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Development Policy and Practice Research Group

**REPRODUCTION, EXCHANGE RELATIONS AND FOOD
INSECURITY: MAIZE PRODUCTION AND MAIZE
MARKETS IN HONDURAS**

by

HAZEL EILEEN JOHNSON

Thesis submitted for the degree of Doctor of Philosophy at The Open University

1995

Date of submission: 19 May 1995
Date of award: 4 October 1995

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To those working to alleviate food insecurity in Honduras

and in memory of

Christine Cooper,

Christine Liechti

and Rosa Vásquez

ACKNOWLEDGEMENTS

I thank the many people who have supported the work of this thesis and who cannot all be named here.

In Honduras, I give thanks to all the staff of the Postgrado en Economía y Planificación del Desarrollo in the National University of Honduras where I was based when I carried out the research, and especially Alcides Hernández who was departmental coordinator; to the staff of the Catholic Institute for International Relations in Tegucigalpa, in particular Jenny Vaughan, Dick Harding and Reina Rodríguez de Fiallos; to the many staff in ministries and government institutions who assisted me with data, documents and contacts, especially Comercio Interior (San Pedro Sula), Instituto Hondureño de Mercadeo Agrícola (IHMA - Departamentos de Planificación, Comercialización y Análisis), Ministerio de Recursos Naturales (MRN -Tegucigalpa and Danlí offices), Secretaría de Planificación (SECPLAN [CONSUPLANE] - Departamento Agrícola); to members of the Central Nacional de Trabajadores Agrícolas (CNTC) who assisted me with contacting collectively-organized groups; to the agronomists, extensionists, development workers, activists and other researchers who discussed data and ideas with me; and last, but not least, to the maize farmers, traders and industrialists I interviewed and who were prepared to give me their time and hospitality.

In Britain, I have to thank the patience and forbearance of my colleagues (past and present) in Development Studies and the Systems Department at the Open University, and particularly the moral and institutional support of Geoff Peters, Alan Thomas and David Wield. I also wish to thank Henry Bernstein, Ben Crow, Barbara Harriss, Patricia Howard, John Willmer and Philip Woodhouse who inspired me in different ways with this research. I have also greatly appreciated the friendship and

encouragement of fellow researchers Dina Abbott, Pamela Cawthorne and Richard Heeks, as well as the moral support of friend and colleague Mary Thorpe. Thanks are also due to those in the Systems Department who helped me with computing and printing problems, and especially to Kevin Gowans who redrew the maps at short notice.

Special appreciation goes to Oxfam, especially Deborah Eade, who helped to fund the research; to Maureen Mackintosh, from whose rigorous supervision I learned an enormous amount; and to Daniel Tabor, who supported me in every way.

The analysis, interpretation, errors and omissions in this thesis are my own responsibility.

CONTENTS

Abstract	xv
Acronyms and measurements	xvii
Introduction	1
(i) Focus and argument of the thesis	1
(ii) Contribution of the research	5
(iii) My approach to food security: debts and contributions	9
(iv) Structure of the thesis	10
Chapter 1 Explaining rural food insecurity	12
Introduction	12
1.1 Explaining food insecurity	13
1.2 Food insecurity and agrarian class formation	17
1.3 The disappearance and persistence of peasants	21
1.4 Peasants, petty commodity producers and semi-proletarians	24
1.5 Surplus extraction and food insecurity	27
1.6 Commoditization	33
1.7 Exchange relations, social hierarchies and power	39
1.8 Survival strategies, policy and public action	44
1.9 Summary	45
Chapter 2 Gaps in policy debates affecting Honduran maize farmers	48
Introduction	48
2.1 Acknowledging food insecurity in the 1980s	49
2.1.1 Nutrition	50
2.1.2 Poverty and income	51
2.1.3 Rural poverty and action on landlessness	52
2.1.4 Rural poverty and unemployment	54
2.1.5 Economic and political crisis	54

2.1.6 Food production, imports and aid	55
2.1.7 Concluding comment	59
2.2 The changing context of agricultural and food policy debate	59
2.3 Gaps in debates and proposals relating to rural food insecurity	63
2.3.1 Policies affecting access to and control over land	63
2.3.2 Policies directed to productive capacities	70
2.3.3 Market efficiency and market incentives	74
(i) State intervention and prices	74
(ii) The role of price incentives	78
(iii) Conclusion	80
2.4 Summary	81
Chapter 3 Researching maize	82
Introduction	82
3.1 General questions and issues	82
3.2 Doing field research	87
3.2.1 Interviewing individual maize farmers and peasant groups in El Paraíso	91
3.2.2 General note on interviewing peasant groups; interviewing groups in Santa Bárbara	99
3.2.3 Interviewing traders in Danlí and San Pedro Sula	103
3.2.4 Note on interviewing industrialists in San Pedro Sula	110
3.3 Summary	112
Chapter 4 Changes affecting maize production, 1952-74	114
Introduction	114
4.1 Historical perspectives on current-day maize production	115
4.2 Changes affecting maize production from 1952-74	121
4.2.1 General changes in land distribution, tenure and use	123
(i) Declining access to land	123
(ii) Privatization of land	124
(iii) Commoditization of land use	131
4.2.2 Changes affecting maize production	133
(i) Distribution of maize farms and access to land	134
(ii) Land use in maize farms	135
(iii) Reproducing maize production	136

4.3 Changes affecting maize production in El Paraíso and Santa Bárbara, 1952-74	138
4.3.1 Evidence of pressures on access to land	138
4.3.2 Evidence of commoditization in land use	144
4.3.3 Evidence of intensification in maize production	147
4.4 Summary	151
Chapter 5 Producing maize in El Paraíso: obstacles, risks and strategies	157
Introduction	157
5.1 Obtaining land	159
5.1.1 Land tenure patterns in Chichicaste and Jutiapa	160
5.1.2 Large farmers	165
5.1.3 Small and medium farmers	167
5.1.4 Paying for rented or borrowed land	169
5.1.5 Land and exchange relations: balancing risk and security	172
5.1.6 Conclusions	177
5.2 The use of labour in maize production	178
5.2.1 Large farmers	179
5.2.2 Small farmers	181
5.2.3 Medium farmers	184
5.2.4 Conclusions	185
(i) Relations within farms	185
(ii) Relations between farms	186
(iii) Implications for maize production	186
5.3 Financing production	187
5.3.1 Conclusions	194
5.4 Access to technologies	195
5.4.1 Conclusions	205
5.5 The social relations of maize production: summary and conclusions	205
Chapter 6 Reproducing maize in El Paraíso: vulnerability, survival and accumulation	209
Introduction	209

6.1 Access to maize for consumption	211
6.1.1 The problems of consumption deficit farmers	214
6.1.2 Farmers who met their consumption needs	219
6.1.3 Conclusions	221
6.2 Making cash income from maize production	222
6.2.1 Negative net income farmers	224
6.2.2 Positive net income farmers	227
(i) Yields	227
(ii) Area, output and income from sales	229
6.2.3 Models and realities of making a net income from maize production	233
6.2.4 Returns to labour	239
6.2.5 Large maize farmers	243
6.2.6 Conclusions	244
6.3 Conclusions	245

Chapter 7 Reproducing maize in El Paraíso: dealing with debt and output markets

	248
Introduction	248
7.1 Debt relations and reproducing finance for maize production	249
7.1.1 Conclusions	258
7.2 The social relations of maize prices	260
7.2.1 How maize farmers saw prices	262
7.2.2 Differentiated farmers: differentiated prices?	264
7.2.3 Summary and conclusions	275
7.3 Conclusions: food insecurity and class relations	276

Chapter 8 Reproducing maize in collective groups: El Paraíso and Santa Bárbara

	287
Introduction	287
8.1 Peasant organization and types of production unit	289
8.2 Reproducing collectively-organized maize production in El Paraíso and Santa Bárbara	293
8.2.1 Land/labour relations	294

(i) Land tenure	295
(ii) Access to, distribution and use of land	297
(iii) Labour	303
(iv) Summary and conclusions	306
8.2.2 Debt relations and income from maize	307
(i) Financing production	307
(ii) Making a net cash income from maize	315
(iii) Summary and conclusions	323
8.2.3 Managing consumption	324
8.2.4 Collective organization and prices	330
8.3 Conclusions	335
<i>Chapter 9 Maize markets and maize production</i>	338
Introduction	338
9.1 Types of market, trading worlds and terminologies	341
9.1.1 Types of market	341
9.1.2 Trading worlds and terminologies	343
9.2 Farmers' interaction with markets and prices	347
9.2.1 Farmer-trader relations and prices in El Paraíso and Sta Bárbara	348
9.2.2 Access to other markets: institutional alternatives	354
9.2.3 Conclusions	359
9.3 The profitability of maize trade	359
9.3.1 Price shares and profit margins	361
9.3.2 Evidence of trader wealth	369
9.3.3 Conclusions	375
9.4 The social relations of securing profits	375
9.4.1 Wholesalers and truckers/itinerant traders	377
9.4.2 Trading between wholesalers, and between wholesalers and industry	379
9.4.3 Informal and institutionalized credit relations	382
9.4.4 Conclusions	384
9.5 Conclusions	384
<i>Conclusions</i>	387
Theoretical conclusions	387

(i) Class relations	387
(ii) Commoditization	389
(iii) Markets	392
(iv) Food insecurity	395

Policy implications	396
(i) Land	396
(ii) Credit	398
(iii) Technical assistance	400
(iv) Output markets and pricing	402
(v) Lessons for food security	404

References	406
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List of tables

3.1 Summary of fieldwork stages	89
3.2 Distribution of maize farmers interviewed in Jamastrán	96
3.3 Industrial use of maize among selected companies in San Pedro Sula, 1988	111
4.1 Rural landlessness by region in Honduras as indicated by population engaged in day labour (based on 1974 population census data)	120
4.2 Distribution of farms by farm size in Honduras, 1952-74	124
4.3 Distribution of land in farms by farm size in Honduras, 1952-74	124
4.4 Percentage distribution of farms by type of tenure and farm size, 1952 and 1974	127
4.5 Distribution of farms with a single type of tenure and farm size, 1952 and 1974	129
4.6 Changes in land area in single tenure farms by type of land tenure, 1952-74	130
4.7 Changes in land use in farms, Honduras 1952-74	132
4.8 Number of farms growing maize by farm size, Honduras 1952 and 1974	134
4.9 Maize farms: estimated percentage of land used for growing maize within farms by farm size, Honduras 1952 and 1974	136
4.10 Extent of off-farm income by farm size (all farms, 1982) and use of wage labour in maize production by farm size (1984), Honduras	137

4.11 El Paraíso and Santa Bárbara: average maize yields, 1952-74 (MT/Ha)	151
5.1 Number of small, medium and large farmers interviewed in Chichicasté and Jutiapa, 1987	158
5.2a Distribution of farms by stated type of land tenure among farmers interviewed in Chichicasté and Jutiapa, 1987 (all farms)	164
5.2a Distribution of farms by stated type of mixed land tenure among farmers interviewed in Chichicasté and Jutiapa, 1987	164
5.3 Access to land by six large maize farmers in Chichicasté and Jutiapa, 1987	166
5.4 Number of plots per farm among small and medium maize farmers in Chichicasté and Jutiapa, 1987	168
5.5 Type of access to unowned land by small and medium maize farmers in Chichicasté and Jutiapa, 1987	169
5.6 Type of contractual arrangement for rented or borrowed land among small and medium maize farmers in Chichicasté and Jutiapa, 1987	171
5.7 Estimated proportion of land used for maize among farmers interviewed in Chichicasté and Jutiapa, <i>primera</i> 1986-87	176
5.8 Type of labour used in maize production among small, medium and large farmers interviewed in Chichicasté and Jutiapa, 1987	180
5.9 Estimated proportion of seasonal labour in total labour required in maize production for small, medium and large farmers in Chichicasté and Jutiapa, <i>primera</i> 1986-87	180
5.10 Access to labour and use of own labour for maize production among small farmers interviewed in Chichicasté and Jutiapa, 1987	183
5.11 Area planted with maize and access to labour of small farmers interviewed in Chichicasté and Jutiapa, <i>primera</i> 1986-87	183
5.12 Use of family and seasonal labour by area of planted maize among medium farmers in Chichicasté and Jutiapa, <i>primera</i> 1986-87	185
5.13 Evidence of land and labour exchanges between small and large maize farmers, Chichicasté and Jutiapa, 1987	186
5.14 Sources of credit among small, medium and large maize farmers interviewed in Chichicasté and Jutiapa, <i>primera</i> 1986-87	190

