7	Questionnaire Section 6=F
CARD 328	8-9	Card 10.
POTDM 329	10-11	No. Dunums Potatoes
POTSC 330	12-13	Source Seed/ling
POTEX 331	14-15	Percentage Exported
POTIR 332	16	Type of Irrigation System 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
ONNDM 333	17-18	No. Dunums Onion
ONNSC 334	19-20	Source Seed/ling
ONNEX 335	21-22	Percentage Exported
ONNIR 336	23	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
GARDM 337	24-25	No. Dunums Garlic
GARSC 338	26-27	Source Seed/ling
GAREX 339	28-29	Percentage Exported
GARIR 340	30	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+# 9. NA
OTHDM 341	31-32	No. Dunum Other Vegetable
OTHSC 342	33-34	Source Seed/ling

OTHEX 343	35-36	Percentage Exported
OTHIR 344	37	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
LEMDM 345	38-39	No. Dunum Lemon
LEMSC 346	40-41	Source Sapling
LEMEX 347	42-43	Percentage Exported
LEMIR 348	44	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
ORGDM 349	45-46	No. Dunums Orange
ORGSC 350	47-48	Source Sapling
ORGEX 351	49-50	Percentage Exported
ORGIR 352	51	Type of Irrigation System 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
MANDM 353	52-53	No. Dunums Mandarin
MANSC 354	54-55	Source Sapling
MANEX 355	56-57	Percentage Exported
MANIR 356	58	Type of Irrigation System: 1, Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6.1+2+3 7. Other 8.1+3 9. NA
CLMDM 357	59-60	No. Dunums Clementine
CLMSC 358	61-62	Source Sapling
CLMEX 359	63-64	Percentage Exported
CLMIR 360	65	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
GFRDM 361	66-67	No. Dunums Grapefruit
GRFSC 362	68-69	Source Sapling
GRFEX 363	70-71	Percentage Exported
GRFIR 364	72	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
BANDM 365	73-74	No. Dunums Banana
BANSC 366	75-76	Source Sapling
BANEX 367	77-78	Percentage Exported
BANIR 368	79	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
VLLGE 369	1	Village Name: 1. Bardal 2. 'Ain al Beda 3. Marj Najeh 4. Zbeidat 5. Jiftlik 6. Frush Bet Dajan 7. Other 8. 'Ain Shibli 9. NA
HOUSE 370	2-4	Household Number
PERSN 371	5-6	Person Number
QSECT 372	7	Questionnaire Section 6=F
CARD 373	8-9	Card 11.
OFRDM 374	10-11	No. Dunums Other Fruit
OFRSC 375	12-13	Source Sapling
OFREX 376	14-15	Percentage Exported
OFRIR 377	16	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
CRNDM 378	17-18	No. Dunums of Corn
CRNSC 379	19-20	Source Seed
CRNEX 380	21-22	Percentage Exported

CRNIR 381	23	Type Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
WHTDM 382	24-25	No. Dunums of Wheat
WHTSC 383	26-27	Source Seed
WHTEX 384	28-29	Percentage Exported
WHTIR 385	30	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
BARDM 386	31-32	No. Dunums Barley
BARSC 387	33-34	Source Seed
BAREX 388	35-36	Percentage Exported
BARIR 389	37	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
OFCDM 390	38-39	No. Dunums of Other Field Crops
OFCSC 391	40-41	Source Seed
OFCEX 392	42-43	Percentage Exported
OFCIR 393	44	Type of Irrigation System: 1. Drip Irrigation 2. Furrow 3. Sprinkler 4.1+2 5. 2+3 6. 1+2+3 7. Other 8. 1+3 9. NA
DNMMO 394	45-46	No. Dunums Harvested More Than Once Per Year
HHCON 395	47-48	Crops For Household Consumption: 00. Inapplicable 01. Onion 02. Garlic 03. Potatoes 04. Lentils 05. Onion + Garlic 06. Onion + Garlic + Potatoes 07. Onion + Garlic + Potatoe + Lentils 08. Garlic + Potatoes 09. Garlic + Potatoes + Lentils 10. Potatoes + Lentils 11. Potatoes + Lentils + Onions 12. Potatoes + Onions 13. Onion + Lentil 14. Onion + Garlic + Lentil 15. Garlic + Lentil 16. None 77. Other 99. NA
WTRSC 396	49	Water Source: 1. Bore Well 2. Spring/canal 3. Israeli Grid 7. Other 9. NA
OWNAW 397	50	Owner of Bore-well: 0. Inapplicable 1. Landlord 2. Self 3. Local Person 4. Village 5. Absentee 7. Other 9. NA
SHRTG 398	51	Do You Suffer From Water Shaotages: 1. Yes 2. No 9. NA
SHRTG 399	52	What Time of the Year do You Have Water Shortage: 0. Inapplicable 1. Summer 2. Autumn 3. Winter 4. Spring 7. Other 9. NA
OWNSP 400	53	Owner of Spring: 0. Inapplicable 1. Landlord 2. Self 3. Local Person 4. Village 7. Other 9. NA
WSTRG 401	54	Water Storage on Farm: 0. Inapplicable 1. Drip Irrigation Pond 2. Tank 3. Oil Drums 4. None 7. Other 9. NA
ALTSC 402	55	Alternative Water Source: 1. Yes 2. No 9. NA
MNTNC 403	56	Who Maintains Water System: 0. Inapplicable 1. Landlord 2. Self 3. Village 4. Private Owner 7. Other 9. NA
MCEQU 404	57	Mechanical Equipment Owned: 1. Tractor 2. Accessories for Tractor 3. 1+2 4. None 7. Other 9. NA

AGEEQ 405	58-59	Age of Equipment (years)
RNTEQ 406	60	Rented Equipment: 0. Inapplicable 1. Tractor 2. Accessories for Tractor 3. 1+2 4. None 7. Other 9. NA
RNTER 407	61	Rentier of Equipment: 0. Inapplicable 1. Landlord 2. Other Farmer 3. Commercial Rental Company 4. Israeli Settlement 7. Other 9. NA
TECIM 408	62	Technical Improvements Desired: 1. None 2. Tractor 3. Drip Irrigation 4. Improve Irrigation reach 5. Drip Irrigation Pond 6. Plastic House 7. Other 8. Plastic Sheeting 9. NA
BUYIN 409	63-64	Wher Do You Buy Insecticides and Fertilizers (See Seedling Source Code)
ANML 410	65	Do You Have Animals: 1. Yes 2. No 9. NA
GOATS 411	66-68	No. of Goats
GTMLK 412	69-70	Kilos Milk Per Day
GTMLK 413	71	What Do You Make From Milk: 0. Inapplicable 1. Nothing 2. Yoghourt 3. Cheese 4. 2+3 7. Other 9. NA
SALEP 414	72	How Do You Sell Produce: 0. Inapplicable 1. Don't Sell 2. To a Merchant 3. At Market 4. Privately 7. Other 9. NA
PSTRE 415	73-74	No. Of Months Under Pasture Per Year
VLLGE 416	1	Village Name: 1. Bardala 2. 'Ain al Beda 3. Marj Najeh 4. Zbeidat 5. Jiftlik 6. Frush Bet Dajan 7. Other 8. 'Ain Shibli 9. NA
HOUSE 417	2-4	Household Number
PERSN 418	5-6	Person Number
QSECT 419	7	Questionnaire Section 6=F
CARD 420	8-9	Card Number 12.
DRCTL 421	10-11	No. of Diary Cattle
BFCTL 422	12-13	No. of Beef Cattle
CMLK 423	14-15	No. of Kilos of Milk Per Day
CMLK 424	16	Milk Produce: 0. Inapplicable 1. None 2. Yoghourt 3. Cheese 4. 2+3 7. Other 9. NA
SALEP 425	17	Where Do You Sell Produce: 0. Inapplicable 1. Don't Sell 2. To Merchant 3. At Market 4. Privately 7. Other 9. NA
PSTRE 426	18-19	No. of Months Under Pasture Per Year
SHEEP 427	20-22	No. of Sheep
SHMLK 428	23-24	No. Kilos Per Day
SHMLK 429	25	Milk Produce: 0. Inapplicable 1. None 2. Yoghourt 3. Cheese 4. 2+3 7. Other 9. NA
SALEP 430	26	Where Do You Sell Produce: 0. Inapplicable 1. Don't Sell 2. To Merchant 3. At Market 4. Privately 7. Other 9. NA
PSTRE 431	27-28	No. of Months Under Pasture
BCHCK 432	29-30	No. Broiler Chickens
LCHCK 433	31-32	No. Layer Chickens
CHEGG 434	33-34	No. Eggs Per Day
FDDRP 435	35-36	No. of Dunums for Fodder Production

FDDRP 436	37	Fodder Crop Produced: 0. Inapplicable 1. None 2. Oats 3. Barley 4. Wheat 7. Other 9. NA
FDDRP 437	38	Period Fodder Produced For: 0. Inapplicable 1. Spring 2. Summer 3. Autumn 4. Winter 7. Other 9. NA
TYCON 438	39-40	Type of Concentrate Used: 0. Inapplicable 1. Tearobet 2. None 3. 677 7. Other 9. NA
CONBT 439	41	Where is Concentrate Purchased: 0. Inapplicable 1. Israeli Company 2. Israeli Arab 3. Commission Agent 4. West Bank Merchant 7. Other 9. NA
SLWSL 440	42	Do You Sell Direct To Wholesaler: 0. Inapplicable 1. Yes 2. No 9. NA
CMAGT 441	43-44	Name of First Commission Agent (See Code List)
01. Abu al Jud		02. Abu al Walid
04. Abu Gharib		05. G Abu Hantash
07. Abu Hisham		08. Abu Shammatt
10. K al Awad		11. al Fahmawi
13. al Jallad		14. J R al Masri
16. Usama al Masri		17. al Shaarawi
19. Ashur		20. Y Abdel Aziz
22. Muhammad Haimur		23. Afif Halaweh
25. Majid Y Jabber		26. Misbah Y Jabber
28. M S Muannes		29. Yusef Muhammad
31. al Haj Nafea		32. al Haj Nasser
34. Mahmud Salameh		35. Saleh Saleh
37. Hussein Shakaa		38. Raja Shakaa
40. Shawwa		41. Abed Sulfeman
43. Yusef Taher		44. Majid Yusef
77. Other		45. Misbah Yusef
		99. Not Ascertained
CMAGT 442	45-46	Commission Paid (%)
CMAGT 443	47	Is Commission Agent Your Landlord: 1. Yes 2. No 9. NA
CMAGT 444	48-49	Name of Second Commission Agent (See Code List)
CMAGT 445	50-51	Commission Paid (%)
CMAGT 446	52	Is Commission Agent Your Landlord: 1. Yes 2. No 9. NA
JORCM 447	53	When Your Market in Jordan is Your Commission Agent A: 1. West Banker 2. Jordanian 3. None 7. Other 9. NA
CORGN 448	54	Where Do You Get Your Certificates of Origin: 1. Landlord 2. Marketing Cooperative 7. Other 9. NA
DFMRK 449	55	Difficulties in Marketing in Jordan: 1. None 2. Restriction on Quota 3. Delays 4. Transport Costs 5. Limitation on Transport 6. Obtaining Permission For Truck and Driver 7. Other 9. NA
DBLCN 450	56	Do You Pay a Double Commission When You Market in Jordan; 1. Yes 2. No 9. NA

CAPUR 451	57	Do You Purchase Fertilizers and Insecticides From Your Commission Agent: 1. Yes 2. No 9. NA
CAPUR 452	58	Do You Purchase Seeds/lings From Commission Agent: 1. Yes 2. No 9. NA
CAPUR 453	59	Do You Purchase Irrigation Equipment From Commission Agent: 1. Yes 2. No 9. NA
CAPUR 454	60	Do You Purchase Packing Boxes From Commission Agent: 1. Yes 2. No 9. NA
CAPUR 455	61	Does Commission Agent Provide Transport: 1. Yes 2. No 9. NA
CAPUR 456	62	Does Commission Agent Provide Loans: 1. Yes 2. No 9. NA
JMRKT 457	63	Do You Use Jewish Marketing Company 1. Yes 2. No 9. NA
INVST 458	64	Where Do You Get Investment Funds 1. Loan from Commission Agent 2. Loan From Landlord 3. Family 4. Savings 5. Credit 6. Loan From Cooperative 7. Other 9. NA
MNINV 459	65-66	Main Investment Over Last Five Years 01. None 02. Drip Irrigation 03. Tractor 04. Drip Irrigation Pond 05. 2+3 06. 2+3+4 07. 3+4 08. 2+4 77. Other 99. NA
PLINV 460	67	Planned Investments 1. Tractor 2. Drip Irrigation 3. Drip Irrigation Pond 4. None 7. Other 9. NA
EXPRP 461	68-70	No. Dunums of Arable Land Expropriated
EXPRP 462	71-73	No. Dunums Non-arable Land Expropriated
EXLOC 463	74	Location of Expropriated Land 1. Bardala 2. 'Ain al Beda 3. Marj Najeh 4. Zbeidat 5. Jiftlik 6. Frush Bet Dajan 7. Other 8. 'Ain Shibli 9. NA
PRNTU 464	75	Present Use of Expropriated Land 1. Military Zone 2. Kibbutz/Settlement 7. Other 9. NA
EXCRT 467	76	Did You Go to Court Over Expropriation 1. Yes 2. No 9. NA
STMNT 468	77	Type of Contact With Settlements 1. Work 2. Shopping 3. Water 4. None 7. Other 9. NA

Section G

VLLGE 467	1	Village Name: 1. Bardala 2. 'Ain al beda 3. Marj Najeh 4. Zbeidat 5. Jiftlik 6. Frush Bet Dajan 7. Other 8. 'Ain Shibli 9. NA
HOUSE 468	2-4	Household Number
PERSN 469	5-6	Person Number
QSECT 470	7	Questionnaire Number 7=G
CARD 471	8-9	Card Number 13.
UNEMP 472	10-11	Last Job (unemployed) 1. Labourer 2. Skilled Worker 3. Professional 4. Self-employed 5. Clerical 7. Other 9. NA

EMPLD 473	11	Job (employed) 1. Labourer 2. Skilled Worker 3. Professional 4. Self-employed 5. Clerical 7. Other 9. NA
WK SCT 474	12	Work Sector 1. Industry 2. Construction 3. Agriculture 4. Government 5. Commerce 6. Social Services 7. Other 9. NA
WKPLC 475	13	Place Worked 1. Israel 2. Israeli Settlement 3. West Bank 4. Abroad 7. Other 9. NA
SUBCN 476	14	Do You Work For a Subcontractor 1. Yes 2. No 9. NA
SUBCC 478	15	Subcontractor Category 1. West Bank Palestinian 2. Israeli Arab 3. Israeli 7. Other 9. NA
NOWKS 479	16-17	No. Weeks Worked Last Year
JBHOW 480	18	How Did You Get Last Job 1. Labour Exchange 2. Subcontractor 3. Family/friend 4. Application Form 5. Direct Application 7. Other 9. NA
YRWRK 481	19-20	No. of Years Worked in Last/Present Job
PSTJB 481	21	Second Last Job 1. Labourer 2. Skilled Worker 3. Professional 4. Self-employed 5. Clerical 6. Farmer 7. Other 9. NA
PSTJB 482	22	Sector Worked 1. Industry 2. Construction 3. Agriculture 4. Government 5. Commerce 6. Social Services 7. Other 9. NA
PSTJB 483	23	Place Worked 1. Israel 2. Israeli Settlement 3. West Bank 4. Abroad 7. Other 9. NA
PSTJB 484	24	Period Worked 1. Less Than One Month 2. 1-3 months 3. 3-6 Months 4. 6-12 Months 5. 1-2 Years 6. 2+ Years 9. NA
PSTJB 485	25	Third Last Job 1. Labourer 2. Skilled Worker 3. Professional 4. Self-employed 5. Clerical 6. Farmer 7. Other 9. NA
PSTJB 486	26	Sector Worked 1. Industry 2. Construction 3. Agriculture 4. Government 5. Commerce 6. Social Services 7. Other 9. NA
PSTJB 487	27	Place Worked 1. Israel 2. Israeli Settlement 3. West bank 4. Abroad 7. Other 9. NA
PSTJB 488	28	Period Worked 1. Less Than One Month 2. 1-3 Months 3. 3-6 Months 4. 6-12 Months 5. 1-2 Years 6. 2+ Years 9. NA
PSTJB 489	29	Fourth Last Job 1. Labourer 2. Skilled Worker 3. Professional 4. Self-employed 5. Clerical 6. Farmer 7. Other 9. NA

PSTJB 490	30	Sector Worked 1. Industry 2. Construction 3. Agriculture 4. Government 5. Commerce 6. Social Services 7. Other 9. NA
PSTJB 491	31	Place Worked 1. Israel 2. Israeli Settlement 3. West Bank 4. Abroad 7. Other 9. NA
PSTJB 492	32	Period Worked 1. Less Than One Month 2. 1-3 Months 3. 3-6 Months 4. 6-12 Months 5. 1-2 Years 6. 2+ Years 9. NA
PSTJB 493	33	Fifth Last Job 1. Labourer 2. Skilled Worker 3. Professional 4. Self-employed 5. Clerical 6. Farmer 7. Other 9. NA
PSTJB 494	34	Sector Worked 1. Industry 2. Construction 3. Agriculture 4. Government 5. Commerce 6. Social Services 7. Other 9. NA
PSTJB 495	35	Place Worked 1. Israel 2. Israeli Settlement 3. West Bank 4. Abroad 7. Other 9. NA
PSTJB 496	36	Period Worked 1. Less Than One Month 2. 1-3 Months 3. 3-6 Months 4. 6-12 Months 5. 1-2 Years 6. 2+ Years 9. NA

APPENDIX 2

الملتقى الفكري العربي

بحث أ. ب (١)

القسم أ :

اسم القرية :
 رقم البيت :
 رقم الشخص :
 تاريخ الاستبيان :
 رقم الفريق :
 رقم معبئه الاستبيان :

القسم أ :-

تتم تعبئة هذا النموذج من قبل جميع افراد العائلة فوق سن الخامسة عشرة من الجنسين ذكورا واناثا .

١- هل انت رب العائلة ؟ نعم / لا

٢- اذا لا ، ما هي علاقتك برب العائلة ؟

٣- الاسم السن الجنس الحالة الاجتماعية

٤-

اسم الحمولة	اسم العشرة
-------------	------------

٥- هذا السؤال موجه للاناث فقط

اسم الحمولة قبل الزواج	اسم العشرة قبل الزواج
------------------------	-----------------------

٦- في حالة كون رب العائلة متزوجة ارملة ام مطلقة :

ما هي علاقة القرابة بينك وبين زوجك ؟ مثلا: هل هو ابن عم لزم / غير لزم ، ابن خال لزم او / غير لزم ، من نفس الحمولة ، لاطة قرابة .

٧-

هل انت لاجئ	ما هو بلدك الاولي	ما هو عملك او عمل والدك في البلد الاولي
-------------	-------------------	--

- ٨- (أ) هل بإمكانك القراءة والكتابة ؟ نعم / لا
 ٨- (ب) هل تقرأ الصحف اليومية ؟ نعم / لا
 ٨- (ج) هل تلم بمبادئ الرياضيات كالجمع والطرح والقسمة ؟ نعم / لا
 ٩- هل ذهبت الى المدرسة ؟
 -١٠

كم كان عمرك عندما ما هو اخر صف دراسي هل حصلت على هل اكملت دراستك
 تركت المدرسة اكملة التوجيهي بعد التوجيهي؟
 ما هي المؤهلات التي حصلت عليها؟

- ١١- (أ) لماذا تركت المدرسة ؟
 ١١- (ب) هل تستفيد من مؤهلاتك العلمية بعد التوجيهي ؟ نعم / لا
 ولماذا لا تستفيد منها ؟

١٢- اين تعلمت القراءة والكتابة في حالة لم تتعلمها بمدرسة ؟

ككتاب محو امية غير ذلك (حدد)

١٣- (أ) هل التحقت بدورة تدريب لتؤهلك في عملك ؟

اين ما هي مدة دورة من نظم دورة ما مدى استفادتك من التدريب

١٤- هل تعمل حاليا ام انك عاطل عن العمل ؟

يعمل عاطل عن العمل

١٥- اذا كنت عاطلا عن العمل ، متى عملت اخر مرة ؟ ماذا كان عملك ؟

هل تبحث عن عمل ؟

تاريخ تركك العمل ما هو اخر عمل قمت به هل تبحث حاليا عن عمل

١٦- اذا كنت لا تبحث عن عمل ، فهل هناك اية اسباب تمنعك عن العمل او عن البحث عن عمل ؟ مثلا: بسبب كونك ربة منزل ، ام بسبب كبر السن ، العجز عن العمل ... او بسبب اي شئ آخر ؟ (حدد) .

١٧ - اذا كنت تعمل ، ففي اي قطاع تعمل؟ وهل تعمل لحسابك الخاص؟ ام هل تعمل مقابل اجر؟

طبيعة العمل زراعة صناعة بناء تجارة

عامل بالاجرة

عامل لحسابك الخاص

تقوم بتوظيف عمال بالاجرة

ملاحظة :

اذا كان الشخص عامل بالاجرة او عاطل عن العمل حسب ما جاء في السؤال (١٤) فالرجاء تعبئة النموذج (و) بعد تعبئة هذا النموذج مباشرة .

١٨ - اذا كنت تعمل بالزراعة ولست عامل مأجور:
هل انت :

طريقة الحيابة

مستأجر

محاصص/ مزارع

مالك صغير

مالك

ملاحظة :-

الرجاء التوضيح اذا كان الشخص ينطبق عليه اكثر من واحد من اي البنود الموجودة في سؤال (١٨) . نعني في هذا الاستبيان بمصطلح المالك : الشخص الذي يؤجر اما مزارعه / اي محاصصه او نقدا ونعني بمصطلح المالك الصغير : الشخص الذي يعمل على الارض التي يملكها . اما اذا كان الشخص مالكا صغيرا ، او مزارعا / محاصصا او مستأجرا فالرجاء تعبئة النموذج (د) بعد لنموذج مباشرة . اذا كان الشخص مالكا : الرجاء تعبئة النموذج (هـ) بعد هذا النموذج مباشرة .

١٩ - اذا كنت تعمل لحسابك الخاص في مجال غير المجال الزراعي :

هل مكان العمل في منزلك	نوع العمل	عدد افراد العائلة المعاونين لك
	صناعة	
	تجارة	
	بناء	
	مجالات اخرى	

٢٠ - في حالة توظيفك لعمال بالاجرة اي عمال مياومة في غير مجال الزراعة ؟

مكان العمل	نوع العمل	عدد العمال
	صناعة	
	بناء	
	تجارة	
	مجالات اخرى	

رقم القرية :
 رقم البيت :
 رقم الشخص :
 رقم الفريق :
 رقم معبئ الاستبيان :

القسم ب : -

تم تعبئة اسئلة هذا النموذج من قبل جميع النساء في الاسرة اللواتي لديهن
 ابناء / بنات .

١- ما هو عدد اولادك الذكور الذين يعيشون معك في البيت ؟ اذكرى اسماءهم
 واعمارهم .

الاسم

العمر

المجموع

٢ - ما هو عدد بناتك الذين يعيشون معك في البيت ؟ اذكرى اسماءهن
 واعمارهن ؟

الاسم

العمر

المجموع

٣- ما هو عدد اولادك الذين يعيشون في اماكن اخرى ؟ اذكرى اسماءهم
 واعمارهم واماكن عيشهم .

الاسم

العمر

المدينة

البلد

هل يحمل هويه
 اسرئيليه ؟ اذا
 لا: اية جنسية يحمل

ماذا يشتغل

المجموع

٤- ما هو عدد بناتك الذين يعيشون في اماكن اخرى؟ اذكرى اسماءهن واماكن
عيشهن واعمارهن.

الاسم
العمر
المدينة
البلد
هل تحمل هوية اسرائيلية اذا لا: اية جنسية تحمل
ماذا تشتغل
المجموع

٥ - اذكرى عدد اطفالك الذكور الذين ولدوا احياء ثم ماتوا ؟

٦ - اذكرى عدد اطفالك الانثى الذين ولدوا احياء ثم ماتوا ؟

٧ - اذكرى عدد المرات التي اجهفت فيها طبيعيا ؟

٨ - هل انت حامل الان ؟

٩ - ما هو تاريخ ولادة آخر طفل لك ؟

١٠- هل ما زال هذا الطفل حيا ؟

١١- اذكرى عدد افراد الاسرة الذين مرضوا في الاسبوعين الاخيرين ؟ واذكرى نوع
المرض.

١٢ - هل هناك من يعيش معك في البيت بالاضافة الى زوجك واولادك وبناتك ؟
نعم / لا
اذا نعم :

ما هي علاقته القرابية بالعائلة ؟

الاسم
العلاقة القرابية

رقم القرية :
 رقم البيت :
 رقم الشخص
 رقم الفريق:
 رقم معبئ الاستبيان:

القسم ج : -

تتم تعبئة اسئلة هذا النموذج مرة واحدة فقط من قبل ربة المنزل او اي شخص اخر مسؤول عن العائلة .

١- كم شهرآ في السنة تقضيه العائلة في المزرعة / او في القرية ؟ اين تعيشون عندما لا تكونون هنا ؟

عدد الاشهر في المزرعة اماكن العيش الاخرى

٢- هل هذا البيت ؟ ملك العائلة بالاجرة ملك خاص

٣- اذا البيت ملك: هل تملك صك الملكية ؟

٤ - اذا البيت بالاجار :

من المؤجر

عنوان المؤجر

٥ - ما هو عدد غرف البيت ؟

٦ - هل المطبخ داخل ام خارج البيت ؟

٧ - كم شخصا ينام في كل غرفة ؟

رقم الغرفة المطبخ

عدد الافراد

٨- ما نوع المراضر في البيت ؟

سيفون من دون سيفون لا يوجد

مراضر داخلية

مراضر خارجية

السؤالين (١٠٩) يقوم بالاجابة عليهما الباحث اي (معين الاستمارة) من خلال ملاحظاته الشخصية :

٩ - ما هي المواد البنائية المكونة للبيت ؟ (مثلا : حجر ، لبن ، خشب ، اغطية بلاستيكية ، اكياس)

١٠- مما يتكون السقف ؟

١١ - ما هي سنة بناء البيت ؟ او (ما هو عمر البيت)

١٢ - من اين تحصل على مياه الشرب والطهي ؟

مواسير وجنفيات مربوطة بشبكة	بئر ارتوازي	نبع	حنفية القرية	برك مصادر رمل اخرى
--------------------------------	-------------	-----	--------------	-----------------------

١٣ - حدد الاماكن الاخرى التي تحصل منها على المياه ؟

١٤ - ما هو معدر الكهرباء في البيت ؟

شبكة كهرباء	موتور	لا يوجد
-------------	-------	---------

١٥ - اذا موتور : من هو مالك الموتور ؟ ما هو عدد الساعات الكهربائيه التي تحصل عليها يوميا .

اسم المالك

العنوان

عدد الساعات / يوميا

١٦ - هل تملك العائلة :

سيارة	تلفزيون	فرن غاز	شلاجة	راديو
-------	---------	---------	-------	-------

١٧ - من اين تشتري الطعام والملابس؟ ما هو معدل ذهابك للتسويق؟

المكان

معدل التسوق

رقم القرية :
 رقم البيت :
 رقم الشخص :
 رقم الفريق :
 رقم معبى الاستبيان :

القسم د :

تتم تعبئة هذا النموذج من قبل جميع المالكين المتوسطين والمغار والمستأجرين والمحاصيين / او المزارعين ولا يتم تعبئة هذا النموذج من قبل المالكين الكبار.

١ - ما هي مساحة الارض التي تملكها (وبهاية شكل) ؟

ملك اجرة (محاصة / مزارعة)

مساحة الارض بالدنمات

٢ - هل الارض قطعة واحدة ام مقسمة الى قطع متفرقة ؟ كم قطعة هناك وما بعد كل منها عن البيت ؟

عدد قطع الاراضي بعدها عن البيت

قطع متفرقة

قطعة واحدة

٣ - اذا كنت انت المالك فما نوع سند الملكية الذي عندك ؟

طاهو (كوشان تركي) اخراج قيد غير ذلك (حدد)

اذا الاراضي مؤجرة فالرجاء تعبئة الاسئلة من ٤- ٩

٤ - هل بإمكانك ذكر اسم / (اسماء) مالك الأرض، موقع سكنه ، عدد الدنمات المستأجرة ، مدة الأجرة ، المدة المتراكمة للأجرة ، من هو المالك ، وما هي العملة التي تدفع بها الأجرة ؟

اسم المالك	مكان السكن	عدد الدنمات	مدة الأيجار
كم مضي على استئجارك للأرض		العملة المتداولة	

٥ - هل يشارك المالك بزراعة الأرض؟

٦ - ما هي الخدمات التي يوفرها لك المالك ؟ (حدد)

٧ - هل بإمكانك تجديد العقد بسهولة ام انك بحاجة الى اعادة الاتفاق على العقد ؟

٨ - هل ترغب ان تزيد من مساحة الأرض التي تستأجرها ؟ ما الذي يمنعك ؟

٩ - هل تكفي الأيدي العاملة من عائلتك للعمل على مزرعة اكبر ام انك تصحح حاجة لتوظيف عمال ؟ (حدد)

إذا كانت الأرض محاصصة / مزارعة الرجاء تعبئة الاسئلة من ١٠ - ١٨

١٠ - هل بإمكانك ذكر اسم / (اسماء) المالك ، مكان سكنه ، عدد الدنمات المؤجرة ، فترة العقد ، عدد السنوات التي تعاقدت خلالها مع هذا المالك ؟ ما هي النسبة من المحصول الصافي الذي تدفعه للمالك ؟

الاسم

العنوان

عدد الدنمات

فترة العقد

عدد السنوات التي

تعاقدت مع هذا

المالك فيها

نسبة المحصول

الصافي % للمالك

١١ - ما مساحة الأراضي التي كنت تحاصصها كل سنة ؟ خلال الخمسينين الماضية ؟

٧٨ - ٧٧	٧٩ - ٧٨	٨٠ - ٧٩	٨١-٨٠	٨٢ - ٨١
---------	---------	---------	-------	---------

- ١٢ - هل يشارك المالك بزراعة اللأرض؟
- ١٣ - ما نوع العقد بينك وبين المالك ؟
- ١٤- ما هي الخدمات التي يقدمها المالك بالاضافة الى الأرض(حدد) ؟
- ١٥ - ما هي الخدمات التي تقدمها انت كجزء في العقد ؟ (حدد)
- ١٦ - بالاضافة الى امتلاك أرض تخصك ما هي التغييرات التي ترغب بإدخالها على عقد المحاصمة ؟
- ١٧ - هل ترغب بزيادة مساحة الأرض التي تزرعها ؟
- ١٨ - هل الأيدي العاملة من افراد العائلة تكفي للعمل على مزرعة اكبر ام انك تصبح بحاجة لتوظيف عمال مياومة ؟.