5.15 Sources of finance among small farmers involved in land and labour exchanges with large maize farmers, Chichicasté and Jutiapa, <i>primera</i> 1986-87	193
5.16 Estimated amounts of credit (all types, excluding interest) received per hectare by small, medium and large farmers interviewed in Chichicasté and Jutiapa, <i>primera</i> 1986-87	194
5.17 Use of mechanized inputs by small, medium and large maize farmers interviewed in Chichicasté and Jutiapa, <i>primera</i> 1986-87	198
5.18 Use of biochemical inputs by small, medium and large maize farmers interviewed in Chichicasté and Jutiapa, <i>primera</i> 1986-87	199
5.19 Average quantities of biochemical inputs used by small, medium and large maize farmers interviewed in Chichicasté and Jutiapa, <i>primera</i> 1986-87 (Kgs/Ha)	200
5.20 Relationship between access to credit from the DRI and average amount of biochemical inputs used among small and medium maize farmers, <i>primera</i> 1986-87 (Kgs/Ha)	201
5.21 Exchange networks of small maize farmers not receiving institutional credit in Chichicasté and Jutiapa, <i>primera</i> 1986-87	203
5.22 Sources of machine or animal hire among small, medium and large farmers interviewed in Chichicasté and Jutiapa, <i>primera</i> 1986-87	204
6.1 Maize sales at harvest as a proportion of harvested output among farmers interviewed in Chichicasté and Jutiapa, <i>primera</i> 1986-87	213
6.2 Maize available for household consumption after harvest sales, Chichicasté and Jutiapa, <i>primera</i> 1986-87	214
6.3 Characteristics of consumption deficit farmers in Chichicasté and Jutiapa, post- <i>primera</i> 1986-87	215
6.4 Area sown, output and yields of small maize farmers interviewed in Chichicasté and Jutiapa, <i>primera</i> 1986-87	220
6.5 Number of farmers with positive and negative net incomes from maize farming by farm size group, Chichicasté and Jutiapa, <i>primera</i> 1986-87	225
6.6 Negative net cash incomes as percentage of estimated cash costs of production among maize farmers interviewed in Chichicasté and Jutiapa, <i>primera</i> 1986-87	225
6.7 Farmers experiencing a negative net income and/or a maize consumption deficit, Chichicasté and Jutiapa, <i>primera</i> 1986-87	226

6.8 Yield characteristics of maize farmers obtaining positive net income (including potential income from further post-harvest sales), Chichicaste and Jutiapa, <i>primera</i> 1986-87	228
6.9 Yield characteristics of maize farmers obtaining negative net income, Chichicaste and Jutiapa, <i>primera</i> 1986-87	229
6.10 Comparison of expected costs and net cash income from maize before and after technological change through rural credit for different maize farm models (1984)	235
6.11 Comparison of cash costs of production/Ha before and after technological change through rural credit with mean and median cash costs of production for maize among farmers interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87 (Lps/Ha)	237
6.12 Comparison of value of maize sales/Ha before and after technological change through rural credit with mean and median value of maize sales among farmers interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87 (Lps/Ha)	237
6.13 Comparison of net incomes/Ha before and after technological change through rural credit with mean and median net incomes among farmers interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87 (Lps/Ha)	238
6.14 Average net incomes from maize (means and medians) of farmers interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87	243
6.15 Perspectives on the food security and insecurity of consumption and/or income deficit farmers interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87	246
7.1 Ways of financing maize production among farmers interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87	251
7.2 Extent of coverage of costs of production by institutional credit among maize farmers interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87	251
7.3 Ability of small and medium farmers receiving DRI credit to repay loans from maize sales, Chichicaste and Jutiapa, <i>primera</i> 1986-87	253
7.4 Some perceived problems with reproducing maize production by type of farmer (Jutiapa), 1987	263
7.5 Social positions of maize farmers interviewed in Chichicaste and Jutiapa, 1987	281
8.1 Initial categorization of groups interviewed, 1987 and 1988	293
8.2 Collectively-organized groups interviewed in Chichicaste, Jutiapa and Quita Sueño, 1987 and 1988	294

8.3 Distribution of land by collective and individual use among groups interviewed in Chichicaste and Jutiapa, 1987	298
8.4 Sources of finance for maize production among groups interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87	309
8.5 Sources of credit reported by 10 Quita Sueño groups since inception (1986-88)	310
8.6 Agricultural input use by collectively-organized groups interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87 (number of groups)	312
8.7 Comparison of average quantities of biochemical inputs used by small, medium and large maize farmers and collectively-organized groups interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87 (Kgs/Ha)	313
8.8 Agricultural input use by 10 collectively-organized groups interviewed in Quita Sueño, <i>primera</i> 1987-88 (number of groups)	314
8.9 Average maize yields by type of ground reported among groups interviewed in Quita Sueño, <i>primera</i> 1987-88	314
8.10 Net income from maize production estimated for groups interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87, and net income of equivalent farm model designed by the DRI	317
8.11 Maize yields for collective plots among groups interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87	318
8.12 Average net incomes (means and medians) of individual farmers by class (both villages) and members of collective groups interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87	320
8.13 Estimated net income from maize production by 6 groups interviewed in Quita Sueño, <i>primera</i> 1986-87	323
8.14 Chichicaste and Jutiapa: consumption, income and loan repayment outcomes among groups interviewed, <i>primera</i> 1986-87	327
8.15 Estimated yearly maize consumption needs for 6 groups interviewed in Quita Sueño, <i>primera</i> 1987-88	328
8.16 Comparison of prices received for maize and time of harvest sales of semi-proletarian farmers, petty commodity producers and collectively-organized groups interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87	332
9.1 Per capita consumption of food grains in urban and rural areas, 1967-68 and 1978-79 (Kgs/year)	341

9.2 General characteristics of Danlí and San Pedro Sula traders, 1987 and 1988	345
9.3 Trader terminology	346
9.4 Origin of maize purchasers by number of sales and type of farmer, among individual farmers interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87	349
9.5 Prices received by individual maize farmers interviewed in Chichicaste and Jutiapa by origins of purchasers (where known), <i>primera</i> 1986-87	350
9.6 Relationship between prices received for maize by groups in Quita Sueño and origin of traders, <i>primera</i> 1987-88	353
9.7 Percentage of retail prices in nearest market centres received by Chichicaste and Jutiapa maize farmers with lowest farmgate prices, <i>primera</i> 1986-87	362
9.8 Estimated profit rates for four wholesalers interviewed in San Pedro Sula, May 1988	367
9.9 Estimates of hypothetical daily gross profits for retailers in Danlí, May 1988	368
9.10 San Pedro Sula: potential profits from storing maize commercially, 1988 (Lps/MT)	369
9.11 Histories of traders interviewed in Danlí, 1987	373
9.12 Histories of wholesalers interviewed in San Pedro Sula, 1988	374
Non-commoditized, personalized and commoditized relations in Honduran maize farming in the 1980s	390

List of figures

2.1 Honduras: maize output 1970-85	56
2.2 Honduras: maize yields, 1970-85	56
2.3 Honduras: maize output per capita, 1970-85	57
2.4 Honduras: exports and imports of maize, 1970-85 (MT)	58
2.5 Honduras: nominal and real farmgate prices for maize, 1978-88	79
3.1 Map of Honduras, showing departments	90
3.2 Map of El Paraíso, showing Danlí, Chichicaste and Jutiapa	93

3.3 Map of North-west Honduras, showing Quimistán, La Entrada and San Pedro Sula	101
4.1a El Paraíso: distribution of farms by farm size group, 1952 and 1974	140
4.1b El Paraíso: distribution of farmland by farm size group, 1952 and 1974	140
4.2a Santa Bárbara: distribution of farm by farm size group, 1952 and 1974	141
4.2b Santa Bárbara: distribution of farmland by farm size group, 1952 and 1974	141
4.3a El Paraíso: number of single tenure farms by type of tenure, 1952 and 1974	143
4.3b El Paraíso: land in single tenure farms by type of tenure, 1952 and 1974	143
4.4a Santa Bárbara: number of single tenure farms by type of tenure, 1952 and 1974	144
4.4b Santa Bárbara: land in single tenure farms by type of tenure, 1952 and 1974	144
4.5a El Paraíso: land use in farms, 1952 and 1974	145
4.5b Santa Bárbara: land use in farms, 1952 and 1974	146
4.6a El Paraíso: number of maize farms by farm size group, <i>primera</i> 1952 and 1974	148
4.6b El Paraíso: maize area harvested by farm size group, <i>primera</i> 1952 and 1974	148
4.6c El Paraíso: maize output by farm size group, <i>primera</i> 1952 and 1974	149
4.7a Santa Bárbara: number of maize farms by farm size group, <i>primera</i> 1952 and 1974	149
4.7b Santa Bárbara: maize area harvested by farm size group, <i>primera</i> 1952 and 1974	150
4.7c Santa Bárbara: maize output by farm size group, <i>primera</i> 1952 and 1974	150
5.1a Distribution of farms by tenure, Danlí and El Paraíso, 1974	161
5.1b Distribution of land area in farms by tenure, Danlí and El Paraíso, 1974	162
6.1 Maize sales for positive net income farmers by area sown, Chichicasté and Jutiapa, <i>primera</i> 1986-87	231
6.2 Percentage of output sold by positive net income farmers by maize area sown, Chichicasté and Jutiapa, <i>primera</i> 1986-87	231
6.3 Positive net income by maize area sown, Chichicasté and Jutiapa, <i>primera</i> 1986-87	232

6.4 Positive net income/Ha by maize area sown, Chichicaste and Jutiapa, <i>primera</i> 1986-87	232
6.5 Relationship between maize area sown and use of own labour by all small and medium farmers interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87	241
6.6 Returns to own labour by maize area sown among small and medium positive net income farmers, Chichicaste and Jutiapa, <i>primera</i> 1986-87	241
6.7 Returns to own labour by maize area sown among all small and medium farmers interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87	242
6.8 Relationship between labour time and returns to own labour for all small and medium maize farmers interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87	242
7.1 Chichicaste: prices received for maize by farm size ranking, <i>primera</i> 1986-87	265
7.2 Jutiapa: prices received for maize by farm size ranking, <i>primera</i> 1986-87	266
7.3 Chichicaste: average prices received for maize by farm size group, <i>primera</i> 1986-87	267
7.4 Chichicaste: average prices received for maize by adjusted farm size groups, <i>primera</i> 1986-87	268
7.5 Chichicaste: average prices received for maize by farm size group (small farmers with no credit), <i>primera</i> 1986-87	268
7.6 Jutiapa: average prices received for maize by farm size group, <i>primera</i> 1986-87	270
7.7 Jutiapa: average prices received for maize by farm size group (small farmers with no credit), <i>primera</i> 1986-87	270
7.8 Chichicaste and Jutiapa: prices received for maize by month of sale, <i>primera</i> 1986-87	273
7.9 Chichicaste and Jutiapa: relationship between month maize was sold and farm size, <i>primera</i> 1986-87	273
8.1 Quita Sueño: relationship between land per capita in groups and size of collective plot, 1987-88	301
8.2 Quita Sueño: prices received for maize by size of collective maize plots, <i>primera</i> 1987-88	333
8.3 Quita Sueño: prices received for maize by time of sale, <i>primera</i> 1987-88	333

8.4 Quita Sueño: time of maize sales by size of collective maize plots, <i>primera</i> 1987-88	334
9.1 Danlí: bi-monthly wholesale and retail maize prices, 1986-87	363
9.2 Yearly wholesale prices as a percentage of retail prices, Honduras 1965/66-1987/88	365
9.3 Monthly wholesale prices as a percentage of retail prices, Honduras 1982/83-1986/87	365

List of appendices

3.1 Changes in number of maize farms, area harvested and output by department, 1952-74	113
4.1 El Paraíso: distribution of types of land tenure in farms with a single type of tenure by farm size, 1952 (percent)	153
4.2 Santa Bárbara: distribution of types of land tenure in farms with a single type of tenure by farm size, 1952 (percent)	154
4.3 Land use in farms, El Paraíso and Santa Bárbara, 1974	155
4.4 El Paraíso and Santa Bárbara: changes in average farm size and maize area harvested, 1952-74 (percent)	156
6.1 Maize losses incurred by farmers interviewed in Chichicaste and Jutiapa, <i>primera</i> 1986-87 (percent of harvested maize)	247
7.1 Farm and off-farm activities by farm size among maize farmers interviewed in Chichicaste and Jutiapa, 1987	283
7.2 The social positions of maize farmers	284

ABSTRACT

Although severe poverty and difficult climatic conditions for crop production created acute food insecurity among many small maize producers in parts of Honduras in the 1980s, this thesis focuses on the widespread phenomenon of chronic and endemic vulnerability found in less critically affected parts of the country. It argues that a major cause of food insecurity among small maize producers in the 1980s lay in the complex nature of social relations of production and exchange for maize. Nevertheless, policy debates and directions in Honduras tended to side-step these complexities.

Small maize farmers were vulnerable to food insecurity because of their exchange relations with other farmers, traders and state institutions over land, labour, finance and output. These exchanges combined commoditized, personalized and non-commoditized relations. They also involved inequality and power, reciprocity and assistance, as well as forms of economic coercion.