الرجاء تعبئة الاسئلة من ١٩ - ٢٠ قبل جميع المالكين .
ما عدا المحاصمين اي المزارعين

١٩- هل تضمن اي جزء من ارضك ؟

٢٠ - من المتضمن , ما هو عمله , ما مساحة الاراضي المتضمنة , وما هو المحصول المتضمن؟

اسم المتضمن

عمله

عنوانه

عدد الدونمات
المتضمنة

نوع المحصول
المتضمن

٢١- كم مرة عادة , تقوم بتضمين المحصول؟

٢٢- لماذا تضمن المحصول بدلا من ان تحصده وتسوقه بنفسك ؟ (حدد)

٢٣- ما هي الخدمات المتوقع منك تقديمها للمتضمن ؟ (حدد)

٢٤- ما هي الخدمات التي يقدمها المتضمن ؟ (حدد)

الاسئلة ٢٥ - ٣٧ تتم الاجابة من قبل الجميع

٢٥- اذكر اسماء افراد العائلة الذين يعملون في المزرعة طوال السنة وما نوعية عملهم؟

الاسم

طبيعة العمل

٢٦- اذكر اسماء افراد العائلة الذين يعملون في المزرعة من وقت لآخر وما نوعية عملهم وبأي فترة من السنة يقومون بالعمل؟

الاسم

طبيعة العمل

فترة العمل

من السنة

٢٧ - هل بإمكانك ذكر اي من هذه الاعمال يقوم بها : الرجال ، النساء ، الاطفال او الالة .

العمل المقام	الالة	الرجال	النساء	الاطفال
حراثة				
تنعيم التربة				
تزييل				
تغطية الزبل				
الري وتنظيف الاثلام				
خطوط التفتاف والبلاستيك				
زراعة البذور والاشتال				
التعشيب				
رشن المبيدات				
التسميد الكيماوي				
الحصاد / قطف المحصول				
تعبئة المحصول				
التحميل				
البيع على جانب الطريق				
ترتيب ورفع التفتاف - والبلاستيك عن الارض				

٢٨ - هل تقوم بعض الاحيان بتوظيف عمال مياومة في المزرعة ؟

اذا نعم ، الرجاء تعبئة اسئلة من ٢١-٣١

٢٩- ما عدد عمال المياومة الذين توظفهم طوال السنة ، وكم منهم موسميون ؟ وما نسبة كل من الرجال والنساء والاطفال تحت سن ١٥ ؟ وايين يقيمون ؟

مناطق سكنهم	عددهم	رجال نساء اطفال	عمال مياومة دائمين
		رجال نساء اطفال	

٣٠- في اي وقت من السنة تقوم بتوظيفهم ؟

٣١- كيف توظف هؤلاء العمال ؟ (حدد) (مثلا : من خلال متعهد) . ايضا من اين يجئ العمال ؟

٣٢- هل بإمكانك التوضيح عن كيفية معرفتك بأساليب الزراعة الحديثة ؟ (حدد) .

٣٣- كيف تعرف عن البذور الحديثة ، الاسمدة الكيماوية ، ومبيدات الحشرات ؟ (حدد)

٣٤- ما هي المجالات الزراعية التي تطالعها ؟ (اذكر الاسم)

٣٥ - هل انت عضو في اية جماعات ، جمعيات او لجان زراعية ؟ (اذكر اسم الجمعية ومركزك فيها) .

اسم الجمعية

المركز فيها

٣٦ - كم مرة بالعادة تلتقي والمرشدين الزراعيين ؟

الرجاء توجيه الاسئلة من (٣٧ - ٤١) الى المستأجرين والمحاصنين / المزارعين

٣٧- هل يحدد لك المالك كيفية استخدامك للعمال ؟ (حدد كيف)

٣٨ - هل يوجهك المالك في استثمارك للالات والمعدات في المزرعة ؟ (حدد) .

٣٩ - كيف يتم الاتفاق بينك وبين المالك على المحصول المنتج ؟ (حدد) .

٤٠ - ما معدل تردد المالك على المزرعة ؟

خلال موسم الزراعة
والقطف

خلال باقى السنة

رقم القرية
رقم البيت
رقم الشخص
رقم الفريق

رقم الاستبيان

القسم ه :-

تتم تبعثة هذا النموذج . من قبل جميع المالكين ، مثلا : الذين يؤجرون الارض
اما نقدا او بالمحاصمة / مزارعة .

١-
الاسم
العنوان

٢- ما مساحة الارض التي تملكها ، هل هي مقسمة الى اراض مروية وغير مروية ؟
واين موقع الارض؟

موقع الارض
مساحة الاراضي المروية
مساحة الاراضي الغير مروية

٣- ما مساحة الاراضي التي ورثتها عن عائلتك واين موقعها ؟

الموقع
المساحة

٤- (اذا لم ترك اية ارض او اذا اضفت الى الاراضي المروية) ما هي مساحة
الاراضي التي اشتريتها ؟

الموقع
المساحة بالدنمات
زمن الشراء

٥- ما نوع ملكية ؟ وما مساحة الاراضي لكل نوع من الملكية ؟

سجل في الطابو اخراج قيد سند غير ذلك حدد
(كوشان تركي)
عدد الدنمات

٦- ما هو عدد المستأجرين الذين تتعاقد معهم ، ما مساحة الأرض المؤجرة لكل منهم ؟ اين موقع الأرض، ما هي مدة العقد ، كم مضي على استئجار كل منهم الأرض؟

الاسم
موقع الأرض
عدد الدنمات
مدة العقد
المدة التي مرت
على التعاقد

٧- ما هي الخدمات التي تقدمها للمستأجر بالإضافة الى الأرض؟

٨- ما هو عدد المحاصمين الذين تؤجر لهم الأرض، وما مساحة الأرض التي يحاصمها كل منهم ، موقع الأرض، ما هي مدة العقد ، ما مدة محاصمة كل منهم للأرض، وما هي النسبة من المحصول الكلي التي يحصل عليها كل طرف ؟

الاسم موقع الأرض
عدد الدونمات
مدة العقد
عدد السنوات التي
مرت على التعاقد

ونسبة حصة المالك من
المحصول الكلي

٩- ما هو نوع العقد بينك وبين المحاصمين ؟ (حدد)

١٠- ما هي الخدمات التي توفرها للمحاصمين ؟

١١- ما هي الخدمات التي يقدمها المحاصمون ؟

١٢- منذ متى تؤجر انت وعائلتك الاراضي للمحاصمين / للمزارعين؟

١٣- هل تقوم بالنصح بما يجب ان ينتج وبالساليب الاكثر نجاعة في الانتاج ، ام انك عادة تترك ذلك للمحاصمين ؟ (حدد) .

١٤- ما معدل ترددك على المزارع التي تؤجرها ؟

خلال موسم الزرع
خلال موسم قطف الثمار
خلال بقاى السنة

١٥- ما مساحة الأرض التي تزرعها لحسابك الخاص؟

موقع الأرض
عدد الدنمات

١٦- هل عندك مدير مزرعة ، وهل هو حاصل على ثقافة زراعية متخصصة ؟ وما هي صلتها القرابية بك ؟

اسم مدير مزرعة المؤهل العلمي (الثقافة) صلة القرابة

١٧- هل تضمن اي جزء من ارضك ؟

اذا نعم لمن تضمنها ، ما وظيفته ، اين مكان عمله ، مامساحة الاراضي التي تضمنها ، وما هو المحصول المتضمن؟

عدد العقود (التضمينات)

اسم المتضمن

وظيفته

مكان عمله

الدنمات المتضمنة

المحصول المتضمن

١٩- مامعدل تضمينك للمحصول ؟

٢٠- لماذا تضمن المحصول بدلا من ان تحصله بنفسك ؟ (حدد)

٢١- ما هي الخدمات المتوقعة منك تقديمها للمتضمن؟ (حدد)

٢٢- ما هي الخدمات التي يقدمها المتضمن؟(حدد)

٢٣- ما هو عدد افراد عائلتك الذين يعملون بشكل دائم في المزرعة وما طبيعة عملهم؟

الاسم

طبيعة العمل

٢٤- كم فردا من العائلة يعمل لفترات قصيرة في المزرعة ، ما طبيعة العمل؟ وما هي الفترات التي يعمل فيها؟

الاسم

طبيعة العمل

الفترة التي يعمل

فيها في المزرعة

٢٥- هل بإمكانك ذكر اي من هذه الاعمال يقوم بها : الرجال ، النساء ، الاطفال او الالة .

العمل المقام	الالة	الرجال	النساء	الاطفال
حراثة				
تنعيم التربة				
تزييل				
تغطية الزبل				
الري وتنظيف الاثلام				
خطوط التفتاف والبلاستيك				
زراعة البذور والاشتال				
التعشيب				
رش المبيدات				
التسميد الكيماوي				
الحصاد / قطف المحصول				
التحميل				
البيع على جانب				
الطريق				
رفع وترتيب برايش				
التفتاف - والبلاستيك عن الارض				

٢٦- هل توظف عمال مياومة في المزرعة ؟

٢٧- ١٥١ نعم ، كم منهم يعمل طوال السنة ، وكم منهم يعمل موسميا ، وما عدد كل من الرجال والنساء والاطفال تحت سن ١٥ ؟ واين يقيمون؟

مناطق سكنهم	عددهم
رجال	عمال موسميين
نساء	
اطفال تحت سن ١٥	
رجال	عمال دائمين
نساء	(طوال السنة)
اطفال تحت سن ١٥	

٢٨- متى توظف العمال الموسميين ؟

٢٩- كيف يتم توظيفهم ؟ (حدد) استفسر عن المتعهد .

٣٠- هل بإمكانك التوضيح عن كيفية معرفتك عن المعدات والاساليب الحديثة ؟

٣١- هل بإمكانك التوضيح عن كيفية اطلاعك على البذور والاسمدة والمبيدات الحديثة ؟

٣٢- ما هي المجلات والنشرات الزراعية التي تطالعها ؟

٣٣- هل تنتمي الى اية جماعات , جمعيات او لجان زراعية ؟ اذكر اسماءها والمركز الذي تحتله انت ضمنها ؟

الجمعية

المركز الذي تحتله

٣٤- ما معدل اتصالك بالمرشدين الزراعيين ؟

رقم القرية :
 رقم البيت :
 رقم الشخمين
 رقم الفريق:
 رقم معبى الاستبيان:

القسم و:-

تتم تعبئة هذا النموذج من قبل المالكين ، المالكين الصغار ، المستأجرين والمحاصنين بالإضافة الى تعبئة النموذج المخصص للمالكين الصغار ، المستأجرين ، المحاصنين / المزارعين فقط والنموذج (هـ) المخصص للمالكين فقط .

(١) الخضروات النوع عدد الدونمات معدر الاشتال تاريخ الاشتال تاريخ الزراعة النسبة المصدرة الى الاردن بالمئة

هندوره
 خيار
 بادنجان
 كوسا
 قرنبيط
 فلفل حار
 فلفل حلو
 فول
 فاصوليا
 ذرة صفراء
 ملوخية
 بطاطا
 بصل
 شوم
 خس
 غير ذلك

اساليب الري المتبعة

(٢) بهيوت بلاستيكية تنقيط
 عدد الدونمات تفتاف
 رشاشات غير ذلك
 عدد (عدد الدونمات)
 اثلام عدد (عدد الدونمات)
 عدد الدونمات (عدد الدونمات)

الفواكه النوع عدد الدونمات مصدر الاشتال تاريخ الزراعة النسبة
المصدر من
المحصول
الى الاردن %

ليمون
برتقال شموطي
برتقال بلدي
برتقال بلدي
برتقال ابوسرة
برتقال فلنتسيا
مندلينا
كلمنتينا
بوملي
جريب فروت
موز
بلخ
غير ذلك

اساليب الري المتبعة

تفتاف تنقيط (عدد الدونمات)	اشلام عدد (الدونمات)	رشاشات عدد (الدونمات)	غير ذلك (عدد) (عدد الدونمات)
----------------------------------	----------------------------	-----------------------------	---------------------------------

٣) حبوب محاصيل النوع عدد مصدر تاريخ الزراعة النسبة المصدر من المحصول
حقلية الى الاردن %

ذرة مكانس
قمح
شعير
غير ذلك

اساليب الري

تنقيط (تفتاف) (عدد الدونمات)	اشلام (عدد الدونمات)	رشاشات (عدد الدونمات)	غير ذلك (عدد الدونمات)
------------------------------------	-------------------------	--------------------------	---------------------------

٤- ما هي نسبة مساحة الأرض التي تزرعها باكثر من محصول سنويا؟ وما هي المحاصيل التي تزرعها؟

٥- ما هي المحاصيل التي تنتجها فقط للاستهلاك الهبتي ؟
٦- من اي من هذه المصادر تحصل على المياه ؟

بشر ارتوازي نبع في نفس ارضك قناة مفتوحة غير ذلك (حدد)

٧- في حالة كون المعدر بشرًا ارتوازيًا : كم بشرًا تستعمل وما هو عدد الافراد الذين يشاركونك البئر/ الابار؟ ما عمق كل بئر؟ من هو مالك البئر ؟ هل كمية المياه المستهلكة محددة من قبل الاسرثاشيليين؟

رقم البئر	١	٢	٣	٤	٥
المالك					
عدد الاشخاص المشاركين في البئر					
عمق البئر					
هل المياه محددة					
الكمية المسموحة					

٨- هل تعاني ابدا من نقص في المياه؟ نعم / لا
حدد مدة المعاناة وزمن المعاناة وحدتها.

٩- في حالة كون معدر المياه قناة مفتوحة او نبع :

معدر النبع او	من المالك	ابن تخزين المياه كم عدد المزارع المشاركة
القناة المفتوحة		في مياه النبع / القناة المفتوحة

هل تمر المياه من يقوم باصلاح ما هي التكاليف خلال اقنية ام شبكة المياه التي تترتب عليك وماسير والمحافظة عليها
هل هناك اي مصدر اخر للمياه ؟

١٠- ما هي المعدات الميكانيكية التي تستعملها ؟ كم عمرها؟

المعدات المملوكة

عمرها

١١- ما هي المعدات المستأجرة ؟ ومن المؤجرة ؟

المعدات المأجورة

المالك

١٢- ما هي التحسينات التي تود ادخالها على المزرعة ؟

١٣- ما هي الازمدة والمبيدات الحشرية التي تستعملها ؟ ومن تشتريها ؟

الازمدة والمبيدات

البائع

١٤- هل تربي الحيوانات في المزرعة ؟

نعم / لا

في حالة الاجابة بنعم ، الرجاء تكملة الاسئلة من (٢٢-٥)

١٥- هل تربي الماعز ؟

عدد الماعز . ماهي كمية ما تنتجه الماعز من الطيب في السنة
ما هي المنتجات التي تقوم بتصنيعها من الطيب
ابن تبيع المنتج ؟ ولمن؟

ابن تبيع اللحوم؟ مانسبة مدخولك من منتج الاغنام عدد اشهر الرعي
ابن تحتفظ بالماعز في المزرعة

١٦- هل تربي الماشية ؟ (ابقار ، عجول ، فحول) نعم / لا

ما هو عدد الماشية	ما هي كمية الطيب المنتج	ماذا تصنع من الطيب؟	ابن تبيع المنتج؟ ولمن؟
حدد عدد الابقار البلدية وابقار الطيب	سنويا؟		

ابن تبيع اللحوم ولمن؟
ما نسبة مدخولك من منتج الماشية ؟
عدد اشهر الرعي
ابن تحتفظ بالماشية في المزرعة؟

١٧- هل تربي الاغنام ؟

عدد الاغنام	نسبة الطيب المنتج ماذا تصنع من الطيب ابن تبيع المنتج؟ ولمن؟
سنويا	

ابن تبيع اللحوم ولمن؟
ما اذا تصنع بالصوف؟ ما نسبة مدخولك من منتج الاغنام؟
عدد اشهر الرعي

١٨- هل تربي الدواجن ؟ (الدجاج) .

عدد الدواجن اللّاحم اين تبيعها ؟ ولمن ؟ عدد الدواجن المبيّعة سنويا
نسبة المدخول من تربية الدواجن اللّاحم

عدد الدواجن المبيّاض عدد البيض المنتج سنويا اين تبيع البيض نسبة المدخول
اسبوعيا ولمن ؟ من تربية
الدواجن المبيّاض

ما هي انواع
الاعلاف التي
تستعملها
هل تقوم بزراعة
الاعلاف بنفسك
ما هو عدد الدنمات
المستغلة لزراعة الاعلاف

ماذا تشتري من
الاعلاف
اين تحتفظ بالدواجن في المزرعة

١٩- هل لديك انواع اخرى من الحيوانات وهل هي للبيع ام للاستهلاك العائلي ؟
نوع الحيوان ، العدد للبيع ، للاستهلاك العائلي ، مكان الاحتفاظ بها

ارانب
بط
اوز
حمام
غير ذلك

٢٠- اسم الطبيب البيطري ؟ اين موقع سكنه ؟ وما هو معدل تردده على المزرعة
الاسم مكان السكن معدل تردده على المزرعة

السؤال التالي حول الاعلاف موجه للمعنيين بالثروة الحيوانية باستثناء مربي
الدواجن .

٢١- عدد الدنمات المستغلة لانتاج ما نوع الاعلاف التي تنتجها؟ في اي شهر
لانتاج الاعلاف تنتجها؟

ما هي مراكز
الاعلاف التي تشتريها
من اين تشتريها ؟ من البائع؟

٢٢- ما شكل او نوع البيوت التي تملكها في المزرعة ؟ (عددها)

تتم الاجابة على الاسئلة من (٢٣-٤٨) من قبل الجميع ، الا في حالة ذكر غير ذلك

٢٣- هل تبيع المحاصيل لبيع الجملة مباشرة ؟ نعم / لا

٢٤- اذا كانت الاجابة نعم ، فما هو اسم / (اسماء) بائع الجملة وعنوانه .
ما نوع المحاصيل المباعة؟ وما نسبة كل منها للمحصول الكلي؟

اسم وعنوان بائع الجملة

نوع المحصول المباع

نسبته الى المحصول الكلي

٢٥- ما هي المحاصيل التي تباعها للشناس مباشرة ؟ وما نسبة ما تباعه من
نتاج محصولك بهذه الطريقة ؟ واين تباعه ؟

نوع المحصول

النسبة الى المحصول الكلي

مكان بيع المحصول

٢٦- هل تسوق محصولك في الاردن من خلال كوميسيونجي (وكيل بالعمولة) اردني
ام كوميسيونجي من الضفة يملك حصة في الاردن ؟

الاسم

العنوان

٢٧- كيف تحمل على شهادة المنشأ للتصدير الى الاردن؟ ما هي الصعوبات التي
تواجهها في الحصول عليها؟

٢٨- ما هي المشاكل الاساسية التي تواجهها عند تسويق محصولك في الاردن ؟

٢٩- هل تدفع كوميسيون مضايف عند تسويق المحصول في الاردن ؟

اذا كانت الاجابة بنعم ، فما هي نسبة الكوميسيون من قيمة البيع ؟

قيمة الكوميسيون الثاني
(في الاردن)

قيمة الكوميسيون الاول
(في الضفة)

٣٠- ما هو اسم الكوميسيونجي (الوكيل بالعمولة) الذي تتعامل معه في الضفة
الغربية وما هو عنوانه ؟ هل هو المالك ؟ هل يملك حصة ؟ واين موقعها ؟ وما
نسبة ما يأخذه من قيمة البيع بسعر السوق ؟

الاسم والعنوان

الحصة ومكانها

النسبة من سعر السوق

هل هو المالك

٣١- هل بإمكانك وصف الخدمات التي يقدمها لك الكوميسيونجي بالتحديد . وما
هي الرسوم التي يتقاضاها مقابل هذه الخدمات ؟

٣٢- هل هناك اية رسوم اخرى تدفعها للكوميسيونجي / الوكيل بالعمولة ؟

٣٣- هل يمولك الكوميسيونجي بالحبوب ، الاسمدة المبيدات ومعدات اخرى ؟ اذكر ذلك بالتفصيل وحدد الفائدة التي يجب ان تدفعها بالمقابل ؟

٣٤- ما هي الخدمات التي تدفع مقابلها بالشيك او بالدينار ؟

٣٥- اذا لم يكن الكوميسيونجي هو المالك، فما هو الدور الذي يلعبه المالك في تسويق محصولك؟

٣٦- هل هناك اية تعاونيات للتسويق في منطقتك ؟ وهل انت عضو فيها ؟ اذا كان الجواب لا ، لماذا ؟

اسم التعاونية	العضوية	اذا لم تكن عضوا ، لماذا ؟
---------------	---------	---------------------------

٣٧- هل تتعاقد مع اية شركة اسراييلية للتسويق ؟ ما اسمها ؟ وما نوع المحاصيل التي تزودها بها ؟ وما هي كميتها ؟ وما هي مدة العقد ؟

الشركة	المحصول	الكمية	مدة العقد
--------	---------	--------	-----------

٣٨- من اين تحصل على اموال الاستثمار؟

الادخار	دين من العائلة	قرض من المالك قرض من الكوميسيونجي
---------	----------------	-----------------------------------

قرض عيني قرض من تعاونية زراعية غير ذلك (حدد)

٣٩- في حالة كون المصدر قرضا عينيا ؟ ما هي الحاجيات التي تأخذها كقرض عيني ؟ وما هي المؤسسة التي تأخذ منها القرض؟ وما هي فترة سداد القرض وما هي نسبة الفائدة ؟

الحاجيات فترة سداد القرض	اسم المؤسسة	نسبة الفائدة
--------------------------	-------------	--------------

٤٠- اذا كان القرض نقديا ، فما هو سبب اقتراضك المال، وما هي فترة سداد القرض وما هي نسبة الفائدة السنوية ؟

الهدف من القرض	فترة سداد القرض نسبة الفائدة
----------------	------------------------------

٤١- عد اهم الاستثمارات التي قمت بها خلال النسيين الخمس الماضية ؟

٤٢- ما هي الاستثمارات التي تخطط للقيام بها في الموسم القادم ؟

٤٣- ما هي الاستثمارات التي تود تنفيذها في حالة توفر راسم المال الكافي

٤٤- هل تضمن محصولك من اجل ان تحصل على اموال الاستثمار ؟ اذا نعم، لماذا تستعمل هذه الطريقة ؟

٤٥- هل صودر اي جزء من ارضك ، ما مساحة الارض المصادرة المروية منها والغير مروية ؟ اين موقعها ؟ هل توجهت بالمشكلة الى المحكمة ولاي غرض تستعمل الارض حاليا ؟

مساحة الارض المروية	مساحة الارض الغير مروية	موقعها	استعمال هل توجهت بالمشكلة الارض الحالي الى المحكمة
---------------------	-------------------------	--------	--

٤٦- ماذا كانت نتيجة توجيهك الى المحكمة ؟

٤٧- ما نوع العلاقات والاتصالات التي تقيمها مع المستوطنات الاسرائيلية ؟ مثلا :
ما هو نوع عدد افراد الاسرة الذين يشتغلون هناك ؟ وما معدل ترددهم على المزارع الاسرائيلية ؟

٤٨- ما هي القيود التي تفرضها السلطات على انتاجك ؟ (واي شكل تتخذ)

رقم القرية :
 رقم البيت:
 رقم الشخص:
 رقم الفريق:
 رقم معبى الاستبيان:

القسم ز :

تتم تعبئة هذا النموذج من قبل الافراد العاطلين عن العمل حاليا والافراد الذين يعملون بالاجرة .

١- اذا كان الشخص عاطلا عن العمل :

متى كانت اخر مرة اشتغلت بها	ماذا كان عملك ؟	اين كنت تعمل ؟	عند من كنت تعمل؟
في اي قطاع كنت تعمل	كم يوما كنت تعمل في الاسبوع	كم كان عدد ساعات العمل	هل كنت تتقاضى اجرا يوميا / ام اسبوعيا؟
هل كنت تعمل عند متعهد ثانوي للعمال؟	اذكر اسمه	ما هو عدد الاسبوع التي عملت خلالها في السنة الماضية ؟	هل كنت تدفع ضريبة؟

٢- كيف حصلت على العمل ؟ حدد العملية التي اتبعتها للحصول على العمل ؟ مثلا: من خلال مكاتب عمل او اقارب او متعهد ٠٠٠ الخ؟

٣- اذا كان الشخص يعمل:

منذ متى وانت في عملك الحالي	ما هي نوعية عملك؟	اين تعمل؟	عند من تعمل ؟
هل تعمل لدى متعهد ثانوي	ما هو اسمه وعنوانه ؟	ما هي عدد الاسبوع التي تعمل فيها خلال السنة الماضية ؟	هل تدفع اية ضرائب
في اي قطاع كنت تعمل؟	كم يوما تعمل في الاسبوع	ما هو عدد ساعات العمل اليومية ؟	كيف يتم الدفع لك؟(يوميا / اسبوعيا / حسب العمل المقام)

٤- كيف حصلت على الوظيفة؟ حدد العملية التي اتبعتها مثلاً: من خلال مكاتب

توظيف ، اقارب ، متعهد.

صهل بإمكانك تعداد الاعمال التي شغلتها خلال السنتين الماضيتين او اذكر
اخر ستة اشغال قمت بها اذا حصل ذلك في اقل من سنتين ؟ اذا امكن
فابدأ من اخر عمل قمت به وعدد الاعمال الاخرى تنازلياً؟

الرقم نوع العمل المجال الذي تعمل فيه' عندهم كنت تعمل ؟ مكان العمل اذكر
المدّة
والتاريخ

١
٢
٣
٤
٥
٦

APPENDIX 3

TABLES ON CROP PRODUCTION, EXPORT AND IRRIGATION

APPENDIX 3

Table 1: Number of Dunums of Lemon by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	3	1	2	8	1	15
5 - 9	-	-	-	4	1	5
10 - 14	-	-	-	2	3	5
25 - 29	-	-	-	1	-	1
Not ascert.	-	-	-	1	-	1
Col. total	3	1	2	16	5	27

Table 2: Number of Dunums of Orange by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	2	1	1	7	-	11
5 - 9	2	1	1	4	2	10
10 - 14	-	-	-	1	-	1
15 - 19	-	-	-	-	2	2
20 - 24	-	-	-	1	1	2
65 - 69	-	-	-	1	-	-
Col. total	4	2	2	14	5	27

Table 3: Number of Dunums of Mandarin by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	4	1	2	13	1	21
5 - 9	-	1	-	1	-	2
Col. total	4	2	2	14	1	23

Table 4: Number of Dunums of Clementine by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	4	2	2	13	3	24
10 - 14	-	-	-	1	1	2
Col. total	4	2	2	14	4	26

Table 5: Number of Dunums of Grapefruit by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
1 - 4	-	-	-	1	2	3
Col. total	-	-	-	1	2	3

Table 6: Number of Dunums of Banana by Agrarian Class

Dunums	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
5 - 9	-	-	-	-	1	1
Col. total	-	-	-	-	1	1

Table 7: Percentage of Courgette Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	308	6	31	51	-	396
1 - 4	2	-	-	-	2	4
5 - 9	1	-	-	-	1	2
10 - 14	2	-	-	-	2	4
20 - 24	1	-	-	1	1	3
30 - 34	1	-	-	-	1	2
50 - 54	-	-	-	2	1	3
Not ascert.	5	1	1	-	-	7
Col. total	320	7	32	54	8	421

Table 6: Percentage of Cucumber Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	154	-	8	17	-	179
5 - 9	1	1	-	1	1	4
10 - 14	1	1	-	1	1	4
50 - 54	1	1	-	1	1	4
Not ascert.	3	-	1	4	1	9
Col. total	160	3	9	24	4	200

Table 9: Percentage of Broad Beans Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	165	-	9	28	-	179
10 - 14	1	2	1	2	2	8
20 - 24	1	1	-	1	1	4
Not ascert.	2	-	-	3	2	7
Col. total	169	3	10	34	5	221

Table 10: Percentage of Sweet Corn Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	89	5	14	13	3	124
1 - 4	1	-	-	-	-	1
Not ascert.	2	-	1	-	-	3
Col. total	92	5	15	13	3	128

Table 11: Percentage of Hot Pepper Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	133	-	9	17	-	159
1 - 4	1	1	1	1	1	5
Not ascert.	4	4	5	5	2	20
Col. total	138	5	15	23	3	184

Table 12: Percentage of Beans Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	114	-	5	19	-	138
70 - 74	-	1	-	1	-	2
Not ascert.	2	2	-	-	-	4
Col. total	116	3	5	20	-	144

Table 13: Percentage of Melon Exported by Agrarian Class

	Percentage Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	28	1	6	5	2	42
20 - 24	-	-	-	1	-	1
50 - 54	1	-	-	-	-	1
70 - 74	1	-	-	-	-	1
95 - 100	5	-	-	-	-	5
Not ascert.	1	-	-	1	2	4
Col. total	36	1	6	7	4	54

Table 14: Percentage of Jews Mallow Exported by Agrarian Class

	Percentage Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	18	2	4	12	-	36
Col. total	18	2	4	12	-	36

Table 15: Percentage of Sweet Pepper Exported by Agrarian Class

	Percentage Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	10	-	-	-	3	13
1 - 4	1	1	1	1	1	5
5 - 9	-	-	-	1	1	2
Not ascert.	1	-	-	1	1	3
Col. total	12	1	1	3	6	23

Table 16: Percentage of Potatoes Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	3	-	-	-	-	3
Col. total	3	-	-	-	-	3

Table 17: Percentage of Onions Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	3	-	2	1	-	6
Col. total	3	-	2	1	-	6

Table 18: Percentage of Garlic Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	1	-	-	-	-	1
Col. total	1	-	-	-	-	1