Exchanges of land and labour between commercial and semi-proletarian farmers, as well as loans made by commercial to semi-proletarian farmers, helped to sustain the maize production of both social groups. Although these relations provided some security on an unequal basis for semi-proletarian farmers, indebtedness prevented them from improving their livelihoods from maize. Thus while most commercial farmers interviewed were able to make profits from maize production, semi-proletarian farmers continued in stagnation.

Petty commodity maize producers as well as commercial farmers tended to establish relations with state and state-linked institutions for credit, technical assistance, and sometimes for output markets. However, petty commodity producers could also experience difficulties in reproducing maize production. In particular, their

incorporation into state-linked projects to increase output and productivity could increase the risk of debt and left many in a position of 'insecure transformation'.

Semi-proletarian maize farmers could break the cycle of 'secure stagnation' by organizing collectively to gain land and establish new social relations of production and exchange. However, there were many risks and difficulties for these groups, and struggling groups might still maintain some relations of patronage to survive.

A key distinction between maize production and trade was that the latter was driven by profits while the former continued in production even though many farmers had negative net cash incomes. Traders' profits also depended on social differentiation, by wealth and task in trade, as on the differentiation of farmers from whom they purchased maize. Personalized relations also helped to ensure profits from trade.

Although maize trade involved many participants and was apparently competitive, local traders (including commercial maize farmers) could establish debt relations with semi-proletarian farmers which put the latter at a disadvantage in output markets, especially with respect to the time of maize sales and hence prices received. Market alternatives for semi-proletarian farmers were relatively restricted compared to commercial farmers and petty commodity producers.

The thesis concludes that policies which only consider market variables in maize production and distribution and which propose increasing liberalization and deregulation are unlikely to benefit those who are most at risk among Honduran maize farmers. Unless the complex social relations which maintain either the stagnation of semi-proletarian farmers or the insecure transformation of petty commodity producers are addressed, conditions of reproducing maize production are likely to become more acute and reinforce food insecurity in the countryside.

ACRONYMS AND MEASUREMENTS

Acronyms

BANADESA - Banco Nacional de Desarrollo Agrícola (National Bank for Agricultural Development)

BCH - Banco Central de Honduras (Bank of Honduras)

BANAFOM - Banco Nacional de Fomento (National Bank of Promotion [of production])

BANASUPRO - Agencia del Banco Nacional de Fomento para el Suministro de Productos Básicos (Agency of BANFOM for the Distribution of Staples)

CACM - Central American Common Market

CEE - Comisión Económica Europea (European Economic Commission)

CEPAL - Comisión Económica de America Latina (see ECLA)

CIIR - Catholic Institute for International Relations

CONSUPLANE - Consejo Superior de Planificación Económica (now SECPLAN) (Higher Council for Economic Planning - now Planning Secretariat)

DARCO - Dirección Agrícola Regional Centro Oriental (Agricultural Directorate of the East-central Region)

DGEC - Dirección General de Estadísticas y Censos (General Directorate of Statistics and Censuses)

DRI - Desarrollo Rural Integrado (Integrated Rural Development [programmes])

ECLA - Economic Commission for Latin America

EEC - European Economic Community

FAO - United Nations Food and Agriculture Organization

FENAGH - Federación Nacional de Ganaderos de Honduras (National Federation of Honduran Cattlemen)

IFPRI - International Food Policy and Research Institute

IHMA - Instituto Hondureño de Mercadeo Agrícola (Honduran Institute for Agricultural Marketing)

IICA - Instituto Interamericano de Ciencias Agrícolas (Interamerican Institute for Agricultural Sciences)

IMF - International Monetary Fund

INA - Instituto Nacional Agrario (National Agrarian Institute [for land reform])

MRN - Ministerio de Recursos Naturales (Ministry of Natural Resources)

SECPLAN - Secretaría de Planificación (previously CONSUPLANE - see above)

SIECA - Secretaría Permanente del Tratado General de Integración Económica Centroamericana (Permanent Secretariat of the Central American Economic Integration Agreement)

SRN - Secretaría de Recursos Naturales (Secretariat of Natural Resources)

USAID - United States Agency for International Development

Measurements

Lempira (Lp/Lps) - Honduran currency, then officially equivalent to \$0.50 (abbreviated to Lp or Lps in the text)

Manzana - unit of land area = .7 Ha

Quintal - 100 lbs

INTRODUCTION

This thesis is about rural food insecurity. It focuses on a single crop, maize, and analyses the production and reproduction strategies of farmers in the Central American state of Honduras during the 1980s. It explains how production and exchange relations can act to undermine as well as to maintain farmers' capacities to produce and sustain access to maize. In doing so, it debates and adds to existing approaches to food security issues. It also identifies some of the shortcomings of food and agricultural policies directed towards resolving problems of food insecurity.

(i) Focus and argument of the thesis

Maize is the main food staple in Honduras, especially among the rural and urban poor. Survey data gathered at the end of the 1970s indicates its importance for daily consumption in the 1980s. Maize provided on average 43% of calories and 37% of proteins in the daily diet of urban households in the major cities, although among the lowest household groups in terms of cash income it provided as much as 60% of calories and 52% of proteins (estimated from SIECA, 1983, Table 1). In the rural areas, maize constituted 48% of calories and 40% of proteins among the households surveyed, increasing to 66 and 55 per cent respectively among the lowest income groups (*ibid*, Table 3). Although cash income is a misleading measure of poverty in rural areas, these data still give an indication of the importance of maize among poor households at the beginning of the 1980s.

Maize is a key source of livelihood in rural areas, which contained 60% of the population in the 1980s. The agricultural census in 1974 provides basic information about the conditions of maize farming at that time. It showed that 85% of all farms produced maize for direct consumption and the market. Furthermore, in 1974, the majority of maize-

producing farms (65%) were small farms of 5 Has or less. These small farmers constituted (and still do constitute) a key sector of the rural poor¹. Maize also provides livelihoods and profits for the many traders in grains, as well as for those engaged in maize processing: millers, *tortilla* makers, the food snacks industry, by-product processing (such as starch) and, above all, animal feeds.

Given its key role in daily survival for many people, focusing on the production and reproduction of maize² has allowed me to examine some of the fundamental issues involved in rural food insecurity in Honduras. Focusing on a single crop cannot explain the complete range of conditions and relations which create or reduce rural food insecurity, but it reveals the types of processes which reinforce the vulnerability³ of rural people to food insecurity and which are likely to be replicated in the production and reproduction of other crops as well as other means of livelihood.

Rural food insecurity has been an ongoing problem in Honduras. (Some of its manifestations are discussed in Chapter 2.) In the countryside, the food insecure were predominantly to be found among the very small farmers and landless workers, who together comprised a substantial proportion of the rural population. While government policies sought to find ways of achieving national food security by increasing food output

¹ The other key sector of poor people is the landless. Ruhl (1984) calculated that about 50% of all rural families were landless or land poor in the early 1980s. This figure does not include those engaged in permanent wage work.

² I use the phrases 'reproduction of maize' or 'reproducing maize' in this thesis as short-hand for the reproduction of maize production and the reproduction of maize consumption because the latter two are cumbersome phrases.

³ The concept of vulnerability to food insecurity is being used here to indicate the inabilities of many maize farmers to produce or consume adequate food staples without ongoing debt relations and potential or actual entitlement loss. This thesis addresses these issues with respect to maize. These concepts are explored in Chapter 1.

and productivity, food insecurity was a feature of life for many rural producers who nevertheless helped to supply urban and rural markets with food staples such as maize.

My thesis is based on research carried out in Honduras at different times between 1986 and 1988. My main concern was to explain the widespread chronic and endemic vulnerability among small maize farmers. Thus I did not analyse the conditions of food insecurity of those farmers who were located in areas of extreme poverty or particularly severe climatic conditions, such as in the west and south of Honduras. My fieldwork with maize farmers was carried out in the eastern and north-western departments of El Paraíso and Santa Bárbara where a range of conditions was to be found. Traders were also interviewed in Danlí, El Paraíso as were traders and industrialists in San Pedro Sula, Cortés.

My basic argument is as follows.

A major cause of vulnerability to food insecurity among small maize producers in the 1980s lay in the complex nature of social relations of production and exchange for maize. However, policy debates and directions only partially addressed these complex social relations. Thus, among some groups of farmers, policies were likely to exacerbate rather than improve vulnerability to inadequate production and consumption of maize.

The reasons why small maize farmers were vulnerable to food insecurity lay in the exchange relations with other farmers, traders and state institutions over land, labour, finance and output as well as in their access to land. These exchanges combined commoditized, personalized and non-commoditized relations⁴. They also involved inequality and power, reciprocity and assistance, as well as forms of economic coercion.

⁴ *These and other concepts are addressed in Chapter 1.*

Maize farmers can be classified into commercial farmers, petty commodity producers and semi-proletarian farmers. Exchanges of land and labour between commercial and semi-proletarian farmers helped to maintain the maize production of both social groups. Semi-proletarian farmers might also obtain loans of money and inputs from commercial farmers, and might sell maize to them, as commercial farmers often engaged in trade. These relations provided some security on an unequal basis for semi-proletarian farmers but at the cost of being unable to improve their livelihoods from maize. Thus while most commercial farmers were able to make profits from maize production, semi-proletarian farmers continued in stagnation.

Both commercial farmers and petty commodity maize producers tended to establish relations with state and state-linked institutions for credit, technical assistance, and sometimes for output markets through the grain marketing board. However, petty commodity producers could also experience difficulties in reproducing maize production. In particular, their incorporation into state-linked projects to increase output and productivity could increase the risk of debt. Their potential for increasing output was, in practice, insecure.

Semi-proletarian maize farmers could however break with the 'secure stagnation' implied in land/labour exchanges with commercial farmers. This was evident in the experiences of collectively organized farmers who received land through the land reform programme established in 1975. However, the thesis shows that there were many risks and difficulties, and poor groups might still maintain some relations of patronage to survive, indicating their continuing vulnerability.

Output market links were diverse for all maize farmers and had different effects. Although maize trade involved many participants and was apparently competitive, local traders (often also commercial maize farmers) could establish debt relations with semi-proletarian

farmers (for example, through pre-harvest sales) which put the latter at a disadvantage in output markets. Market alternatives for semi-proletarian farmers were relatively restricted compared with other maize farmers, whereas commercial farmers and some petty commodity producers could in principle sell maize to the state marketing board and to industry, even though transactions costs of such sales were high compared with selling to private traders.

However, a key distinction between production and trade was that the latter was driven by profits while the former continued in production even with negative cash incomes. Traders' profits also depended on social differentiation, by wealth and task in trade, as well as in production. Furthermore, although competitive, personalized relations helped to ensure profits from trade.

The thesis concludes that policies which only consider market variables in maize production and distribution and which propose increasing liberalization and deregulation are unlikely to benefit those who are most at risk among maize farmers. Unless the complex relations of exchange which maintain either the stagnation of semi-proletarian farmers or the insecure transformation of petty commodity producers are understood and the policy implications addressed, conditions of reproducing maize production are likely to become more polarized between different social groups and reinforce vulnerability to food insecurity in the countryside.

(ii) Contribution of the research

Although there has been considerable debate about food security in Honduras (see Chapter 2), analysing how relations of exchange involved in the production of a basic food staple might contribute to the vulnerability of producers was not a main concern in the 1980s. Studies of food staple sub-systems in the late 1980s, in which I also took part,

provided an overview of the chain of relations from production to final consumption (Johnson, 1988).⁵ There were also several 'diagnostic' studies which attempted to present a picture of the overall context of maize and other food staple production and distribution (for example, OEA/IDRC/CONSUPLANE, 1982). However, these were largely descriptive studies and did not consider the complex nature of exchange and its effects.

Other published food security studies around the time of, and since, my own field research have concentrated on macro-economic issues (eg Arroyo, 1985; Arias, 1989; Noé Pino and Perdomo, 1990). There have also been many publications which relate food security and economic policy (eg Aguirre and Tablada, 1988; Brockett, 1987a and 1987b; Quezada and Scobie, n.d.), or raise food security issues within the general context of economic and agrarian policy (eg Brockett, 1987c; Larson, 1982; Norton, 1988; Ponce, 1985; USAID, 1989; U.S. Government, 1982). All these studies are concerned with food security as it relates to the general supply of and demand for food staples, with economic and policies and processes, or with changes in technology, all of which might affect output and incomes. They have tended to focus on national market variables, whereas my study uses local case material to explain some of the underlying processes which can lead to food insecurity among staple crop producers.

There have been some useful papers on the extent of income distribution and rural poverty (eg CONSUPLANE, 1985; Molina Chocano and Reina, 1983; Peek, 1984; Torres, 1979). They have largely been based on census and survey data in the 1960s and 1970s, and have not focused on the actual dynamics of rural social relations. Nutritional surveys were carried out in Honduras in the 1960s and again in the 1970s and other evaluations have taken place which show the continuing prevalence of malnutrition (Kanbur, 1991; SIECA,

⁵ These studies were somewhat similar in style and intent to the French *filères vivrières* approach discussed in Bernstein's analysis of maize in South Africa (1992).

1983; USAID, 1978a). Yet other studies and papers have discussed the need for food aid and for buffer stocks, while some analysts have looked at the effects of food aid on agricultural production, including that of food staples (eg FAO/FSAS, 1986; Norton and Benito, 1987; World Food Programme, 1986). There has also been considerable concern about markets for food staples - especially about whether (and how) they should be regulated or deregulated (for example, ESQUELÍ, 1986; Hanrahan, 1983; IHMA and CADESCA/CEE, 1987; IRI, 1985; KSU, 1985; Loria and Cuevas, 1984; Pollard et al, 1984; USAID, 1978b). This concern has not extended to looking at the relationship between different kinds of exchange and how maize farmers might be affected.

The main focus of studies of social relations in the countryside has been on land distribution and tenure. There are many good reasons for this, above all the key role in rural life played by control over means of production and because of the concentrated nature of this control in Honduras, as in many other Latin American countries. Moreover the existence of three land reform laws in the 1960s and 1970s, along with a brief reformist period in the 1970s which effected limited redistribution of land, has captured the attention of many analysts (eg del Cid, 1977; Brockett, 1990; Brown et al, 1981; Bueso, 1987; Molina Chocano and Reina, 1983; Murga, 1977; Parsons, 1975; Pearson, 1980; Peek, 1984; Posas, 1979; Ruhl, 1984a, 1985; World Bank, 1983). Many of these studies have made important contributions to understanding the achievements and limits of Honduran agrarian reform. However, they have not generally contained detailed analysis of the social relations between social groups in the countryside, nor, with the exception of Brockett, have studies about land been linked directly to food security issues.

There have been some insightful studies of the type of (rather than the actual) phenomena that concern me in this thesis. For example, Boyer (1982) looked at the changing economic rationality among peasants in the southern highlands of Honduras as capitalist relations of production spread. This powerful and interesting thesis is written from an

anthropological perspective and studies the lives and behaviours of farmers in several communities in the area. It argues among other things that land concentration related to the encroachment of pasture and export crops, and demographic growth in a relatively densely-populated region, led to food deficits among small producers as well as changing agricultural practices resulting in soil depletion. Although Boyer analysed the class relations between farmers and the increasingly commoditized nature of production, he did not look at the relations involved in reproducing a particular crop, nor was his study related to policy measures and debates.

Kramer (1986) has analysed the relationship between cattle expansion, land distribution and migration in the west of Honduras. His thesis is not about food security, however it does focus on the economic conditions of cattle and maize production. Kramer argues that migration was not initially a response to capitalist encroachment nor of attraction to urban areas because of higher wages. Migration took place within rural areas and was a reaction to a decline in production and wage conditions: migrants were basically looking for land. Although this study focuses on cattle and the growth of cattle lands, Kramer analyses the strategies adopted by different classes of farmers with respect to cattle and maize production. He also looks at the potential benefits of an integrated rural development programme in the area that he studied. The thesis is written from a perspective of economic maximization but does not analyse how and why producers might have chosen (or been obliged) to maintain relations which did not necessarily maximise their economic possibilities.

There are two other studies which have particular relevance to my own work. Howard Ballard (1987), who also studied cattle, showed the existence and significance of the social divisions of labour between cattle farmers and how these social divisions were linked to wider processes of capitalist expansion. This study illuminates the nature of class relations in the countryside within the production of a particular commodity, beef. It provides an

impressive explanation of who benefits and who loses from production and the world market for beef. Although cattle are closely and contradictorily linked to food staple production in terms of land use, the study is not directly concerned with food insecurity. Brockett (1987a, b and c, and 1990) provides useful material on the relationship between commercialization and economic and food insecurity from a macro-economic perspective and is also concerned with policy issues. He is, however, primarily interested in how access to land has changed with the growth of export crops, and does not look at the social relations of food staple production.

(iii) My approach to food security: debts and contributions

The World Bank has defined food security as 'access by all people at all times to enough food for an active healthy life. Its essential elements are the availability of food and the ability to acquire it' (World Bank, 1986, 1) Food insecurity, on the other hand, is 'the lack of access to enough food. There are two kinds of food insecurity: chronic and transitory. Chronic food insecurity is a continuously inadequate diet caused by the inability to acquire food...Transitory food insecurity is a temporary decline in a household's access to enough food' (*op cit*).

As Chapter 1 of this thesis will argue, I see food security as a reproduction issue. Other writers have taken this approach in different ways. For example, de Janvry's analysis of the agrarian crisis in Latin America (1981) eloquently argues that the food crisis is a class reproduction crisis, or one of social reproduction, while Drèze and Sen (1989) have broadened the notion of food security to take in other aspects of welfare involved in daily and generational as well as social reproduction. I take a narrower approach by (i) focusing on people's capacities to continue producing and acquiring adequate food on a sustained basis, and (ii) specifically addressing the problems of producing and consuming adequate maize among some groups of maize farmers. I believe this approach can

pinpoint some of the broader problems which affect both class reproduction (de Janvry) and a wider concept of food and welfare security (Drèze and Sen).

I am particularly concerned with exchange relations. Exchange is the key mechanism through which people acquire resources for production in commoditized economies, maintain their access to resources, and make a living. Furthermore, analysing exchange relations can also reveal the underlying distribution and control of means of production and use of labour. Exchange can take personalized and non-commoditized forms even in commoditized economies and the social relations of, and strategies for, reproducing food crops can involve a complex interaction of such processes.

As well as the work of Sen and others on entitlements, I am intellectually indebted to the class analysis of agrarian structures which has taken place in the Latin American and Anglo-American literature, and the analysis of markets, interlinkages and power that has emerged from a South Asian context. This thesis contributes this well-established literature in analysing the unevenness of commoditization, and the importance of personalized and non-commoditized relations even in highly commoditized economies. It shows that commoditization is a non-linear process. The thesis also adds to the literature which treats markets as social phenomena, including relations of power, rather than abstract forces.

(iv) Structure of the thesis

The structure of the thesis is as follows. Chapter 1 explains my conceptual framework with reference to pertinent literature. Chapter 2 provides a contextual analysis of the problems of food insecurity in Honduras, and addresses gaps in policy debates and approaches to the rural economy. The methods I used to carry out my research are explained in Chapter 3. Chapter 4 analyses changes in access to land and implications for

maize production up to the 1974 agricultural census, and looks at how the statistical data for my fieldwork sites compare. In Chapter 5, I analyse the social relations of production among two communities of maize farmers in El Paraíso. Chapter 6 addresses problems in maintaining access to maize for consumption and in making a cash income from maize among these farmers, while Chapter 7 analyses debt relations and whether farmers' social positions were reflected in the prices they received for maize. The conditions of these farmers are compared with the experiences of collectively organized maize producers in Chapter 8. In Chapter 9, I analyse exchange relations and prices in output markets and their implications for maize production. Finally, my conclusions summarize my contributions to theoretical analysis and discuss policy implications.

CHAPTER 1

EXPLAINING RURAL FOOD INSECURITY

Introduction

This chapter provides a critical analysis of the main conceptual issues involved in my approach to the food insecurity of rural populations, and relates the issues to current literature. The arguments presented in this chapter and the literature reviewed are directed to the particular concern of the thesis, that is, the reproduction of a food staple.

The chapter argues that explaining food insecurity among rural food staple producers has to look at producers' capacities to reproduce their food production, and the causes and mechanisms of endowment and entitlement loss (Sen, 1981). To do this requires analysis of changes in social relations in the countryside, especially those of class, and the social conditions through which endowments and entitlements are secured or undermined. These social conditions include commoditization, types of exchange relations between different social groups (and the social hierarchies and power relations they involve), the functioning and organization of markets, and state intervention. However, rural food staple producers are not seen simply as victims of these social conditions and relations but as actors who try to find means of defending access to the foods they produce, as well as accumulate wealth from them. The strategies pursued by different social groups of producers therefore also require analysis. Thus while I take a broad political economy approach to the problem of food insecurity, I am also concerned with issues that are often given less consideration, such as the role of exchange in reproduction, and the complex and contradictory nature of action.

My particular concern is to explain the food insecurity of many maize farmers in

Honduras. As stated in the Introduction, government policies (addressed in Chapter 2) have sought to find ways of achieving national food security by increasing food production, productivity and incomes, while food insecurity exists precisely among those many farmers who help to supply urban and rural markets with food staples. The question is what tools of analysis can help to explain the existence of food insecurity among certain groups of the rural population as well as show how their food insecurity is linked to the wider problem of food insecurity in the national context.

1.1 Explaining food insecurity

Most current definitions of food security have broadened out from earlier notions which emphasized food supplies and stocks, prevalent during the concern about world food shortages in the 1970s¹. More recent definitions like those used by institutions such as the World Bank (1986) or the FAO (1986) as well as individual analysts such as Shuttleworth (1988) or Barraclough (1991) include concern for all people's sustained *access* to food as well as sustained food *availability* (whether through national production and/or food imports and aid). Thus demand - and whether demand is backed by the wherewithal to obtain food - has become as much of an issue as supply. This is evident in the World Bank's position, as well as in the perspectives of writers such as Raikes (1988): 'People die of starvation, or go hungry, not because there is no food in their country (or region), but because they cannot afford it and have no other means of access. Food may indeed be physically absent from famine areas. But this reflects the fact that aggregate 'effective demand' (demand with the money to back it) is insufficient to draw it there from richer areas (or to prevent its outflow to such areas)' (*ibid*, 1).

¹ See, for example, FAO (1983) which discusses the 1974 international undertaking on world food security, involving international cooperation over food supplies, expanding production, having national policies for buffer stocks, etc. However, even very recently, the Worldwatch Institute predicted global famine because food supplies would not be able to keep up with population growth (Walker, 1994).

As stated in my Introduction, the World Bank's approach differentiates between chronic and transitory food insecurity. These two types of food insecurity are linked either to demand or supply issues, as shown in the stated policy implications. Chronic food insecurity is seen as a demand problem whereas transitory food insecurity is largely seen as an issue which can be resolved through adjustments in food supplies. Policy recommendations for chronic food insecurity include identifying the food insecure and looking for ways of generating income through investment in agriculture, subsidized employment and food, and making changes to institutions blocking agricultural growth (for example, allowing women to own land). Recommendations to alleviate transitory food insecurity involve supply measures: promoting drought or disease resistant crops, and price stabilization through stocks, food aid and the liberalization of trade.

The World Bank's approach clearly recognizes that food insecurity is not simply resolved by supplying more food. It explicitly acknowledges that ongoing food insecurity is a function of demand and people's capacities to command food whether through their own production or purchase. However, the distinction between chronic and transitory food insecurity is something of a false dichotomy given that emergency situations principally affect those who are already potentially food insecure.

Explaining food insecurity within the boundaries of a society or an economic system thus involves many aspects of analysis. For example, Barraclough (1991) lists the following characteristics of a secure food system: (a) capacity to produce/import/store sufficient food; (b) reduction of susceptibility to international markets and political pressures through national autonomy and self-determination; (c) seasonal and cyclical reliability of food supplies; (d) ecological sustainability; (e) equity of access to adequate food across social groups (*ibid*, 1). In practice, studies of food insecurity tend to look at only some of these phenomena - or even at some aspects of them. Exceptions are food systems analyses (such as those looking at *filières vivrières*, mentioned in Footnote 4 of the Introduction)

which seek to identify bottlenecks in processes of production and distribution, in particular where there is concentration of economic interests such as in land or oligopolistic control of markets. But these analyses are not generally concerned with micro-level studies and the relationship of local phenomena to the broader system.

In general, analyses of food insecurity tend to divide into studies which look at broad questions, such as factors determining overall supply of and demand for food, and those which look more closely at local conditions of food insecurity, hunger and famine². However, there are studies and approaches which try to combine the broader issues with frameworks for analysing specific phenomena. Key among these is the work of Amartya Sen (1981). Sen uses the concepts of 'endowments' and 'entitlements': owned assets, entitlements to goods from one's own production and from selling labour power or trade. When people lose or have a reduction in these ownership and exchange entitlements, they may become food insecure (or even suffer hunger and starvation). Crucial in Sen's approach³ is the role of social relations of production and exchange which may have quite specific effects for the access of different groups of people to food. His approach also allows for the possibility of examining how local access to food may, or may not, be related to broader trends in prices, incomes, control over food production and food markets, as well as the role of food policies in affecting people's access to food.

Sen's ideas inform my own work. First, I argue that people are food secure when they are able to reproduce their means to produce or acquire adequate food on a sustained basis. Food insecurity results from difficulties in reproducing the ability to produce or acquire

² Examples of the former are Ender (1983), Lele and Candler (1984), McIntire (1981), Mellor (1988), Raikes (1988), Shuttleworth (1988), World Bank (1986, 1988). Examples of the latter are Vaughan (1987), Watts (1983, 1988).