Table 19: Percentage of Other Vegetable Crops Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	11	1	4	9	-	25
Col. total	11	1	4	9	-	25

Table 20: Percentage of Lemon Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	1	1	1	5	2	10
20 - 24	-	-	-	1	-	1
50 - 54	-	-	-	1	-	1
60 - 64	1	-	-	2	-	3
70 - 74	-	-	1	2	-	3
95 - 100	1	-	-	2	1	4
Not ascert.	-	-	-	3	2	5
Col. total	3	1	2	16	5	27

Table 21: Percentage of Oranges Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	1	-	1	3	2	7
20 - 24	-	-	-	1	-	1
50 - 54	-	-	1	2	-	3
60 - 64	1	1	-	2	-	4
95 - 100	2	1	-	3	1	7
Col. total	4	2	2	14	5	27

Table 22: Percentage of Mandarin Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	1	-	1	6	-	8
20 - 24	-	-	-	1	-	1
50 - 54	-	-	1	1	-	1
60 - 64	1	1	1	3	-	6
95 - 100	1	-	-	3	-	4
Not ascert.	1	1	-	-	1	3
Col. total	4	2	2	14	1	23

Table 23: Percentage of Clementine Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	1	-	1	5	2	9
20 - 24	-	-	-	1	-	1
50 - 54	-	1	-	2	-	3
60 - 64	1	-	1	2	-	4
95 - 100	1	-	-	3	-	4
Not ascert.	1	1	-	1	2	5
Col. total	4	2	2	14	4	26

Table 24: Percentage of Grapefruit Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	-	-	-	1	1	2
Not ascert.	-	-	-	-	1	1
Col. total	-	-	-	1	2	3

Table 25: Percentage of Grapefruit Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
95 - 100	-	-	-	-	1	1
Col. total	-	-	-	-	1	1

Table 26: Percentage of Corn Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	5	2	-	2	-	9
Col. total	5	2	-	2	-	9

Table 27: Percentage of Wheat Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	101	9	9	50	4	173
5 - 9	3	-	-	-	-	3
70 - 74	-	-	-	1	-	1
Col. total	104	9	9	51	4	177

Table 28: Percentage of Barley Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	22	1	3	5	2	33
5 - 9	1	-	-	-	-	1
Col. total	23	1	3	5	2	34

Table 29: Percentage of Other Field Crops Exported by Agrarian Class

Percentage	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
None	14	2	-	4	1	21
Col. total	14	2	-	4	1	21

Table 30: Tomato Irrigation System by Agrarian Class

System	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
Drip	371	10	37	69	8	495
Furrow	12	-	1	5	-	18
Not ascert.	7	1	1	-	-	9
Col. total	390	11	39	74	8	522

Table 31: Eggplant Irrigation System by Agrarian Class

System	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
Drip	319	8	30	48	8	412
Furrow	6	-	2	4	-	12
Not ascert.	6	-	-	-	-	6
Col. total	331	8	32	52	8	430

Table 32: Courgette Irrigation System by Agrarian Class

System	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
Drip	302	6	32	52	8	400
Furrow	8	1	-	2	-	11
Not ascert.	10	-	-	-	-	10
Col. total	320	7	32	54	8	421

Table 33: Cucumber Irrigation System by Agrarian Class

System	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
Drip	155	3	9	24	4	195
Furrow	1	-	-	-	-	1
Furrow + sprinkler	1	-	-	-	-	1
Not ascert.	3	-	-	-	-	3
Col. total	160	3	9	24	4	200

Table 34: Broad Bean Irrigation System by Agrarian Class

System	Share-cropper	Farming-Shepherd	Cash Tenant	Small-holder	Farming-Landlord	Total
Drip	79	2	2	17	5	105
Furrow	84	1	7	16	-	108
Other	1	-	-	-	-	1
Not ascert.	5	-	1	1	-	7
Col. total	169	3	10	34	5	221

APPENDIX 4: WATER SOURCES AND WATER RESOURCES

In this appendix I want to consider the question of water sources and resources in terms of a number of elements. Firstly, I will consider the issue of water resources and how they relate to the project of settler colonialism and Zionism. I will then outline the main water sources and resources in the north Jordan Valley. Finally I will look at the question of economic ownership of water resources.

I. WATER AND COLONISATION

Access to an adequate supply of water is a critical factor in maintaining agricultural activity in any peasant society. If water supplies diminish peasants have a number of choices open to them: either they leave their land and take up some other type of work activity or become more productive given the constraints placed upon them and look for ways to conserve precious water supplies. However, the problem of securing adequate supplies of water in the West Bank region is further complicated because the securement of water has always been part of a larger geo-political issue. From the pre-Yeshuv period to the present day the Israeli state has always focused on water supply as an important component in the thinking of, and has always had a long term impact on, Israeli military strategy and the overall project of Zionist colonisation. Moreover, since 1978, recent Israeli proposals for "autonomy" in the occupied territories, which have become the singular Israeli focus for a solution to the "Palestinian

problem", have consistently emphasised that land as well as water would be excluded from any limited political autonomy which Palestinians might be allowed to exercise over their own civil society under such a solution.

In an interview with Sarah Graham-Brown in 1979, the Israeli water commissioner, Meir Ben Meir, stated quite unequivocally the strategic and economic importance of continued Israeli control over the West Bank aquifer system. He reported to Graham-Brown that by 1985, according to existing computations "... Israel would have a considerable water deficit and could not do without the West Bank aquifer".(1) He suggested that the only alternative would be for Israel to develop expensive technological and technically difficult desalination programmes which would raise the costs of Israeli agricultural products and thus make Israeli agriculture less competitive with Palestinian products in the West Bank market and with foreign competitors in the international market. It would also probably lead to significant price rises of Israeli agricultural produce in the home market.(2)

The Israeli state has persistently, as part of the overall strategy of Judaisation and colonisation, refused to allow Palestinian peasant farmers - with few exceptions - to tap new sources of water supply.(3) The colonisation process does not just deal with colonisation of land but is also linked to the colonisation and exploitation of limited ground water resources. In the Jordan Valley increasing Israeli exploitation of ground water resources at the expense of

Palestinian peasant farmers is particularly marked. This is brought out quite clearly in the 1978 report by the Military Government Department of Agriculture, which shows that:

- "1. Total number of artesian wells in the West Bank is 331, of which 17 have been drilled by the Israeli water company (Mekerot) in the Jordan Valley to serve Israeli settlements in the area.
2. 12 Arab wells have dried up after occupation. Many others in the Jordan Valley (mostly in the northern part) are suffering a declining water table and increased salinity.
3. Total volume of water discharged from 314 Arab wells amounted in 1977/78 to 33.0 million cubic metres (mcm.). Whereas 17 Israeli wells in the Jordan Valley have discharged in the same season 14.1 mcm."(4)

During this period Israeli wells, which account for only 5% of the wells in the West Bank, produced the equivalent of 44% of the total volume of all Palestinian wells. However, the issue is not merely a quantitative one. The impact of these Israeli wells has to be gauged against the fact that these wells are much deeper and use much more powerful electric pumps than the Palestinian equivalents. In the Jordan Valley, in particular, the impact of these deep Israeli wells on the local peasant farmers has been very dramatic. As the Israeli Military Government Department of Agriculture admits in its 1978 report, the water table in the northern Valley has been declining and there is a corresponding increase in groundwater salinity. Ibrahim Matar has shown that this process has also occurred in the southern Jordan Valley around the Jericho area "... where the salinity of the water being pumped from pre-1967 Arab wells has increased noticeably in the last three years."(5) The most widely reported and best

documented case of the impact of these deep Israeli wells on local peasant agriculture occurred in the village of al-Auja whose natural spring dried up in 1979 after a deep Israeli well had been drilled near to the source of the village spring. When this happened the village lost the whole of the season's crop and many citrus trees became petrified.(6)

Palestinian wells in the Jordan Valley are limited to a depth of 100 metres while Israeli wells range from 300-500 metres in depth. This means that the water supply used by Israeli kibbutzim and moshavim in the region is not subject to the same problem of the falling water table which affects Palestinian farmers. Neither are they plagued to the same degree by the problem of ground-water salinity. Moreover, Palestinian wells are only allowed to produce specific quotas of water while Israeli farmers have unrestricted supplies of water. All Palestinian wells in the region are officially metered by the military government and farmers are fined very heavily for exceeding their water quota.

Thus, peasant farmers in the Jordan Valley have had to make do with existing water resources and they have not been allowed to extend these resources since 1967. In fact, due to a number of factors - the destruction of numerous artesian wells during the 1967 Arab-Israeli War, debarred access to the Jordan River as a source of agricultural water supply for security reasons and the lower water table - the water resources in the region are probably less now than they were before 1967. However, the demand for water for agricultural

use in this earlier period was less heavy because the agrarian system during that time was largely based on rain-fed agricultural crops, such as wheat and barley (which were predominant), although there was still some vegetable crop production using the earth furrow irrigation system.

When Israel occupied the Golan and the West Bank in 1967 the state resolved a major military-hydraulic imperative, by securing for the nation access to two major sources of water, and, at the same time, it won a major strategic military victory over the other three riparian states, viz. Syria, Lebanon and Jordan.(7) The result of this victory was that Israel firstly secured access to the Banias tributary of the River Jordan, secondly removed the Syrians from their fortified positions on the Golan Heights overlooking Lake Tiberias, thus forestalling any attempt by them to divert the head-waters of the River Jordan and, thirdly obtained absolute control over the West Bank aquifer system.(8) The importance of these achievements in terms of the Israeli water economy cannot be overestimated, since on the one hand, the River Jordan meets about "... one half of the combined water demand of both Israel and Jordan, while on the other hand, it is estimated that a third of Israel's water needs are provided from the West Bank aquifer system."(9)

At the present time the West Bank aquifer system is utilised to meet the main domestic, industrial and agricultural needs of the Palestinian population and a significant portion of Israel's internal water requirement. It is against the

background of water colonisation, rather than the spurious logic of a pseudo-hydrology, that Israel's water policies and military restrictions on the drilling of new wells and the deepening of existing wells have to be viewed. If the Palestinian peasant farming population had exclusive control over its own water resources then, in the short term, water shortage would not be a major problem although good water management and economy for future agricultural and industrial expansion would constitute an important challenge.

II. WATER SOURCES AND RESOURCES IN THE NORTH JORDAN VALLEY

At the present time peasant farmers in the valley most commonly (41% of all peasant farms) (see Table 1) obtain their agricultural water supplies from bore wells, which are predominantly controlled by regional landlords (see Table 2). These bore wells pump ground-water from aquifers to the surface by means of diesel pumps, most of which are now fairly primitive in design and economically inefficient. All of the pumps are fitted with meters and the quantity of water which is allowed to be discharged is tightly controlled by the Israeli authorities. Another 28% of peasant farmers get their water supply from a grid system operated either by the Israeli water company or through village-level distribution networks. A further 21% get their agricultural water supply either from springs close to their land or from the al Fara'a canal.

The al Fara'a canal system serves large numbers of farmers in

the villages of 'Ain Shibli, Frush Bet Dajan and Jiftlik. The canal has its source in a stream from the Nablus mountains and meanders down through Wadi Fara'a to Jiftlik where it is transformed from a naturally running stream to a wo/man-made canal system for purposes of irrigation and water distribution. Unlike bore wells and the grid system, in which the actual volume of water is tightly controlled, the canal system is controlled by a time period, i.e. the farmer is allowed a set number of hours of water over a given period for the purposes of irrigation. This is rather problematic since most farmers do not have anywhere to store the water they are allotted and so the tendency is to use it all for

Table 1: Agricultural Water Source by Agrarian Class

Water source	Share-cropper	Farming-shepherd	Cash Tenant	Smallholder	Farming-landlord	Total
Bore well	184	7	26	32	6	255
Canal/spr.	93	5	8	20	4	130
Grid	123	2	10	39	3	177
Other	1	1	-	1	-	3
Not asc.	4	44	-	11	1	60
Total	405	59	44	103	14	625

irrigation purposes. Often farmers, particularly if they are not up-to-date with recent agronomic developments, have a tendency to over water plants. This has the effect of making them less productive. One possible way around this problem is the construction of drip irrigation ponds to store water until such times as it can be used most effectively and

productively. There is still a good deal of agricultural extension and educational work to be done in this respect, particularly with farmers tied to the canal system.

If we consider the agricultural water source according to agrarian class characteristics we find that the majority of cash tenants (59%) obtain their agricultural water supply from bore wells and in relative terms they are much more likely to utilise bore wells than any other agrarian class. However, this does not reflect any fundamental class differentiation, rather, it is a question of geography and location. Cash tenants are predominantly located in the villages of Zbeidat and Marj Najeh. These two villages have neither access to the water of the al Fara'a canal nor do they have access to natural springs, thus the villages mainly tap ground-water sources by means of bore wells. Other than this there are no fundamental differences between the supply of agricultural water among the different agrarian class groupings. (10)

Only 11% of peasant farmers have access to alternative sources of water supply and 84% are restricted to the supply they have at the present time (see Table 2). Farming-landlords are more likely than any other class category to have access to alternative water supplies with slightly more than a fifth having such an alternative available to them. However, the absolute numbers are very small and therefore not significant in regional terms.

Table 2: Do you Have an Alternative Source of Water Supply by Agrarian Class?

Alter. source	Share-cropper	Farming-shepherd	Cash Tenant	Smallholder	Farming-landlord	Total
Yes	49	3	4	11	3	70
No	332	54	38	88	11	523
Not asc.	24	2	2	4	-	32
Total	405	59	44	103	14	625

As well as being restricted to existing water sources, more than a third of peasant-farmers interviewed (36%) complained that they suffered from water shortages (see Table 3). Again, the problem of water shortages was not class specific as 39% of sharecroppers, 10% of shepherds, 32% of cash tenants, 41% of smallholders and 36% of farming-landlords said that they suffered water shortages.

Table 3: Do you Suffer From Water Shortage by Agrarian Class?

Water shortage	Share-cropper	Farming-shepherd	Cash Tenant	Smallholder	Farming-landlord	Total
Yes	159	6	14	42	5	226
No	198	7	28	41	5	279
Not asc.	48	46	2	20	4	120
Total	405	59	44	103	14	625

Of those who suffered from water shortage, 41% claimed that it was a perennial problem (see Table 4), while 25% claimed

that they only suffered from this problem in the summer season. However, we must assume that they mean early summer or late spring since very little agricultural activity takes place in the north Jordan Valley during the hottest part of the summer season. At first sight it might appear unusual that 6% of farmers claimed that they suffered water shortages through the winter and a further 8% said that they suffered

Table 4: Period of Water Shortage by Agrarian Class

Period	Share-cropper	Farming-shepherd	Cash Tenant	Smallholder	Farming-landlord	Total
Summer	42	-	4	8	2	56
Autumn	12	-	3	3	-	18
Winter	10	-	1	2	-	13
Spring	1	-	1	-	-	2
All year	64	3	2	22	2	93
Not asc.	30	3	3	7	1	44
Total	159	6	14	42	5	226

from water shortages in the autumn. This could be due to two factors. In the first instance, the year during which the research was undertaken had an uncharacteristically arid winter and farmers' responses to this question might reflect this fact rather than a longer term aspect of their farm activity. Second, it could be the case that this does reflect an agronomic reality, particularly among those farmers who are engaged in rain-fed agriculture in which rainfall is a critical factor during the crop production cycle. The seeds of rain-fed crops such as barley and wheat lie dormant until there is sufficient rainfall which causes the seeds to

germinate and thus bear fruit. If there is no rainfall or very little rainfall then the growth and productivity of the crop will be restricted. Thus, it is quite likely that those farmers who are complaining of water shortages in the winter and autumn are farmers engaged in rainfed agriculture.