³ As short-hand, I call this 'an entitlement approach'.

adequate food. Such reproduction crises may be short-term or ongoing. Thus I am not analysing the nature of economic crisis in Honduras, which has been written about by Noé Pino (1988) and Thorpe (1993). In using the concept 'reproduction crisis' among certain groups of maize farmers in Honduras, I am referring to these 'farmers' inability to produce or consume adequate maize without ongoing debt relations and potential or actual entitlement loss. Analysing the production and exchange relations of a particular food staple can explain how reproduction crises occur as well as reveal the strategies rural people may pursue to achieve some degree of food security.

Second, an entitlement approach to food insecurity among maize farmers in Honduras has tremendous empirical value. It involves analysing maize farmers' access to means of production, labour and finance and how the social relations of production and exchange affect them. However, an entitlement approach does not in itself provide a theoretical framework for analysing the mechanisms by which entitlements are affected or changed. As Ravallion (1987) has also stated in his study of food grain markets in Bangladesh, we need means to find out what *causes* changes in entitlements. Sen acknowledged this point in the final chapter of *Poverty and Famines*, saying that an entitlement approach provides a framework for analysis not a hypothesis about causation. He also stated that we 'need to view the food problem as a relation between people and food in terms of a network of entitlement relations' (1981, 159). Thus further concepts are needed to disentangle these networks of entitlement relations and to understand how they might change and affect different social groups.

The idea that food insecurity, hunger and famine occur when ownership and exchange entitlements are undermined means that we need to understand how entitlements are reproduced. This requires analysis of the mechanisms through which people have access to their entitlements and the means by which they are maintained (or undermined or lost). This approach can also be applied to understanding how a particular food crop is

produced, distributed and consumed. Thus, in the case of maize, as well as understanding how farmers gain access to their land, whether and how they have access to the labour they need, whether they are able to provide their maize needs (and to what extent they are able to provide the maize needs of wage earners by producing marketable surpluses), we also need to know how those processes are sustained or changed.

As I now go on to explain, there are some key concepts of class, exchange, commoditization, social hierarchies and power which afford a means to analysing maize farmers' access to ownership and exchange entitlements and the mechanisms through which those entitlements may be reproduced or changed. Farmers' own strategies for survival or accumulation may affect their entitlements, as may interventions by other agents, such as the state. I first discuss the concepts of class formation and class relations and some of their ramifications for understanding food insecurity (Sections 1.2-1.5), and then look at concepts useful to explaining how food insecurity can arise, especially commoditization, exchange relations, the role of social hierarchies and the nature of survival and accumulation strategies (Sections 1.6-1.8).

1.2 Food insecurity and agrarian class formation

Analysing class formation is a means of understanding how access to and control over land and labour have changed, as well as how the growth of markets has affected social relations in the countryside. To see how class formation takes place, persists or changes, involves analysing processes of reproduction as well as production. Understanding these processes in turn helps to explain the dynamics of poverty and changes in access to entitlements among particular social groups.

However, as an explanatory tool, the concept of class needs to be actively constituted from empirical and historical realities as well as act as a theoretical construct. It also has

limits in explaining all dimensions of social relations as recent literature on gender relations, and cultural and social identities has made clear (see for example, Pearson, 1992; Allen, 1992). Thus my own analysis of class positions among maize farmers in Honduras is drawn partly from the theoretical discussion that follows and partly from my own empirical research.

Much of the considerable literature on changing agrarian structures and class relations in the countryside has largely concerned itself with agrarian transition from pre-capitalist to capitalist modes of production and characterizing current class formation. For example, some writers on agrarian transition in Latin America (for example, de Janvry, 1981; Goodman and Redclift, 1981) have applied the Leninist categories of 'junker' and 'farmer' road to the development of capitalist agriculture and have explored their capacity to explain changes in class structures. The junker road implies agrarian change resulting in large estates and a proletarianized workforce. The farmer road is based on smaller-scale landholdings worked as family farms (which may or may not employ wage labour). Although the two roads are based on different types of access to land and other resources, as well as uses of labour, they both imply (to a greater or lesser extent) the loss of some producers' entitlements to land - or processes of proletarianization.

Both are, however, *models* of how social relations in agriculture may change with the spread of capitalism. As these writers would agree, the reality is often a diverse combination of types of access to land, labour and markets which affect people's capacities to produce crops and sustain their production. For example, census and my own fieldwork data on land and labour distribution and use in Honduras suggest that neither the junker nor the farmer road adequately characterizes the development of social relations in agriculture, although elements of both types of development exist. While land distribution shows a high level of inequality, there are large numbers of medium-sized and small farms. Certain export crops - such as sugar or bananas - can be broadly

characterized as being grown on plantations using permanent wage labour, but there are also other types of sugar and banana production. Cattle-rearing is largely regarded as an activity of large landowners using extensive amounts of land and little labour - but studies (for example, Howard, 1987; Kramer, 1986) have shown that the cattle sector is complex and differentiated. The production of basic food staples is carried out on various types of farm and using different types of labour. Although farms producing maize and beans are predominantly small or medium-sized and tend to use a combination of family and wage labour, maize and bean production may also be combined with cattle herds on large farms which have a permanent hired staff as well as using additional seasonal workers.

Similarly, the debate about whether Latin America was feudal before it was capitalist (for example, Brenner, 1977; Frank, 1969; Laclau, 1971) also depended on models of agrarian transition and the characteristics of particular modes of production based on ideal-typical constructs of social relations. This debate tried to explain the origins of present-day class relations in Latin America. It tried to evaluate the nature and impact of the spread of capitalism on Latin American economies. It also considered strategies or paths for future development. Above all, the debate attempted to determine whether explanations of underdevelopment, poverty and inequality lay primarily in the internal dynamics of particular class relations or primarily in the relations between developed and underdeveloped countries or regions (or centre-periphery relations).

Although this debate made an important contribution to understanding the relationship between internal social structures and the world capitalist system, characterizing social relations as either feudal or capitalist can result in rigid typologies, while the reality is often a messier combination of social interaction and change. Other approaches, such as looking at the articulation of modes of production, have questioned the precise nature of social relations in the countryside and how they are linked. For example, Bartra (1976) and González (1979) suggested that present-day economies in Latin America comprised

more than one mode of production in which capitalist social relations were dominant. As well as trying to characterize class formation (especially, but not only, in rural areas), this approach also tries to show how the capitalist class is able to extract surplus from non- or pre-capitalist (peasant) producers as well as from wage workers, thereby leading to these producers' and workers' impoverishment. This literature also raises the question of whether it is the exploitation of peasant producers that leads to their impoverishment, a subject which I return to below.

These debates about the historical process of class formation, how classes can be adequately characterized in rural Latin America, and what the effects of class formation have been for the creation of poverty and food insecurity, raise further conceptual and empirical issues. Without denying the importance of theory, there is a danger of depending too much on abstract constructs rather than trying to analyse and understand actual relations and processes of change between social groups. Thus, within a political economy framework, a formal characterization of capitalist and pre-capitalist social relations might suggest that the former are constituted by private property, wage labour separated from the means of production, and the creation of surplus value realized into profits through exploitation and the market, while the latter might comprise landlord-tenant relations based on hereditary property rights, servile labour and sets of rights and obligations where surplus is extracted through coercion. In practice, aspects of all these relations might be found in different contexts in the Latin American countryside. Furthermore, they might well be constituted under capitalism either because there is social and economic space for their existence or because they may aid processes of survival and accumulation.

As later chapters argue, these complex relations are part of the dynamics of how capitalist relations have been developing in Honduran agriculture. This complexity can provide mechanisms for producers to sustain their farms as well as act to undermine maize

production.

1.3 The disappearance and persistence of peasants

Changing class relations are of critical importance to food security. They affect producers' entitlements and capacities to sustain food production as well as whether they can continue to survive on the land or are forced - economically or physically - to become wage workers (or join the ranks of the rural and urban un- and underemployed). Thus one key question is whether agrarian transition and class formation have resulted in the impoverishment, dispossession and disappearance of peasants, or whether peasants continue to survive under capitalism. A second is what the nature of peasant production is under capitalism - an issue which I address in later sections.

There has been considerable debate about whether peasants are disappearing or not. At the beginning of this century, Lenin's seminal work on the development of capitalism in Russia (1956, 1977) argued that social differentiation in the countryside would result in the disappearance of poor peasants. Later, Chayanov (1966) showed mechanisms by which peasant production could survive in the context of changes in the countryside. The latter's work, in particular, gave rise to discussion about whether peasants had a mode of economic calculation different from capitalists, namely that profits are neither necessary nor desired for peasant production to continue. Attempts to explain the persistence (or disappearance) of peasant producers who can apparently survive under capitalism have continued to intrigue analysts of agrarian change, and also inform my own inquiry.

In the Latin American context, the persistence and disappearance of peasants were discussed at length by the *campesinistas* and *descampesinistas*⁴. Mexican

⁴ That is, those who argue that peasants persist under capitalism (*campesinistas*) and those who hold that peasants are becoming proletarians (*descampesinistas*).

descampesinista Foladori (1981) held that there was increasing immiseration of the peasantry and proletarianization and strongly criticized those who argued for an ongoing role for the peasantry in developing capitalism. He criticized *campesinistas* for their ahistorical view of social relations and argued that the dynamics of capitalist development had given rise to different social relations in which peasants were being dispossessed. This position implicitly viewed peasants as pre-capitalist producers whose demise was inherent in the development of capitalism. However, for Foladori, this was not just a theoretical proposition: he based his argument on empirical data such as the increasing amount of commoditization in small-scale production (especially the commercialization of output) and growing levels of unemployment (*ibid*, 11, 38-39).

By contrast, the *campesinistas* whom Foladori criticized, such as Stavenhagen, Warman, Esteva and Díaz-Polanco, held that peasants

- * were small-scale producers who used family labour and only sold output when cash income was needed
- * managed to survive under capitalism because they had a special relationship with the land which allowed them to subsist without needing to make profits
- * could survive because developing capitalism lacked internal markets (and hence required the continuing production of use values in peasant enterprises)
- * were a homogeneous group facing an external, unequal relationship with a dominant class which extracted surplus (in other words, capitalist social relations were imposed from the outside but the contradictory relations between capital and labour were not internal to peasant production and reproduction)
- * had non-market mechanisms for individual and collective survival (Foladori, 1981).

Some of these points concern the social and economic space in which peasants are able to survive and are therefore open to empirical investigation. Others raise analytical or conceptual questions about whether peasant production is different from capitalist production, or whether peasants constitute a class of producers exploited by capitalists. However, implicit in both *descampesinista* and *campesinista* positions is a debating point about who peasants are and what constitutes their means of livelihood. Because peasants have been (and are) present in many types of society across many historical periods, they are often characterized as having universal and ahistorical behaviours (and hence have often been characterized as having a distinct mode of production). However, the variety of forms of livelihood, access to resources and use of labour which are observable among peasants under capitalism suggests that it is difficult to conceive of them either as having a single mode of production or as being a single class with common conditions of existence.

Thus, the concept of peasant is a useful way of *describing* small-scale producers who largely use family labour and engage in simple reproduction, but other analytical concepts are required to understand the place (or places) they occupy in capitalist development and the processes which threaten or reinforce their survival. Peasants adopt (or are forced into) different strategies for survival which often include a diverse range of behaviours, market and non-market, which are partly a response to externally imposed conditions of production - such as limited access to land - and partly related to the internal dynamics and composition of the production unit. Furthermore, peasants may be able to accumulate wealth in given circumstances as well as be dispossessed in others. That poor people find ways to survive on the land is evident across societies and historical conjunctures. The ways they find to do it and whether they constitute a class or not can only be defined in relation to specific historical conditions.

1.4 Peasants, petty commodity producers and semi-proletarians

From the above discussion, it follows that the category of 'peasant' has little explanatory value in analysing conditions of production and reproduction, and mechanisms of appropriation and distribution⁵. Thus it is difficult to use it either to characterize a particular group of people in the countryside whose food security might be threatened, or to attempt an explanation of food insecurity by exposing conditions of production and reproduction as though they were general to peasants. A more differentiated approach is required.

I argue along with several other analysts that the concepts of simple or petty commodity production and semi-proletarian production help to characterize and have more analytical value in explaining types of peasant production under capitalism (see, for example, Bartra, R., 1976; Bernstein, 1986, 1990; Chevalier, 1982; Friedmann, 1980; Smith, C., 1984; Smith, G., 1985)⁶. Furthermore, the debates taken up by these and other writers have helped to explain social and economic conditions for peasant survival and also reveal the nature and impact of commoditization on peasant livelihoods⁷.