The class determination of water shortage is again nothing very much to do with class specificities, rather it is once more a question of geography and location. Thus, 21% of cash tenants suffer from water shortage during the autumn season and this is three times higher in relative terms than sharecroppers and smallholders. The reason for this is that cash tenants are most commonly located in Zbeidat and Marj Najeh and get their water supply from bore wells. Until the winter rains, particularly after an arid year or two, the water table in the aquifer system is normally lower and the water quantity of available water is reduced. Thus, these farmers are often dependent on the winter rains to raise the water table level in the aquifer system in order to secure an adequate water supply for the coming agricultural season. Apart from the very specific case of cash tenants there are no major differences between the agrarian classes, since between 40-52% of most class categories experience a water shortage all year round.

However, it is important to note that the shortage of water is not the result of a natural shortage brought about by climatic conditions. The shortfall of water for peasant farmers is the direct result of military orders which

preclude Palestinian farmers from drilling deeper wells to tap the aquifer system at a corresponding depth to local Israeli wells. Moreover, the controls the authorities impose on Palestinian peasants are not applied in equal measure to resident Israeli farmers in kibbutzim and moshavim. These Israeli farmers in the Jordan Valley have an unrestricted supply of water from the twenty Israeli bore wells in the region which pump some 15-17 mcm. of water per year.(11) The constant availability of pure (low saline level) water allows Israeli farmers to adopt a wider variety of cropping patterns than those available to Palestinian farmers. The control over water quite clearly is discriminatory and the water shortages cannot be reduced to natural climatic conditions. It is in fact linked to the larger Zionist project of colonisation and Judaization of the Jordan Valley.

In a situation of water shortage one would think it would be to the advantage of Palestinian peasant farmers to have a regular system of storage for water which could then be used for agricultural purposes. However, the development of water storage facilities for agricultural purposes is generally undeveloped. The bulk of farmers (77%) do not have any means of storing excess water (see Table 5). This does not present a problem for those who get their water from bore holes since this water is officially restricted in any case. It does however present a problem to those farmers who get their water supply from the al Fara'a canal and natural springs, since the farmers who use canal water get their water supply by the hour and will often receive more water

than they can use at one time and end up over watering their fields, while water from the springs may end up running off without being used. If any excess water could be stored then it would be possible to irrigate crops using a more efficient and sophisticated water management schedule in order to promote increased crop productivity. Drip irrigation ponds are ideal for this purpose, yet only 17% of farmers had access to such storage vessels.

Table 5: Water Storage by Agrarian Class

Water storage	Share-cropper	Farming-shepherd	Cash Tenant	Smallholder	Farming-landlord	Total
Drip irrigation pond	90	-	4	7	4	105
Nothing	285	55	40	90	8	478
Not asc.	30	4	-	6	2	42
Total	405	59	44	103	14	625

III. ECONOMIC OWNERSHIP OF WATER RESOURCES

I have tried to show in this chapter some of the ways in which water is limited by the whole project of colonisation. Control over water is juridicially and formally invested in the Israeli state as the internationally recognised occupying power. Another aspect of control relates not to colonisation but to economic class relations. In order to distinguish formal juridicial control by the state and ownership by individuals or corporate bodies I will use the term economic

ownership to categorize those individuals who own, rather than juridicially control water resources and water rights. Thus, economic ownership refers to economic class control of water resources.

If we consider economic ownership of the region's Palestinian bore wells we find that 62% of peasant farmers get their water supply from wells which are owned by regional landlords (see Table 6), 17% get their water supply from wells owned by the village as a whole, 15% get their water supply from some other category of owner, 1% get their supply from a well they own themselves and a further 1% get their supply from a local resident who owns a well.

Table 6: Economic Ownership of Bore Wells by Agrarian Class

Owner	Share-cropper	Farming-shepherd	Cash Tenant	Smallholder	Farming-landlord	Total
Landlord	136	4	7	7	3	157
Self	-	-	-	1	1	2
Local Arab	1	1	-	-	-	2
Village	16	1	13	12	1	43
Other	23	1	6	8	1	39
Not asc.	8	-	-	4	-	12
Total	184	7	26	32	6	255

These figures bring out very clearly the dominance of the region's landlords' economic ownership of Palestinian bore wells. Moreover, it is a minority of the region's landlords, normally the more powerful and wealthier ones, who economically control these ground-water resources. Since

water is a scarce factor in agricultural production, ownership and control of this means of production is another factor in augmenting landlords' already significant economic, political and social power.

There are very significant class differences and determinants between the agrarian social classes in terms of the economic ownership of their agricultural water source. For instance, 75% of sharecroppers get their water source from wells controlled by landlords, while only 22% for smallholders, 27% for cash tenants, 50% for farming-landlords and 57% for farming-shepherds. The absolute control of landlords over sharecropper's water supply is seen to be even stronger if we consider the fact that of those who get their water supply from landlords, 87% are sharecroppers. This is larger than the proportion of sharecroppers in the total agricultural population in general.

An inverse relation emerges when we look at the second most common category of economic ownership, i.e. economic ownership by the village itself. Here we find that only 9% of sharecroppers get their water supply from this source, while 50% of cash tenants and 38% of smallholders get their water supply from this source. However, it should be borne in mind that Zbeidat and Marj Najeh are the two villages where the village as a whole owns the local well and in these villages cash tenants and smallholders are significant. Only two farmers, one smallholder and one farming-landlord owned their own well.

We can see quite clearly that the region's landlords are the predominant controllers of the region's ground-water resources. This economic ownership can constitute a fairly significant and steady source of income from the farmers to whom they rent. If the landlord owner is also a landlord with share-tenants it is normally expected that s/he provides the water for her/his tenants as part of the share-contract.

Table 7: Economic Owner of Canal/Spring By Agrarian Class

Owner	Share-cropper	Farming-shepherd	Cash Tenant	Smallholder	Farming-landlord	Total
Landlord	33	-	1	1	-	35
Village	44	4	3	10	2	63
Other	16	1	3	9	2	31
Not asc.	-	-	1	-	-	1
Total	93	5	8	20	4	130

If we consider those farmers who get their water supply from springs or the al Fara'a canal, a different picture emerges; 27% of farmers get their spring/canal water supply from landlords who have economic ownership of this source, 49% from village ownership and 24% from other owners (see Table 7).

If we look at economic ownership of spring/canal water sources we discover that, of those who get their water supply from landlords, 94% are sharecroppers. However, only 36% of sharecroppers, 13% of cash tenants, 5% of smallholders and no

farming-shepherds or farming-landlords get their water supply from the regional landlords who have economic control of spring/canal water sources. More farmers get their spring/canal sources through village ownership than any other source. Thus, 47% of sharecroppers, 80% of farming-shepherds, 38% of cash tenants, 45% of smallholders and 50% of farming-landlords get their supplies from village ownership.

The general trend is that sharecroppers are both absolutely and relatively more dependent on landlords than any other class category for their agricultural water supply, while smallholders and farming shepherds are least dependent on landlords for their water supply.

SUMMARY

In this appendix I attempted to provide an extremely brief outline of the importance of the hydrological question in Zionist thinking and its impact on Israeli military strategy. Control over water resources is just as central a factor in the whole project of colonisation as is the contestation over land. The question of control of water resources is likely to be an even more important determinant in any "autonomy talks" than the question of land, given the absolute importance of securing adequate water resources for the Israeli economy. I also attempted to look at the available sources of water use which Palestinian peasant farmers have access to at the present time and also to look at the economic control of these existing water resources and sources.

NOTES AND REFERENCES

1. Sarah Graham-Brown, "The Economic Consequences of Occupation" in Naseer Aruri, Ed., Occupation: Israel Over Palestine (London, 1984), p.177.
2. Ibid. p.177.
3. They have, however, allowed farmers and herders to construct catchment tanks which collect the run off from rain water but this does not go anywhere towards meeting the needs of adequate agricultural water supplies.
4. Military Government, Department of Agriculture, Monthly Discharge of Underground Water in Tehuda and Shomron 1977/78, quoted in Hisham Awartani, West bank Agriculture: A New Outlook, (Nablus, 1978), p.8.
5. Ibrahim Matar, "Israeli Settlements and Palestinian Rights", in Naseer Aruri, Ed., op. cit. p.129.
6. See ibid. p.129. Also, Tim Coone, "Worries Over West Bank Water", Financial Times, (London), 22 Nov 1979.
7. For a detailed study and history of the political and strategic importance of the riparian dispute, see, Miriam Lowi, "The Politics of Water: The Jordan River and the Riparian States", in McGill Studies in International Development, No. 35 (1984).
8. For an excellent but clear account for the layperson of the hydrological aspects of the River Jordan, see. Thomas Naff and Ruth C. Matson. Eds., Water in the Middle East (Boulder, 1984), pp.17-62.
9. Ibid. p.27.
10. I should explain the reason for the high proportion of

shepherds whose water source was not ascertained (75%). The reason for this is that this section of the questionnaire includes both shepherds who are farmers and those who are shepherds only. Instead of being entered in a "not applicable" category of the questionnaire, shepherds who are only shepherds were entered in the "not ascertained" category, thus skewing the "not ascertained" section in farming-shepherding. This is a problem of questionnaire design and does not upset the general findings.

11. See, Matar op cit. p.129.

- AMIN, S. The Arab Economy Today. London: Zed Press, 1982.
- Unequal Development. New York: Monthly Review Press, 1976.
- ANDERSON, P. "Components of the National Culture". In Student Power. Edited by A. Cockburn and R. Blackburn. Harmondsworth: Penguin, 1969.
- Arguments With English Marxism. London, New Left Books, 1981.
- ARISTOTLE. Metaphysics. Oxford: Oxford University Press, 1924.
- ARRIGHI, G. and SAUL, J. S. Eds. Essays on the Political Economy of Africa. New York: Monthly Review Press, 1979.
- ARURI, N. Ed. Occupation: Israel Over Palestine. London: Zed Press, 1984.
- ASAD, T. "Anthropological Texts and Ideological Problems: An Analysis of Cohen on Arab Villages in Israel". In Review of Middle East Studies. No 1, 1975.
- ASAD, T. Ed. Anthropology and the Colonial Encounter. London: Ithica Press, 1973.
- ASAD, T. and OWEN, R. Eds. Sociology of 'Developing Societies': The Middle East. London: Macmillan, 1983.
- ASAD, T. and WOLPE, H. "Concepts of Modes of Production". In Economy and Society. Vol 5, No 4, 1976.
- AWARTANI, H. West Bank Agriculture: A New Outlook. Nablus: Al Najah, 1978.
- AZIZ, S. Rural Development: Learning From China. London: Macmillan, 1978.
- BACHELARD, G. The New Scientific Spirit. Boston: Beacon Press, 1985.
- The Psychoanalysis of Fire. Boston: Beacon Press, 1964.

- BANAJI, J. "The Peasantry in the Feudal Mode of Production: Towards an Economic Model". In Journal of Peasant Studies. Vol 3, No 3, 1976.
- "Summary of Selected Parts of Kautsky's The Agrarian Question". In The Articulation of Modes of Production. Edited by H. Wolpe. London: Routledge and Kegan Paul, 1980.
 - "India and the Colonial Mode of Production: A Comment". In Economic and Political Weekly. December 1975.
 - "Capitalist Domination and the Small Peasantry. Deccan Districts in the Late Nineteenth Century". In Economic and Political Weekly. August 1977.
- BARAKAT, H. "The Arab Family and the Challenge of Social Transformation". In Women and Family in the Middle East. Edited by E. Fernea. Austin: University of Texas Press, 1985.
- BARKER, D. M. L. and ALLEN, S. Eds. Dependency and Exploitation in Work and Marriage. London: Tavistock Publications, 1976.
- Sexual Divisions in Society. London: Tavistock Publications, 1976.
- BARNARD, C. "Imperialism, Underdevelopment and Education". In Literacy and Revolution: The Pedagogy of Paulo Freire. Edited by R. Mackie. London: Pluto Press, 1980.
- BARRETT, M. Woman's Oppression Today. London: New Left Books, 1980.
- BEE, B. "The Politics of Literacy". In Literacy and Revolution: The Pedagogy of Paulo Freire. Edited by R. Mackie. London: Pluto Press, 1980.

- BENNHOLDT-THOMSEN, V. "Subsistence Production and Extended Reproduction". In Of Marriage and Market. Edited by Kate Young, Carol Wolkowitz and Roslyn McCullagh. London: Routledge and Kegan Paul, 1981.
- BENTON, T. The Philosophical Foundations of the Three Sociologies. London: Routledge and Kegan Paul, 1977
- BENVENISTI, M. The West Bank Data Project: A Survey of Israel's Policies. Washington: American Institute for Public Policy Research, 1984.
- The West Bank and Gaza Data Base Project Interim Report Number 1. Jerusalem: West Bank Data Base Project, 1982.
- BERGGREN, C. and L. The Literacy Process: A Practice of Domestication Or Liberation?. London: Readers and Writers Publishing Cooperative, 1975.
- BERNSTEIN, H. "African Peasantries: A Theoretical Framework". In Journal of Peasant Studies. Vol 6, No 4, 1979.
- "Notes on Capital and Peasantry". In Rural Development. Edited by John Harriss. London: Hutchinson University Press, 1982.
- BERNSTEIN, H. Ed. Underdevelopment and Development. Harmondsworth: Penguin, 1973.
- BETTLEHEIM, C. "Theoretical Comments". In A. Emmanuel, Unequal Exchange. London: New Left Books, 1972.
- BHASKAR, R. A Realist Theory of Science. Sussex: Harvester Press, 1978.
- "Feyerabend and Bachelard: Two Philosophies of Science". In New Left Review. No 94, 1975.
- BLACKBURN, R. Ed. Ideology and the Social Sciences. Glasgow: Fontana, 1972.

- BLALOCK. H. M. Social Statistics. New York: McGraw-Hill Book Company, 1979.
- BLOMSTROM, M. and HETTNE, B. Development Theory in Transition. London: Zed Press, 1984.
- BOOTH, D. "Andre Gunder Frank: An Introduction and Appreciation". In Beyond the Sociology of Development. Edited by I. Oxaal, T. Barnet and D. Booth. London: Routledge and Kegan Paul, 1975.
- BONDS, J., EMERMAN, J., JOHN, L., JOHNSON, P. and RUPERT, P. Our Roots Are Still Alive. New York: Institute for Independent Social Journalism, 1977.
- BONNE, A. State and Economics in the Middle East. London: Routledge and Kegan Paul, 1948
- BRADBY, B. "The Destruction of the Natural Economy". In The Articulation of Modes of Production. Edited by H. Wolpe. London: Routledge and Kegan Paul, 1980.
- BRENNER, R. "The Origins of Capitalist Development: A Critique of Neo-Smithian Marxism". In Introduction to the Sociology of 'Developing Societies'. Edited by H. Alavi and T. Shanin. London: Macmillan, 1982.
- BREWER, A. Marxist Theories of Imperialism: A Critical Survey. London: Routledge and Kegan Paul, 1980.
- BROOKFIELD, H. Interdependent Development. London: Methuen, 1975.
- BURMAN, J. Ed. Fit Work For Women. London: Croom Helm, 1979.
- BYRES, T. and CROW, B. The Green Revolution in India. Milton Keynes: Open University Press, 1983.

- CARMI, S. and ROSENFELD, H. "The Origins of the Process of Proletarianization and Urbanization of Arab Peasants in Palestine". In Studies of Israeli Society: Migration, Ethnicity and Community. Edited by E Kruatzs. New Brunswick: Transaction Books, 1980.
- CARR, M. Blacksmiths, Baker, Roofing-Sheet Maker.... London: Intermediate Technology Publications, 1984
- CASELY, D. J. and LURY, D. A. Data Collection in Developing Countries. Oxford: Oxford University Press, 1981.
- CENTRAL BUREAU OF STATISTICS, Statistical Abstract of Israel 1984. Jerusalem: Central Bureau of Statistics, 1984.
- Statistical Abstract of Israel 1985. Jerusalem: Central Bureau of Statistics, 1985.
- CHAMBERS, A. F. What is This Thing Called Science? Milton Keynes: Open University Press, 1976.
- CHAMBERS, R. Rural Development: Putting the Last First. London: Longman, 1983.
- CHATTOPADHAYAY, P. "On the Question of the Mode of Production in Indian Agriculture: A Preliminary Note". In Economic and Political Weekly. December 1972.
- "Mode of Production in Indian Agriculture: An Anti-kritik". In Economic and Political Weekly. December 1972.
- CHILCOTE, R. H. and JOHNSON, D. L. Eds. Theories of Development: Mode of Production or Dependency?. Beverly Hills: Sage Publications, 1983.

- CHINCHILLA, N. S. "Interpreting Social Change in Guatamala: Modernization, Dependency and the Articulation of Modes of Production". In Theories of Development: Mode of Production or Dependency?. Edited by R. H. Chilcote and D. L. Johnson. Beverly Hills: Sage Publications, 1983
- CLAMMER, J. Ed. The New Economic Anthropology. London: Macmillan, 1978.
- "Economic Anthropology and the Sociology of Development: 'Liberal' Anthropology and its French Critics". In Beyond the Sociology of Development. Edited by I. Oxaal, T. Barnet and D. Booth. London: Routledge and Kegan Paul, 1975.
- COCKBURN, A. and BLACKBURN, R. Eds. Student Power. Harmondsworth: Penguin, 1969.
- COHEN, R., GUTKIND, P. C. W. and BRAZIER, P. Eds. Peasants and Proletarians. London: Hutchinson University Library, 1979.
- COLLINS, L. Ed. The Uses of Models in Social Science. London: Tavistock Publications, 1976.
- CORNFORD, M. Plato's Theory of Knowledge. London: Kegan Paul, 1935.
- DAVIS, U., MAKES, A. E. L. and RICHARDSON, J. "Israeli Water Policies". In Journal of Palestinian Studies. Vol IX, No 2, 1980.
- DEERE, C. D. "Rural Women's Subsistence Production in the Capitalist Periphery". In Peasant and Proletarians. Edited by Robin Cohen, Peter C. W. Gutkind and Phyllis Brazier. London: Hutchinson University Library, 1979.

- DUPRE, G. and REY, P. P. "Reflections on the Pertinence of a Theory of the History of Exchange". In The Articulation of Modes of Production. Edited by H. Wolpe. London: Routledge and Kegan Paul, 1980.
- EICHER, C. K. and STAATZ, J. M. Eds. Agricultural Development in the Third World. Baltimore: John Hopkins University Press, 1984.
- ELAM, Y. "Gush Emunim - A False Messianism". In The Jerusalem Quarterly. No 1, 1976.
- EVENSON, R. "Benefits and Obstacles in Developing Appropriate Agricultural Technology". In Agricultural Development in the Third World. Edited by Carl E. Eicher and John M. Staatz. Baltimore: John Hopkins University Press, 1984.
- FAGEN, R. The Transformation of Political Culture in Cuba. Stanford: Stanford University Press, 1969.
- FARJOUN, E. "Palestinian Workers in Israel: A Reserve Army of Labour". Tel Aviv: The Socialist Organisation of Israel (Matzpen) (pamphlet), 1979.
- FARMER, B. H. Ed. Green Revolution? Technology and Change in the Rice Growing Areas of Tamil Nadu and Sri Lanka. London: Macmillan, 1977.
- FEYERABEND, P. Against Method. London: New Left Books, 1975.
- Science in a Free Society. London: New Left Books, 1978.
- FRANK, A. G. Dependent Accumulation and Underdevelopment. London: Macmillan, 1978.
- Lumpen-Bourgeoisie: Lumpen-Development. New York: Monthly Review Press, 1972.

- Latin America: Underdevelopment or Revolution. New York: Monthly Review Press, 1969.
- Capitalism and Underdevelopment in Latin America. New York: Monthly Review Press, 1969.

FORRESTER, V. "The German Political Foundations". In Pressure Groups, Politics and Development. Edited by C. Stevens and Joan V. Themaat. London: Hodder and Stoughton, 1985.

FOSTER-CARTER, A. "Can we Articulate Articulation?" In The New Anthropology. Edited by J. Clammer. London: Macmillan, 1978.

- "The Modes of Production Controversy". In New Left Review. No 107, 1978.

- "Neo-Marxist Approaches to Development and Underdevelopment". In Sociology and Development. Edited by E. de Kadt and G Williams. London: Tavistock Publications, 1974.

FREIRE, P. Pedagogy of The Oppressed. Harmondsworth: Penguin, 1972.

- Education: The Practice of Freedom. London: Readers and Writers Publishing Cooperative, 1973.

- Cultural Action For Freedom. Harmondsworth: Penguin, 1972.

- Pedagogy in Process. London: Readers and Writers Publishing Cooperative, 1978.

- The Politics of Education. London: Macmillan, 1985.

FRIEDMANN, H. "Household Production in the National Economy: Concepts for the Analysis of Agrarian Formation". In Journal of Peasant Studies Vol 7, No 2, 1980.

- "World Market, State and Family Farm: Social Bases of Household Production in an Era of Wage Labour". In Comparative Studies in Society and History. Vol 20, No 4, 1978.
- "The Family Farm in Advanced Capitalism: Outline of a Theory of Simple Commodity Production in Agriculture". Paper prepared for the Thematic Panel "Rethinking Domestic Agriculture", American Sociological Association, Toronto, August 1981.

FRUZZETTI, L. "Farm and Hearth: Rural Women in a Farming Community". In Women, Work and Ideology in the Third World. Edited by Haleh Afshar. London: Tavistock Publications, 1985.

FERNEA, E. Ed. Women and Family in the Middle East. Austin: University of Texas Press, 1985.

GARDINER, J. "Women's Domestic Labour". In New Left Review, No 89, 1975.

GARDINER, J., HIMMELWEIT, S. and MACKINTOSH, M. "Women's Domestic Labour". In Bulletin of the Conference of Socialist Economists, Vol 4, No 2, 1975.

GERAS, N. "Marx's Critique of Political Economy". In Ideology in the Social Sciences. Edited by R. Blackburn. Glasgow: Fontana, 1977.

GHAI, D. P. "What is a Basic Needs Approach to Development all About?" In The Basic Needs Approach to Development. Edited by D. P. Ghia, A. R. Khan, E. L. H. Lee and T. Alfthan. Geneva: ILO Publications, 1977.

- GHAI, D. P., KHAN, A. R., LEE, E. L. H. and ALFTHAN, T. The Basic Needs Approach to Development. Geneva: ILO Publications, 1977.
- GHOSE, A. K. "Agrarian Reform in Developing Countries: Issues of Theory and Problems of Practice". In Agrarian Reform in Developing Countries. Edited by Ajit K. Ghose. London: Croom Helm, 1983.
- GHOSE, A. K. Ed. Agrarian Reform in Developing Countries. London: Croom Helm, 1983.
- GLAVANIS, K. and P. Eds. Agrarian Relations in the Middle East. (Provisional title). London: Zed Press. (Forthcoming).
- "The Sociology of Agrarian Relations in the Middle East: the Persistence of Household Production. In Current Sociology, Vol 31, No 2 Summer, 1983.
- GLAVANIS, K. "Aspects of Non-Capitalist Social Relations in Rural Egypt: The Small Peasant Household". In Family and Work in Rural Societies. Edited by Norman Long. London: Tavistock Publications, 1984.
- GIACAMAN, R. "Health Conditions in Zbeidat". In Zbeidat: The Social Impact of Drip Irrigation on a Palestinian Peasant Community in the Jordan Valley. S. Tamari and R. Giacaman. Birzeit: Birzeit Research Centre, 1980.
- GODELIER, M. Rationality and Irrationality in Economics. New York: Monthly Review Press, 1973.
- "Structure and Contradiction in Capital". In Ideology in the Social Sciences. Edited by R. Blackburn. Glasgow: Fontana, 1972.

- GOODMAN, D. and REDCLIFT, M. From Peasant to Proletarian: Capitalist Development and Agrarian Transition. Oxford: Basil Blackwell, 1981.
- GRAHAM-BROWN, S. "The Economic Consequences Of Occupation". In, Occupation: Israel Over Palestine. Edited by N. Aruri. London: Zed Press, 1984.
- Education, Repression and Liberation: Palestinians. London: World University Service, 1984.
- GREEN, R. H. "Basic Human Needs: Concept or Slogan, Synthesis or Smokescreen?". In IDS Bulletin. Vol 9. No 4, 1978.
- GRIFFIN, K. The Political Economy of Agrarian Change. London: Macmillan, 1974.
- HALABI, U., TURNER, A. and BENVENISTI, M. Land Alienation in the West Bank: A Legal and Spatial Analysis. Jerusalem: West Bank Data Base Project, 1985.
- HALIM, F. "The Major Mode of Surplus Appropriation in the West Malaysian Countryside". In Journal of Peasant Studies, Vol 10, No 2 and 3, 1982.
- HAMPSHIRE, S. Thought and Action. London: Chatto and Windus, 1965.
- Spinoza. Harmondsworth: Penguin, 1951.
- HANSON, N. Patterns of Discovery. Cambridge: Cambridge University Press, 1963.
- Observation and Explanation. London: Allen and Unwin, 1972.
- HARRE, R. Principles of Scientific Thinking. London: Macmillan, 1970.
- Philosophies of Science. Oxford: Oxford University Press, 1972.

- HARRE, R. and MADDEN, E. H. Causal Powers. Oxford: Blackwell, 1975.
- HARRIS, W. Taking Root: Israeli Settlement In The West Bank, The Golan And Gaza-Sinai, 1967-1980. Chichester: Research Studies Press, 1980.
- HARRISON, M. "Chayanov's Theory of Peasant Economy". In Rural Development: Theories of Peasant Economy and Agrarian Change. Edited by John Harriss. London: Hutchinson University Library, 1982.
- HARRISS, J. Ed. Rural Development: Theories of Peasant Economy and Agrarian Change. London: Hutchinson University Library, 1982.
- Capitalism and Peasant Farming. Oxford: Oxford University Press, 1982.
- HEMPEL, C. "The Theoreticians Dilemma: A Study in the Logic of Theory Construction". In Minnesota Studies in the Philosophy of Science. Volume II. Edited by Freigl, Scriven and Maxwell.
- HESSE, M. "Models Versus Paradigms in the Natural Sciences". In The Uses of Models in the Social Sciences. Edited by L. Collins. London: Tavistock Publications, 1976.
- In Defense of Objectivity. Oxford: Oxford University Press, 1973.
 - Models and Analogies in Science. Indianapolis: University of Notre Dame Press, 1966.
- HILL, C. The Intellectual Origins of the English Revolution. Oxford: Clarendon Press, 1965.
- HIMMELWEIT, S. and MOHUN, S. "Domestic Labour and Capital". In Cambridge Journal of Economics, Vol 1, 1977.

- HINDESS, B. Philosophy and Methodology in the Social Sciences. Sussex: Harvester Press, 1977.
- HINDESS, B. and HIRST, P. Q. Pre-Capitalist Modes of Production. London: Routledge and Kegan Paul, 1975.
- Modes of Production and Social Formation. London: Macmillan, 1977.
- HIRSHON, S. with BUTLER, J. And Also Teach Them To Read. Westport: Lawrence Hill and Company, 1983.
- HOOGVELT, A. The Sociology of Developing Societies. London: Macmillan, 1976.
- HOLDCROFT, L. E. "The Rise and Fall of Community Development, 1950-65". In Agricultural Development in the Third World. Edited by C. K. Eicher and J. M. Staatz. Baltimore: The John Hopkins University Press, 1984.
- HUIZIER, G. "Community Development, Land Reform and Political Participation". In Peasants and Peasant Society. Edited by T. Shanin. Harmondsworth: Penguin, 1973.
- HUME, D. Treatise on Human Nature. Book 1. Oxford: Clarendon Press, 1978.
- HURFORD, D. "Rural Illiteracy In The Occupied Territories: Dimensions And Research Problems". In Birzeit Research Review. Vol 1, No 3 1986.
- ILO. Rural Development and Women in Africa. Geneva: ILO Publications, 1984.
- de JANVRY, A. The Agrarian Question and Reformism in Latin America. Baltimore: John Hopkins University Press, 1981.
- JESSOP, B. The Capitalist State. Oxford: Martin Robertson, 1982.
- Nicos Poulantzas. London: Macmillan, 1982.

- de KADT, E. and WILLIAMS, G. Eds. Sociology and Development.
London: Tavistock Publications, 1974.
- KANT, I. Immanuel Kant's Critique of Pure Reason. New York:
Doubleday and Company, 1966.
- KARL, M. "Income Generation for Women". In Women in
Development: A Resource Guide for Education and Action.
Geneva: ISIS, 1983.
- KAY, G. Development and Underdevelopment: A Marxist Analysis.
London: Macmillan Press, 1975.
- KEAT, R. and URRY, J. Social Theory as Science. London:
Routledge and Kegan Paul, 1975.
- KEEGAN, T. "The Sharecropping Economy of the South African
Highveld in the Early Twentieth century". In Journal of
Peasant Studies, Vol 10, No 2 and 3, 1982.
- KHADER, S. "The Dropping-Out of Adults in Literacy Courses".
Birzeit: Birzeit Adult Literacy Centre, 1983.
(Unpublished mimeo)
- KHOURI, R. G. The Jordan Valley. London: Longman, 1981.
- KHRAISHEH, A. R. and EBERSOLE, J. West Bank Agricultural
Cooperatives: A Case Study in Institutional Change Under
Military Occupation. Jerusalem: Mennonites Central
Committee, 1980. (Unpublished Report)
- KOLAKOWSKI, L. Positivist Philosophy. Harmondsworth: Penguin,
1972.
- KRAUTSZ, E. Ed. Studies in Israeli Society: Migration,
Ethnicity, and Community. New Brunswick: Transaction
Books, 1980.
- KUHN, T. S. The Structure of Scientific Revolutions. Chicago:
University of Chicago Press, 1970.