To take petty commodity production first, there are some differences between writers' understandings of the concept and the conditions in which this type of production arises

⁵ This raises a particular tension in my own work. Many of the maize producers I am concerned about in my study are called *campesinos*, which is usually translated as 'peasants'. In fact, the definition of *campesino* within Honduras can be quite vague - from landless producers, or those who rent or borrow small parcels of land, to producers with several, even tens of, hectares. *Campesino* is also used subjectively by relatively well-off farmers to denote their origins, self-perception of their social position, or a set of attitudes. I return to some of these issues in later chapters.

⁶ Although in this chapter I use the terms peasant or petty commodity producer according to the literature being referred to, I do not use the term peasant analytically in this thesis but only to describe small-scale producers who use a high proportion of family labour in production.

⁷ Alison MacEwen Scott (1986) has summarized the shifts in thinking and some of the more recent debates.

(or may be undermined). For example, Friedmann (1980) maintains the category of peasants to describe producers who might exist at levels of simple reproduction in a variety of conditions under capitalism, but whose production is only partially commoditized and integrated into the market. She uses the concept of simple commodity production to encapsulate production under capitalism which is fully commoditized except in the use of labour (as in the case of family-based wheat farming in the United States).

Bernstein also concluded that petty commodity production (PCP) was a more useful, as well as a more analytical, category than peasant production for understanding the nature and place of small-scale production based primarily on household labour in developing capitalist economies (1986, 1988, 1990, 1992)⁸. However, his position is rather different from Friedmann's: 'The starting point must be to view peasants today as agrarian petty commodity producers within capitalism...Petty commodity producers are...both capitalists and workers at the same time: they own or have access to means of production which they 'put to work' with their own labour. As capitalists, they employ - and therefore exploit - themselves' (1990, 72). Thus in talking about peasants, Bernstein describes them as 'small family farmers' but states: 'What is distinctive about contemporary peasants within capitalism is that they are petty commodity producers subject to processes of class and other social differentiation, which can be charted through pressures on simple reproduction on the one hand, and opportunities for accumulation on the other' (Bernstein, 1992, 30). He also states that the 'contradictory unity' of capital and labour among petty commodity producers can only exist 'on the basis of a prior separation of capital and

⁸ *Earlier formulations of his position held that peasant production under capitalism was a form of exploitation of wage labour equivalents by capital. The production of use values by peasants depresses the price of commodities also produced by them because households cover part of their reproduction costs themselves. Household production would then be a site of struggle between peasants and capital and the state over control of resources and output in which peasants were frequently subject to a 'simple reproduction squeeze' through the effects of commoditization (Bernstein, 1977).*

labour...prior both in theoretical (explanatory) sense and in the historical sense of a capitalist social division of labour' (1988, 263). In other words, as with Friedmann's concept of simple commodity production, petty commodity production can only exist under capitalism because the separation of capital and labour must have taken place first. However, Bernstein says that PCP is also the form that peasant production takes under capitalism. Moreover, Bernstein also sees petty commodity producers as petty capitalists. This position clearly distinguishes petty commodity producers from peasants in other historical periods.

Bernstein rightly points out that these characteristics do not define precisely the nature of PCP as it may be found empirically, nor under what precise conditions petty commodity producers may arise, persist or be dispossessed. PCP may exist in many diverse forms and contexts. But the characteristics of PCP imply that it exists where there is economic and social space created by the ways that capitalism has developed. Thus there are many different types of PCP, reproducing themselves at different levels of production and consumption.

From my own research, I conclude that PCP does arise in the spaces created by the uneven development of capitalism, and that it is pursued as an active strategy for survival where other employment and income-earning opportunities are scarce. However, as my research shows, conditions for the persistence of petty commodity production can also be pressured and unstable.

This brings me to the concept of semi-proletarian production. In the literature (eg Bartra, R., 1976), this concept has sometimes been used synonymously with the concept of 'poor peasant'⁹ - those peasants using family labour and engaging in simple reproduction but

⁹ *Whereas petty commodity production has often been used synonymously with middle and rich peasants.*

whose survival depends on doing wage work for others. In fact, large numbers, if not the majority, of 'peasants' make their living this way in contemporary Latin America. Moreover, the notion of semi-proletarian production suggests that such peasants are proletarians in the making. However, as my analysis from fieldwork later shows, although the threat of proletarianization is ever present, doing wage work can also be a strategy for securing resources to produce one's own crops. Thus the direction of change is not always obvious.

Using the concepts of petty commodity and semi-proletarian production to characterize particular types of production under capitalism thus affords a means to understanding the social and economic spaces occupied by peasants, the social relations between them and other economic actors, and their strategies for survival (and accumulation), and thereby provides an inroad into explaining why certain producers are likely to face food insecurity. However, these concepts cannot be superimposed without first understanding the conditions of production and reproduction of any given set of producers. In later chapters, the categories of petty commodity and semi-proletarian production will be constituted from my analysis, not the other way round.

1.5 Surplus extraction and food insecurity

Understanding the social positions of peasants and other farmers is only partly about finding analytical ways of characterizing change and persistence in rural class formations. Equally important for explaining rural food insecurity is understanding the mechanisms through which people in different social positions accumulate, survive or have their capacities to survive undermined. As any class or social group is not a static entity, and has an internal dynamic as well as an external relationship to others (both of which may be

sources of conflict and change)¹⁰, a key aspect of understanding how class relations and social change in the countryside affect people's food security is to analyse those mechanisms of survival and accumulation.

The literature on peasants and petty commodity producers has focused on some important areas of debate related to mechanisms of survival and accumulation, in particular, the concepts of exploitation and surplus transfers. On one hand, exploitation has often been used as a defining characteristic of peasant production in its relationship to other rural classes, traders and the state (for example, Wolf, 1966; Banaji, 1977; Bernstein, 1977; Bartra, A., 1982; Bartra, R., 1976) and has been used to explain the difficulties peasants have in reproducing livelihoods. On the other hand, writers (for example, González, 1979) have investigated mechanisms of surplus transfer which may or may not take place through exploitation. Both exploitation and surplus transfers might lead to food insecurity among rural producers because part of their labour or output is appropriated by others.

These concepts are problematic in conceptualization and empirical research. Exploitation implies looking at social relations in terms of two major classes: capitalists and wage workers (hence the idea of peasants as wage worker equivalents - see below), whereas social relations of production and exchange in developing capitalist economies are more complex and varied. Both concepts are based on the notion of value (and surplus value) which is difficult to locate analytically in the conditions of developing capitalism as well as problematic to research without equating value and price. The latter problem is further complicated by the fact that production for direct consumption and the market are often

¹⁰ Recent literature on gender relations, for example, has shown that women and men within households may have different experiences of their social positions, may experience conflicts of interest between them, and may have different relations to other classes and social groups. See, for example, Dwyer and Bruce (1988) for studies of intra-household relations, Drèze and Sen (1989) for discussion of cooperative conflict within households, and Mackintosh (1989) for an illuminating study of the relations between male and female contract farmers and their employers.

combined.

My own position is to be cautious about the use of these concepts in my analysis. My approach acknowledges insights from both the Latin American and the Anglo-American literature, while addressing the causes of poverty, entitlement loss and food insecurity from a different direction. Because of the theoretical and empirical difficulties involved, I have chosen to analyse the causes of food insecurity through the problems farmers experience in reproducing their productive capacities. The unequal social positions of farmers, in access to resources and in exchange relations with other farmers, traders and the state, result in unequal benefits from production (manifest in prices rather than values, as well as in access to food) and unequal capacities to reproduce livelihoods. These processes are made apparent from my analysis in later chapters.

Exploitation in particular is a contentious area both of conceptualization and empirical study. In Marxist terms, exploitation involves the appropriation of surplus value from wage workers by capitalists who pay workers less than the value that they create. To apply this definition to peasants/petty commodity producers would be to put them in the position of wage worker equivalents (Banaji, 1977; Bernstein, 1977). While this may be appropriate in the case of some contract farmers, for producers who are still in control of their means of production and producing commodities directly for the market as well as staples for their own consumption, the view of peasants as wage-worker equivalents is problematic. Some analysts have stated that exploitation takes place in the relationship between capitalist production and non-capitalist production (for example, Bartra, R., 1976). Yet others have suggested that, for petty commodity producers, exploitation takes place *within* units of production (for example, Bernstein, 1990). I look briefly at examples of the last two positions.

Among Latin American writers, Bartra, R. (1976), made a distinction between the

capitalist and the peasant sector (regarded as non-capitalist). Among peasants, he distinguished between petty commodity producers and poor and semi-proletarianized peasants. Petty commodity producers were characterized by the use of family labour mainly to produce commodities. They did not make profits (and therefore were not capitalists) because money made from production was a payment to labour, or net income. Bartra included middle and rich peasants in this stratum. However, poor peasants and semi-proletarian farmers were on a continuum of even lower levels of simple reproduction than petty commodity producers: poor peasants used family labour to produce predominantly for direct consumption but often resorted to wage labour to survive (in other words, becoming semi-proletarians). Moreover, poor peasants were exploited in two other ways: (i) in the unequal exchange of the commodities they produced with industrial goods, because of the weight of living labour in peasant products compared with industrial goods which comprise a higher organic composition of capital; (ii) by usury capital which could take advantage of poor peasants' impoverished conditions of production and lack of access to formal credit markets.

The semi-proletarianization of peasants, the use of capital in production and high interest rates imposed by usurers are empirically observable phenomena. However, in distinguishing between the capitalist and peasant sector, Bartra seems to be suggesting *both* that peasants are not part of capitalist production *and* that some peasants (poor and semi-proletarian peasants) are being exploited by capitalists (productive and usury capital). This position suggests that petty commodity producers are definitely outside capitalist relations of production, while poor peasants are both inside (as semi-proletarians) and outside (as direct producers) at the same time, although even as direct producers they are still exploited. A critique of such a position is expressed by Bernstein: 'The location of small producers in markets for land, credit and other commodities is no different in principle from that of capitalists. The categories of rent, interest and merchant's profit to

which PCP may be subject are the same as for capitalist enterprises, and represent 'exploitation' of the former no more than the latter '(1988, 265).

Bernstein holds the other position of interest here. He states that petty commodity producers are simultaneously capitalists and workers, and therefore exploit themselves. The important contribution of Bernstein is to show how peasants/petty commodity producers are centrally located in the development of capitalism and are therefore subject to capitalist social relations. However, the concept of self-exploitation is problematic. If driven from *within* the production unit, the peasant/petty commodity producer represents two, generally opposing, interests at the same time, and maybe even in the same person. That the unit head may set other members to work for him or her as family or other, mostly unremunerated labour, may signify exploitation within the unit. However, the precise nature of the exchanges would have to be analysed and understood. Furthermore, this view does not necessarily take into account the assumptions and perceptions of those working in the unit. If the drive to self-exploitation originates from *outside* the production unit, then the social relations between petty commodity producers and other producers, traders and the state become critical points of analysis, as does the role of competition. These multiple pressures and points of so-called 'squeezing' (Bernstein, 1977; 1988) make the concept of self-exploitation rather imprecise as well as problematic to research.

Surplus transfers from peasants and petty commodity producers to other agents in production and trade may or may not involve exploitation. For example, among Latin American analysts, González (1979) suggested that economic surplus could be transferred from peasant production to capital in the following ways: (i) in the labour market, through low wages because peasants subsidize their own daily reproduction from farming; (ii) in the relationship between peasant production and capitalist agriculture, in rent payments from sharecropping, or the greater use of labour in peasant agriculture; (iii) in payments from peasants to industrial, commercial and financial capital; (iv) through sectoral

transfers, in differential terms of trade, or the immobility of peasant labour because it lacks other job opportunities.

The mechanisms identified by González are clearly ways that such farmers may be forced (economically and sometimes physically) to part with more of what they produce than they would wish to, receive relatively low prices, carry out work without adequate remuneration, or pay high interest rates for loans. Some of these processes may also involve exploitation, but they are easier to research using prices rather than values, and other forms of social analysis. Moreover, whether involving forms of exploitation or not, they make reproducing crops and livelihoods difficult for peasants and, perhaps, for petty commodity producers, while benefiting other rural and urban classes. As Bernstein suggests for petty commodity producers, lack of exploitation by another class 'does not mean that small producers are not subject to various (and sometimes severe) forms of extortion and 'squeezing' - often accompanied by political oppression - by different kinds of capital, including state capitalist enterprises' (1988, 265).

However, the effects of different social relations of production and exchange do not necessarily or always result in the disadvantage of peasants and petty commodity producers. For example, Gómez (1979) (who also distinguished between capitalists and peasants) stated that one had to look in both directions at the relationship between peasant production and capitalist enterprises: peasants might provide cheap labour for capital but working as labourers also allowed them to reproduce their own units of production. Similarly, Bernstein says: 'small commodity producers can also benefit in particular cases from certain relations with capital and the state. This is demonstrated by subsidies to agricultural production and farm support policies' (*ibid*, 265-266).

The critical question, then, is what in any given context are the specific mechanisms which enable or undermine the capacities of petty commodity and semi-proletarian farmers to

sustain (or improve) their production. My thesis argues that, in Honduras, many petty commodity and semi-proletarian maize farmers are subject to different mechanisms which constrain their capacities to reproduce their production. These constraints lie in the means by which they gain access to resources and are able to realize the fruits of their labour. For petty commodity producers, these constraints (and possibilities) arise in their relations to the market, especially that for credit, in which the state plays an important role. For semi-proletarian farmers, the constraints involve the terms on which they gain access to land and inputs, how they are able to use their labour, the terms on which they can sell their output (or retain it for their own use), and so on. Some of these relations may be exploitative, but the very limited resources available to semi-proletarian farmers mean that reproducing production is inherently precarious and risky.

That there is space for different kinds of maize production in Honduras also raises questions about how they are related to each other and how (and whether) they survive, as well as the roles they play in the economy. Recent state policies have been keen to promote the petty commodity production of maize. However, the existence of petty commodity maize production (as well as semi-proletarian production) is interdependent with commercial maize production. Analysing the relations between these different types of farmer shows not only how maize production is related to wider economic (and power) structures, but also how and why food insecurity may be created or sustained for particular social groups.

1.6 Commoditization

Debates about rural class formation suggest that changes in social relations in the countryside can potentially result in food insecurity through the dispossession of peasants, exploitation of poor peasants and rural workers, and surplus transfers of different kinds which undermine productive capacities. An integral part of these processes is

commoditization, a concept and process about which there has also been considerable debate (see, for example, Long, 1986).

Commoditization is the generalized production of goods and services for the market. Within a Marxist framework, commodities are not just goods and services which are exchanged for money, or other goods and services, but they embody labour, and therefore value, which is realized in the market. The relative composition of labour in commodities and the rates at which commodities are exchanged has been at the heart of discussions of exploitation, surplus transfers and unequal exchange raised in the previous section.

However, there are other concerns about commoditization which inform my approach to food insecurity as a reproduction issue:

- (i) Commodity production (including the commoditization of labour) may affect class relations, for example, in reinforcing the position of one class over another, or in bringing about further differentiation.
- (ii) Market competition can exert pressures on farmers to increase the productivity of land and labour by incorporating more commodities in production, which in turn can result in indebtedness and dispossession.
- (iii) Commoditization and the development of markets may be uneven: for example, output might be commoditized much more rapidly than land and labour (Bhaduri, 1983; Bharadwaj, 1985). This may mean that non-commoditized as well as commoditized exchanges are combined in production with differential effects for farmers.
- (iv) Monopolies in production and circulation of commodities can affect the extent of competition in commodity exchange and may result in prices which squeeze out producers and consumers.

There is now a considerable literature on these issues and the effects of commoditization on peasant livelihoods. This literature ranges from analyses of how peasants are 'squeezed' by pressures to commoditize and intensify their production (for example, Bernstein, 1977), to explanations of the dynamics of international and national commoditization processes with concomitant effects such as the stagnation of national food production (for example, Friedmann, 1988, 1990; de Janvry, 1981). There has been debate on the nature and extent of commoditization among the rural poor (Long *et al*, 1986). Debates on commoditization have also informed discussions of petty commodity production (Scott, 1986).

This literature informs my thesis. My main interest is to analyse the nature and effects of commoditization in maize production and markets. In particular, my analysis involves looking at what is understood by commoditized and non-commoditized relations and hence the types of exchange relations which affect productive capacities.

Commoditization is about processes of exchange in situations of competition, or markets¹¹. Understanding how commoditization may affect maize farmers therefore involves analysing farmers' incorporation into markets for land, labour, finance, inputs and outputs, and the benefits which they receive from processes of exchange. However because commodity markets may be unevenly developed, farmers may seek other means of obtaining access to resources or exchanging goods and services. While such processes may be pursued as active strategies, they may also result in tied relations of exchange. Thus different types of exchange may have different effects, both for accumulation as well as for survival.

A key area of analysis is the appearances and realities of commoditized (and non-

¹¹ However, as indicated above, markets may be more or less competitive.

commoditized) relations.¹² For example, while markets for land may exist, access to land for some types of farmer may be by loaning, or exchanging land for labour, or by occupying nationally- or municipally-owned or communal land. Thus a small maize farmer in Honduras may well be aware of the rental and market value of the land occupied, as may the landlord, but the arrangements over access to that land could be defined by other criteria - for example, whether the small farmer can provide wage labour at harvest or whether the landlord is prepared to loan the small farmer some inputs. These arrangements have a non-commoditized appearance but they depend on the existence of commodity markets. A sluggish land market (such as existed in Honduras in the 1980s) may suggest that loaning land to trusted tenants who provide labour is more beneficial to the owner than other uses of that land. However, the arrangement depends both on knowledge of alternative market options for the land, as well as factors such as wage rates. Furthermore, whether the landowner can loan inputs to the small farmer will in turn depend on his access to bank credit for purchasing commodities used in production. Thus the tenant farmer and landowner are both operating in land, labour and financial markets in which an agreement is made to provide land and secure the wage labour of the tenant.

In my analysis of the social relations of production and reproduction of maize, I have called these types of exchange 'personalized' relations because they depend on personal networks and relations between individuals and families which may also involve elements of reciprocity, however implicit and unequal. On one hand, they are not non-commoditized since they depend on commoditized relations and markets for their existence. On the other, they are not 'impersonal' transactions which take place within the markets for land and labour. As later chapters show, some of the relations I analyse in Honduran maize production have the appearance of being non-commoditized - because

¹² This was a source of debate between Bernstein and Long (1986a).

they take the form of favours between patron and client - when in practice they depend on the existence of the cash nexus and generalized commodity exchange.

By contrast, non-commoditized relations do not depend on the cash nexus or the market for their existence. An example would be the use of family labour in production. However, even here, it is important to distinguish between appearance and reality¹³. A notable contribution to research and analysis in this area is Brass's work (1986) on how surpluses are accumulated *within* petty commodity production in Peru through the unequal rights and obligations of kin and 'fictive kin'¹⁴. In his analysis, non-commoditized and commoditized exchange become closely inter-related. As well as being forms of reciprocity, kin and fictive kin relations can be used to extract surpluses, gain access to labour and keep wages down because of the supposed familial and reciprocal ties. However, in the process, kin and fictive kin relations themselves become commoditized.

Personalized commodity and non-commoditized exchange relations are not necessarily evidence of a residue of pre-capitalist modes of production that have yet to be fully transformed. For example, as Bernstein (1988) has pointed out, the domestic labour debate has amply discussed the production of use values and the role of non-commoditized production in advanced capitalist societies. In developing capitalist societies, non-commoditized relations may be evidence of mechanisms of survival where access to resources is limited, or waged employment is either unavailable or poorly remunerated. Historical processes of change from precapitalist to capitalist relations may well carry with them mechanisms that may have served reproduction in the past (such as

¹³ Although it is often difficult to do it in practice. In later chapters, I do in fact use the term non-commoditized to describe the use of family labour.

¹⁴ Fictive kin is the attribution of kinship relations to people who may not be blood relatives but who have rights and responsibilities similar to family ties.

non-commoditized forms of exchange). Their similarity in appearance in the present does not necessarily indicate continuing evidence of precapitalist relations.

Crucial to the importance of analysing commoditization and non-commoditization for understanding food insecurity is the differential benefits from different types of exchange. In commoditized exchanges, relative prices paid for inputs or labour and received for outputs will affect farmers' productive capacities. Personalized exchanges, even if reciprocity is involved, may not necessarily take place with equal benefit. Likewise, non-commoditized exchanges may even involve the extraction of surplus labour, as suggested by Brass. Thus, non-commoditized and personalized mechanisms of procuring resources or engaging in different forms of exchange do not necessarily presuppose complementarity or reciprocity on an equal basis. They may well (and frequently do) reflect inequality and hierarchical power relations, as well as the often contradictory interests of capital and labour inherent in capitalist production. I return to these issues in the next section.

A critical issue for this thesis, then, is whether the existence of non-commoditized and personalized relations in maize production and maize markets impedes or promotes the reproduction of maize and hence the food security of the farmers. My position is that both can occur. On one hand, commercial maize farmers' access to their tenants' labour in Honduras cannot be seen simply as an agreement which benefits both parties by providing workers for one and employment for the other. Material from my fieldwork in later chapters shows that such arrangements are partly based on social hierarchies and patronage as well as the poverty and semi-proletarianization of peasant labour. On the other hand, exchange arrangements between commercial maize farmers and tenants or other small maize farmers may also act as mechanisms for small farmers to survive and for them to be able to reproduce their own maize production, based though these arrangements are on inequality. In other words, they may be evidence of such farmers' food insecurity as well as the means by which food security is, at least partially, achieved.

1.7 Exchange relations, social hierarchies and power

As the discussion of commoditization implies, exchange relations are key to explaining how maize farmers are able to reproduce maize production or not. Going back to Sen, investigating the relationships between endowments, or ownership, and exchange entitlements and how those relationships change can help explain food insecurity. Analysing exchange relations shows some of the difficulties people have in maintaining their access to resources as well as obtaining adequate food supplies and thereby reveals how food insecurity can be created and reinforced.

While this thesis cannot make an anthropological analysis of exchange (see, for example, Rival, 1992), my fieldwork shows that exchange is a multi-dimensional process. It may involve aspects of custom, reciprocity, mutual advantage, social hierarchy and power, as well as market forces and mechanisms of surplus transfer and exploitation. These dimensions of exchange exist within capitalist production and markets, and should be seen as different survival mechanisms in contexts of highly unequal access to resources and concomitant asymmetries in power relations.

Some of the most interesting contributions from economists on the uneven development of exchange relations under capitalism have come from India, notably Bhaduri (1983) and Bharadwaj (1985). As noted in the previous section, this literature has shown that commodity markets may not develop at the same pace. Such a situation could affect access to land, labour and output. For example, access to land may involve complex arrangements between landlords and tenants, that may in turn be tied to output (as in sharecropping) or to use of labour (as in different forms of bonded labour). These are

known as interlinked transactions¹⁵. In addition, and key to the earlier discussion of surplus transfers, certain types of exchange may actually involve coercion or producers may be forced to part with what they produce because of debt relations. The latter has been termed forced commerce (Bhaduri, 1983, 9)¹⁶.

In sum, Bharadwaj states:

'(i) The exchange processes are neither uniform nor equal for all participants. Not only do the quantitative terms and conditions vary, depending on the parties to the exchange, but there can be *qualitative* differences in types of exchanges and the market involvement of individual households; (ii) The exchanges are set not only in terms of 'prices' but there can be non-price factors, explicit and/or implicit, which mainly rely on personal dominance and power equations; (iii) The nature of exchange involvement as well as the terms and conditions depend largely upon the position of the participating household within the resource status categories...*There is thus a correspondence between the production status as a base and the concomitant exchange relations*' (1985, 11; author's emphasis).

My thesis shows that some of these characteristics can be found in exchange relations in maize production and trade in Honduras, although they are culturally specific phenomena with their own history and not as complex as writers have shown for South Asia. But some of the characteristics outlined by Bharadwaj appear in later discussion of

¹⁵ Also known as interlinked markets or interlocking transactions; as well as Bharadwaj and Bhaduri, see for example, Hart (1986) and Bardhan (1989).

¹⁶ Bhaduri defines forced commerce as a 'nexus of involuntary market involvements by the small peasants in various forms and arrangements under the compulsion of debt' (1983, 9).

case material: lack of uniformity in exchange relations, non-price factors emanating from social hierarchies, and class position. For example, current-day land-labour linkages in Honduras may involve price (the cost of labour or wages, land rents, or the cost of fertilizers) but there is a non-price dimension involving social reciprocity, hierarchical rights and obligations, and personalized forms of insurance against risk. Furthermore, such land-labour relations may take on a different character depending on producers' (or landowners') class positions.

Although relations of exchange in maize production and trade in Honduras are more transparent than in some South and South-east Asian contexts, they are nevertheless subject to factors which cannot be explained by economics alone. My thesis argues that social hierarchies therefore need to be taken into account in analysing the relationship between exchange and the reproduction of maize. The social hierarchies are based on different forms of production and class position.

In this thesis, the class positions of maize farmers are arrived at (in Chapter 7) from the empirical realities of maize production as well as from the more abstract distinctions discussed in Section 1.4. The categories I use are 'commercial farmer', 'petty commodity producer' and 'semi-proletarian farmer', as well as using the generic categories of farmer and producer to denote anyone producing directly from the land. The two main classes are commercial and semi-proletarian farmers: one uses predominantly wage labour in production and the other cannot survive without selling labour. Petty commodity producers occupy an intermediate position - they hire some labour, but they do not sell labour; they may engage in simple reproduction or may be able to expand their production. They are in a subordinate position to commercial farmers, but are also able to be in relations of dominance over semi-proletarian farmers. The significance of these categories in my thesis is that they are based on (i) how producers obtain access to resources (including labour) for production, (ii) how maize production is reproduced, and (iii) the

implications for the food security of the producers.