- KUTTAB, J. and SHEHADEH, R. Civilian Administration In The Occupied West Bank. Ramallah: Law in the Service of Man/ Al Haq, 1982.
- LACLAU, E. Politics and Ideology in Marxist Theory. London: New Left Books, 1977.
- LACLAU, E. and MOUFFE, C. Hegemony and Socialist Strategy. London: New Left Books, 1982.
- LAKATOS, I. and MUSGRAVE, P. M. Eds. Criticism and the Growth of Knowledge. Cambridge: Cambridge University Press, 1970.
- LEEDS, A. "Housing-Settlement Types, Arrangements For Living, Proletarianization, and the Social Structure of the City". In Third World Urbanization. Edited by J. Abu Lughod and R. Hay Jr. New York: Methuen, 1979.
- LELE, U. The Design of Rural Development. Baltimore: John Hopkins University Press, 1975.
- LEVI-STRAUSS, C. The Savage Mind. Chicago: Chicago University Press, 1966.
- LEYS, C. "Challenging Development Concepts". In IDS Bulletin Vol 11, No. 3, 1980.
- LIPTON, M. Why Poor People Stay Poor. London: Temple Smith, 1977.
- LOCKE, J. An Essay Concerning Human Understanding. Oxford: Clarendon Press, 1975.
- LONG, N. Ed. Family and Work in Rural Societies. London: Tavistock Publications, 1984.

- LONG, N. "Structural Dependency, Modes of Production and Economic Brokerage in Peru". In Beyond the Sociology of Development. Edited by I. Oxaal, T. Barnet and D. Booth. London: Routledge and Kegan Paul, 1975.
- Introduction to the Sociology of Rural Development. London: Tavistock Publications, 1977.
- LOWI, M. "The Politics of Water: The Jordan River And Riparian States". In McGill Studies In International Development. No 35 1984.
- MACKIE, R. Ed. Literacy and Revolution: The Pedagogy of Paulo Freire. London: Pluto Press, 1980.
- MACKINTOSH, M. "Domestic Labour and the Household". In Fit Work For Women. Edited by J. Burman. London: Croom Helm, 1979.
- "Gender and Economics: the Sexual Division of Labour". In Of Marriage and Market. Edited by Kate Young, Carol Wolkowitz and Roslyn McCullagh. London: Routledge and Kegan Paul, 1981.
- MACPHERSON, J. B. Possessive Individualism. London: Oxford University Press, 1968.
- MAGALIT, E. "Socialist Zionism in Palestine: Collective and Equalitarian Tradition". In The Jerusalem Quarterly. No 28, 1983.
- MALHUUS, M. "Cash Crop Production in the National Economy: Tobacco Growers in Corrientes, Argentina". In Family and Work in Rural Societies. Edited by Norman Long. London: Tavistock Publications, 1984.

- MANN, S. A. and DICKINSON, J. M. "Obstacles to the Development of a Capitalist Agriculture". In Journal of Peasant Studies. Vol 5. No 4, 1978.
- MARX, K. Capital. Vol 1. Harmondsworth: Penguin, 1976.
- Capital. Vol 3. Harmondsworth: Penguin, 1981.
 - Grundrisse. Harmondsworth: Penguin, 1973.
 - A Contribution to a Critique of Political Economy. London: Lawrence and Wishart, 1971.
- MARX, K. and ENGELS, F. "The Manifesto of the Communist Party". In Selected Works. Vol 1. Moscow: Foreign Languages Publishing House, 1962.
- MASHI, K. and Rihan, R. "Education: Elementary and Secondary". In A Palestinian Agenda For the West Bank and Gaza. Edited by E. A. Nakhleh. Washington: American Enterprise Institute For Public Policy Research, 1980.
- MATAR, I. "Israeli Settlements And Palestinian Rights". in Occupation: Israel Over Palestine. Edited by N. Aruri. London: Zed Press, 1984.
- McEACHERN, D. "The Mode of Production in India". In Journal of Contemporary Asia. Vol 6, No 4, 1976.
- MEILLASSOUX, C. Maidens, Meal and Money: Capitalism and the Domestic Community. Cambridge: Cambridge University Press, 1981.
- "From Reproduction to Production". In Economy and Society Vol 1, 1972.
- MOLYNEUX, M. "Beyond the Domestic Labour Debate". In New Left Review, No 116, 1979.

- MOORS, A. "Gender Hierarchy in a Palestinian Village: The Case of Al Balad. In Agrarian Relations in the Middle East (Provisional title). Edited by K. and P. Glavanis. London: Zed Press (forthcoming).
- NAFF, T. and MATSON, R. C. Eds. Water In The Middle East. Boulder: Westview Press, 1984.
- NAGEL, E. The Structure of Science. London: Routledge and Kegan Paul, 1961.
- NAKHLEH, E. A. Ed. A Palestinian Agenda For The West Bank and Gaza. Washington: American Enterprise Institute For Policy Research, 1980.
- NAKHLEH, H. and ZUREIK, E. Eds. The Sociology of The Palestinians. London: Croom Helm, 1980.
- NAKHLEH, H. "Palestinian Intellectuals and Revolutionary Transformation". In The Sociology of The Palestinians. Edited by H. Nakhleh and E. Zureik. London: Croom Helm, 1980.
- NERFIN, M. Ed. Another Development: Approaches and Strategies. Uppsala: The Dag Hammarskjold Foundation, 1977.
- OAKLEY, P. "The Jordan Valley: Drip-Irrigation for Small Farmers". In Reading Rural Development Communication Bulletin, No 5, November 1978.
- OBEREGON, A. Q. "The Marginal Pole of the Economy and the Marginalised Labour Force". In The Articulation of Modes of Production. Edited by H. Wolpe. London: Routledge and Kegan Paul, 1980.

- O'BRIEN, P. J. "A Critique of Latin American Theories of Dependency". In Beyond the Sociology of Development. Edited by I. Oxaal, T. Barnet and D. Booth. London: Routledge and Kegan Paul, 1975.
- OWEN, R. The Middle East in the World Economy 1800 - 1914. London: Methuen, 1981.
- OXAAL, I., BARNET, T. and BOOTH, D. Eds. Beyond the Sociology of Development. London: Routledge and Kegan Paul, 1975.
- PATNAIK, U. "Capitalist Development in Agriculture: A Note". In Economic and Political Weekly. September 1971.
- "On the Mode of Production in Indian Agriculture: A Reply". In Economic and Political Weekly. December 1972.
- PEARCE, A. Seeds of Plenty Seeds of Want. Oxford: Oxford University Press, 1980.
- PEARCE, R. "Sharecropping: Toward a Marxist Analysis". In Journal of Peasant Studies, Vol 10, No 2 and 3, 1982.
- PIAGET, J. The Child's Construction of Reality. London: Routledge and Kegan Paul, 1955.
- POLLOCK, A. "Aspects of Selected Strategies For Rural Development". In Birzeit Research Review. Vol 1. No 3, 1986.
- "Society and Change in the North Jordan Valley". In Development Under Prolonged Occupation. Edited by George Abed. Geneva: Welfare Association, (forthcoming).
- "Sharecropping in the North Jordan Valley: Social Relations of Production and Reproduction". In Agrarian Relations in the Middle East. Edited by Kathy and Pandeli Glavanis. London: Zed Press, 1987 (forthcoming).

- POPPER, K. The Logic of Scientific Discovery. London: Hutchinson, 1959.
- Conjectures and Refutations. London: Routledge and Kegan Paul, 1963.
 - Objective Knowledge. Oxford: Clarendon Press, 1972.
- POULANTZAS, N. Political Power and Social Classes. London: New Left Books, 1973.
- Classes in Contemporary Capitalism. London: New Left Books, 1975.
 - State, Power and Socialism. London: New Left Books, 1978.
 - Fascism and Dictatorship. London: New Left Books, 1974.
 - The Crisis of the Dictatorships. London: New Left Books, 1976.
- POWELL, A. Food Resources and Food Systems in Two West Bank Villages. Jerusalem: Unpublished Report to the Arab Thought Forum, Jerusalem, 1986.
- PRESTON, P. W. New Trends in Development Theory. London: Routledge and Kegan Paul, 1985.
- REITER, R. Ed. Towards an Anthropology of Women. New York: Monthly Review Press, 1975
- RICKS, T. "Palestinian Education: Directions and Areas of Research". In Birzeit Research Review. Vol 1. No 1, 1985.
- RODGERS, B. The Domestication of Women. London: Tavistock Publications, 1980.
- RODINSON, M. Israel: A Colonial-Settler State? New York: Monad Press, 1973.

- ROSEBERRY, W. Coffee and Capitalism in the Venezuelan Andes.
Austin: University of Texas Press, 1983.
- "Peasants and Proletarians". In Critique of Anthropology. No. 11, 1978.
- RUBIN, G. "The Traffic in Women: Notes on the 'Political Economy' of Sex". In Towards an Anthropology of Women. Edited by Rayna Reiter. New York: Monthly Review Press, 1975
- RUDRA, A. "Class Relations in Indian Agriculture". In Economic and Political Weekly. June 1978.
- RUSSELL, B. A History of Western Philosophy. London: Allen and Unwin, 1961.
- SAID, E. W. Orientalism. New York: Pantheon Books, 1978.
- SANDBROOK, R. The Politics of Basic Needs. London: Heinemann, 1982.
- SAUL, J. S. "On African Populism". In Essays on the Political Economy of Africa. Edited by Giovanni Arrighi and John S. Saul. New York: Monthly Review Press, 1979.
- SAVANE, M-A. "Migration". In Rural Development and Women in Africa. Edited by ILO. Geneva: ILO Publications, 1984.
- SAYER, D. Marx's Method. Sussex: Harvester Press, 1979.
- SAYIGH, R. Palestinians: From Peasants To Revolutionaries. London: Zed Press, 1979.
- SCHULTZ, T. W. Transforming Traditional Agriculture. New Haven: Yale University Press, 1964.
- SEDDON, D. Ed. Relations of Production: Marxist Approaches to Economic Anthropology. London: Frank Cass, 1977.
- SEDDON, D. "Paradigms, Peasants and Populism: New Directions in the Political Economy of Agrarian Change in the

- Middle East and North Africa". Discussion Paper No 181. School of Development Studies, University of East Anglia, September 1985.
- "Economic Anthropology or Political Economy?" In The New Economic Anthropology. Edited by J. Clammer. London: Macmillan, 1978.
- SELLTIZ, C., WRIGHTSMAN, L. W. and COOK, S. W. Research Methods in Social Relations. New York: Holt, Rinehart and Winston, 1976.
- SHEHADEH, R. "Some Legal Aspects of Israeli Land Policy in the Occupied Territories". In Arab Studies Quarterly. Vol 7. Nos 2 and 3, 1985.
- SMITH, C. "The Bacterial Quality of Drinking Water In Eight Villages In "The Northern Jordan Valley: An Interim Report". Birzeit: Birzeit Community Health Unit, 1984.
- STAVENHAGEN, R. Ed. Agrarian Problems and Peasant Movements in Latin America. New York: Doubleday, 1970.
- STEEDMAN, I. Marx After Sraffa. London: New Left Books, 1977.
- STEEDMAN-JONES, G. "History: The Poverty of Empiricism". In Ideology in the Social Sciences. Edited by R. Blackburn. Glasgow: Fontana, 1972.
- STEVENS, C. and THEMAAT, J. V. "Non-Governmental Influences on Euro-South Relations". In Pressure Groups, Policies and Development. Edited by C. Stevens and J. V. Themaat. London: Hodder and Stoughton, 1985.
- TAHRIR, J. "An Assessment of Palestinian Human Resources: Education and Manpower. In Journal Of Palestinian Studies. Vol. XIV, No 3, 1985.

- TAMARI, S. "Israel's Search For A Native Pillar: The Village Leagues". In Occupation: Israel Over Palestine. Edited by N. Aruri. London: Zed Press, 1984.
- The Dislocation and Re-Constitution of a Peasantry: The Social Economy of Agrarian Palestine in the Central Highlands and the Jordan Valley, 1960-80. Manchester: Unpublished PhD Thesis, 1983.
 - "Building Other Peoples' Homes: The Palestinian Peasant Household and Work in Israel". Jerusalem: Arab Thought Forum, 1981.
- TAMARI, S. and GIACAMAN, R. Zbeidat: The Social Impact of Drip Irrigation on a Palestinian Peasant Community in the Jordan Valley. Birzeit: Birzeit Research Centre, 1980.
- TAYLOR, J. From Modernization to Modes of Production. London: Macmillan, 1979.
- "Pre-Capitalist Modes of Production. In Critique of Anthropology. Nos. 4 and 5/6, Autumn 1975 and Spring 1976.
- TERRAY, E. Marxism and 'Primitive' Societies. New York: Monthly Review Press, 1972.
- THOMAS, C. Y. Dependence and Transformation: The Economics of the Transition to Socialism. New York: Monthly Review Press, 1974.
- THOMPSON, E. P. The Poverty of Theory. London: Merlin Press, 1980.
- TODARO, M. P. Economic Development in the Third World. London: Longman, 1977.

- TSE-TUNG, M. "Fourteen Great Achievements of the Peasant Movement in Hunan". Selected Works. Vol 1. Peking: Foreign Languages Press, 1969.
- Selected Works. Vol 1. Peking: Foreign Languages Press, 1969.
- TURNER, B. S. Capitalism and Class in the Middle East. London: Heinemann Educational Books, 1984.
- UNESCO. Literacy As A Factor In Development. Paris: UNESCO, 1965.
- VAN ARKADIE, B. Benefits and Burdens: A Report on the West Bank and Gaza Strip Economies Since 1967. New York: Carnegie Endowment for International Peace, 1977.
- WARD, P. M. "The Impact Of Local Leadership Upon Squatter Settlements In Mexico City". In Development Research Digest. No 1. Spring 1978.
- WARREN, B. Imperialism: Pioneer of Capitalism. London: New Left Books, 1980.
- WILLER, D. and J. Systematic Empiricism: Critique of a Pseudo-Science. New Jersey: Prentice Hall, 1973.
- WHITEHEAD, A. "Some Preliminary Notes on the Subordination of Women". In IDS Bulletin, Vol 10, No 3.
- WOLPE, H. "Capitalism and Cheap Labour-Power in South Africa: From Segregation to Apartheid". In The Articulation of Modes of Production. Edited by H. Wolpe. London: Routledge and Kegan Paul, 1980.
- WOLPE, H. Ed. The Articulation of Modes of Production. London: Routledge and Kegan Paul, 1980.
- WORLD BANK, World Development Report 1983. Oxford: Oxford University Press, 1983.

- WORSLEY, P. The Three Worlds: Culture and World Development.
London: Weidenfield and Nicolson, 1984.
- WRIGHT, E. O. Class, Crisis and the State. London: New Left
Books, 1978.
- Classes. London: New Left Books, 1985.
 - "The Value Controversy and Social Research". In The Value Controversy. Edited by I. Steedman. London: New Left Books, 1981.
 - "Reconsiderations". In The Value Controversy. Edited by I. Steedman. London: New Left Books, 1981.
- YOUNG, K., WOLKOWITZ, C. and McCULLAGH, R. Eds. Of Marriage and Market. London: Routledge and Kegan Paul, 1981.
- YOUNG, M. PERRATON, H. JENJINS, J. and DODDS, T. Distance Teaching in the Third World. London: Routledge and Kegan Paul, 1980.