These classes are based on social hierarchies involving relations of power and patronage over access to land, control over labour, and relative wealth (which confers the ability to provide favours, make loans and so on). Furthermore, actions of the state which intervene in these social hierarchies may reinforce or undermine the relative power which people have.

Power and its role in economic life have been given consideration by several writers since Bhaduri and Bharadwaj raised the issues in the South Asian context. For example, Bardhan (1991) has criticized orthodox neoclassical economics which presumes 'that there is no exercise of power if both parties voluntarily enter a transaction' (*ibid*, 266). On trade relations, for example, he states: 'The concept of power goes beyond the outcome of a given exchange and points to the fact that power may be centrally involved in causing the existing pattern (and defining the existing parameters) of trade in the first place. Trading within a given system of property rights and institutions may be mutually beneficial, but in the historical process of defining those rights and institutions, the exercise of power (often with violence) by interested actors who would later participate in the trading has been quite common' (*ibid*, 267). Nevertheless, the assumption that economic transactions are voluntary, and are determined by supply, demand and price, are key to orthodox economic analyses of production and exchange, and are often the assumptions on which food and agricultural policies are based. As stated by Baland and Platteau (1993), general equilibrium theory in orthodox economics is founded on individual rationality and responses to price signals. There is no room in this framework for conflict or coercion even though particular deals may have economic 'transaction costs' (*ibid*, 13).

However, the concept of power itself needs addressing. Bardhan points out that the concept, as used by economists and sociologists, is problematic and debated. He is critical

of the behaviourist idea that 'the behaviour of A causes the behaviour of B' because it identifies possession with the exercise of power and ignores many of the complexities, including psychological ones, inherent in power relations. Power does not necessarily imply a conflict of interests even if relations are unequal. Furthermore, it is possible to know about the existence of power without observing it in action. Bardhan also points out that we often equate the source of power (wealth, assets and so on) with defining what power actually is. However, for many practical purposes of investigation, analysing the source of power (rather than what power is) is the critical issue (1991, 274-275).

I concur with much of Bardhan's position. However, in this thesis I analyse how social hierarchies based on access to wealth and assets both enable and impede maize production, and thus concentrate on the sources of power and their effects. I suggest that the patronage which certain commercial farmers are able to afford to their tenants and others is symptomatic of the powerful positions that such farmers have in the community, and that these relations, which, while they may benefit semi-proletarian farmers, are relations of inequality and subordination. Thus my fieldwork analyses how economic transactions between farmers as well as between farmers and traders are affected (positively and adversely) by the social positions of those involved. These transactions may also involve the state. In political economic literature, the power of the state is often seen to reside in forces of law and order and the judiciary. However, with respect to rural development, the state can wield power through the behaviour of its representatives and agents as well as through the economic channels of programmes and projects. This may occur because there are opportunities for rent-seeking but agents of the state may also be subject to the influence of local power relations.

I thus argue that the relationships between different types of exchange (commoditized and non-commoditized), and different agents involved in exchange (farmers, traders, state organizations and officials) are subject to different sources and types of power and

influence and which affect farmers' entitlements and capacities to reproduce their maize production. Furthermore, my argument has implications for understanding the relationship between different types of exchange and the functioning and development of markets in maize production, and thus adds to the now substantial literature in this field (for example, Hewitt de Alcántara, 1993; Mackintosh, 1990; White, 1993)¹⁷.

1.8 Survival strategies, policy and public action

As stated earlier, peasants and petty commodity producers are not simply victims of social relations and social change in the countryside. They are also actors and can attempt to influence their own productive capacities. Thus, my research analyses how peasants and petty commodity producers actively try to ensure access to means of production, labour, finance and output markets and to work them to their advantage. In addition, some maize farmers organize collectively to try and change the social relations which subordinate them.

My fieldwork demonstrates that there is space for certain types of action to help reproduce maize and secure access to food, even if this action is not always successful. This type of action may be seen as part of coping or survival strategies about which much has been written in recent years (for example, Chambers, 1989; Davies, 1993; Shipton, 1990; Watts, 1988, 1991). However, as Davies (*op cit*) points out, the concept of survival or coping strategies may implicitly assume that people actually do cope or survive and that food insecurity is therefore by definition mostly transitory. In addition, Davies points out that policy support for coping strategies could lock producers in sustained poverty. My own work shows that while, on one hand, some farmers' strategies for reproducing maize

¹⁷ I say more about conceptualizing markets in relation to Honduran policy issues in Chapter 2, Section 2.3.3.(i).

are based on relations of inequality with other farmers, on the other hand, policies to increase productivity in maize production may well undermine survival strategies - or make it difficult for farmers to resort to their earlier practices.

What is the relationship between action by farmers on reproducing maize and other types of action, particularly state intervention? Although it would be wrong to think that policy on food security and related issues has been the sole prerogative of the Honduran state, or of international and national development institutions, in this thesis I mainly address the statements and actions from these sources because they are the most accessible for investigation in relation to thinking and practice related to or affecting food security. However, plans, policies, programmes and projects are the outcomes of processes of struggle and conflict as well as negotiation between different interests. The implementation of policies is further subject to contention as well as collaboration which may affect the outcome.

This idea of policy as a social process has been addressed in the work of Drèze and Sen (1989) and Wuyts, Mackintosh and Hewitt (1992), and involves notions of public action which may be directed to the public good (Drèze and Sen) as well as being directed to private ends or against the good of the majority (Mackintosh, 1992). Although this thesis is not about public action as such, it addresses three types of action: that by individuals (farmers, traders); that by the state, as manifest in rural development programmes and perspectives on food security; that taken by collectively-organized groups of maize producers. My analysis draws out some of the connections between these different types of action.

1.9 Summary

In this chapter I have traced a framework of concepts for explaining food insecurity

among maize farmers in Honduras. As stated in the Introduction to my thesis, I see food insecurity as a reproduction problem: how and why many maize farmers have difficulty in reproducing their maize production and providing adequate quantities of maize for their own consumption. My starting point is Sen's concepts of endowments and entitlements which provide a useful inroad into analysing the relationships between local phenomena which affect food security, such as access to land, labour and income, and broader structural issues such as state policies and the development of markets. To understand the mechanisms which cause changes in people's entitlements and threaten their capacities to reproduce maize, other concepts are needed.

I argue that the class positions of maize farmers are key to their capacities to reproduce maize. However, class is an active category constituted and changed through historical processes and by the actions of producers. A key question is how class positions affect farmers' capacities to reproduce maize. Historically, the accumulation of wealth by some rural classes has resulted in the dispossession and impoverishment of others. However, the continuing existence of many small maize farmers needs explaining, including the mechanisms by which they continue to persist, even in conditions of food insecurity. The active constitution of rural classes therefore requires social and economic spaces which are to be found in the uneven and variable spread of capitalist relations and increasing commoditization of economic life. Thus, under capitalism, peasants may become petty commodity producers or survive as semi-proletarians by combining production on the land with wage work and other means of earning income.

To explain why such producers may experience entitlement loss or find it difficult to reproduce their maize requires understanding the exchange relations which affect their access to resources for production and to maize for consumption. On one hand, the nature and effects of commoditization are key points of analysis. On the other, social hierarchies and power, which affect personalized and non-commoditized exchanges, will

also influence farmers' capacities to reproduce maize.

In conclusion, analysing exchange relations, commoditized and non-commoditized, which are entered into by farmers to secure their means of production and exert some control over the distribution of output, can help to explain rural food insecurity. Power and social hierarchies play an important role in these exchanges, as do forms of reciprocity. The exchanges can serve both to undermine or enhance farmers' capacities to continue in production, as can interventions by the state and other institutions in such a context of unequal social relations. Analysing the production and exchange relations of a staple which is a source of livelihood and food for most farmers can also help explain wider social relations of rural poverty and stagnation. In addition, it can show why it is difficult both to raise national output of staple foods and alleviate food insecurity in the countryside by technical or economic solutions alone.

CHAPTER 2

GAPS IN POLICY DEBATES AFFECTING HONDURAN MAIZE FARMERS

Introduction

The last chapter outlined the conceptual framework being used to analyse and explain rural food insecurity in Honduras. This chapter critically appraises the implications of Honduran food and agricultural policy for the entitlements of maize farmers in the light of this framework. It argues that recent debates among analysts and policy-makers about food insecurity in Honduras have largely centred on market variables which affect the supply of and demand for food staples. Although these debates have recognized that food insecurity in Honduras is not solely, or even primarily, a problem of national food supplies (although there are deficit regions within the country, and there have been food shortages in some areas), there has been little detailed analysis of the causes of food insecurity in rural areas.

There has however been considerable concern among analysts and policy-makers for the problems of rural poverty and rural producers' access to resources and food. As well as the issue of land tenure and distribution, which has preoccupied policy-makers from different perspectives since the 1960s, low incomes and generalized poverty have been focused on as key problems in urban as well as rural areas. However, in the mid-to late 1980s, many policy discussions increasingly centred on issues such as market integration and reinforcement, regulation, deregulation and pricing. Such concerns also affected perspectives on access to land and technologies.

The dynamics of producing maize for direct consumption as well as the market, and the

reasons for the food insecurity which exists among many maize farmers were thus only partially addressed. Policies to increase overall output, or to regulate (or deregulate) markets, generally assumed the existence of a commoditized economy in which production and market relations required restructuring and modernizing to make them more efficient. In this context, peasant production of maize was seen as a subsistence activity which engaged only partially with the market. Even so, the role of non-market relations, power and social hierarchies and how they might create, maintain or alleviate food insecurity among peasant farmers, were not really addressed.

I first explain why food insecurity in general became a policy concern in the 1980s. Then I describe the trends in policy orientation in the 1970s and 1980s to contextualize the debates about or related to food security issues. In Section 2.3, I analyse the debates and measures affecting maize farmers in relation to the conceptual framework provided in Chapter 1. These debates provide the reference points for the analysis presented in Chapters 4-9.

2.1 Acknowledging food insecurity in the 1980s

Discussion on food security in Honduras emerged as a policy concern in official circles in the 1980s. As well as national concern in different quarters about ongoing poverty and malnutrition, food security was also on the agenda of several influential international aid institutions. Agrarian and food policy preceding the 1980s were also linked to food security issues or resulted in changes which could affect food security. Examples are the agrarian reform laws in the 1960s and 1970s and the attempts to regulate markets for food staples, in particular, but not only, at the end of the 1970s.

Why did food security become a particular focus of interest and debate among policy-makers and researchers in Honduras in the 1980s? Some of the reasons lie in the

results of nutrition and income studies and analyses carried out by government institutions and the United States Agency for International Development (USAID) at the end of the 1970s. There was continuing pressure on the government from peasant organizations to act on poverty and landlessness by maintaining the agrarian reform law of 1975 and making land available to peasant groups. Other factors were the generalized economic crisis facing Honduras in the 1980s and the apparent need for food imports. Various international institutions, such as Food and Agricultural Organization (FAO), the World Food Programme and the European Economic Community (EEC), were also concerned about the need for food aid.

2.1.1 Nutrition

Data published at the end of the 1970s suggested that 80% of the Honduran population were nutritionally at risk: 60% of urban families and 90% of those in rural areas (USAID, 1978a, 1)¹. It was further noted that 83% of rural children and 55-60% of urban children under 6 years of age were malnourished² (*ibid*, 16)³. In an essay on malnutrition and poverty in Latin America, Kanbur (1991) cited the food poverty lines⁴

¹ By people nutritionally at risk was meant: "that part of the population which lives continually at the edge of malnutrition and for whom relatively slight changes in incomes, food prices, health, family size, or environmental conditions, might create considerable nutritional impact" (USAID, 1978a, 14 - my translation).

² There was no definition of malnourishment nor information on how it was measured.

³ A more recent document published by the Honduran Ministry of Natural Resources (MRN or SRN - the Ministry of Agriculture) and the FAO estimated that: 63% of the population had a less than adequate diet in terms of calories; 45% of children were malnourished, increasing to 60% in some areas; 27% of urban families had insufficient income to buy a subsistence diet; 44% of urban families could not cover a basic needs basket (SRN/FAO, 1988, 1,14,21).

⁴ Food poverty line: the cost of a minimum requirements diet (Kanbur, 1991, 121): Those households whose per capita income is below the cost of such a minimum requirements diet are...classified as being in 'destitution' (*op.cit*). The food poverty line or destitution line was constructed by Altimir for 1970 (1982). The food poverty line for 1980 was calculated by CEPAL (Economic Commission for Latin America - ECLA) (1983). Information on the different methodologies and the relationship between the two food poverty lines used is not provided.

for Honduras for 1970 and 1980. Although, as Kanbur explains, they are not strictly comparable because of different time periods and methodologies, the number of households below them were possibly indicative of a worsening trend. Data for 1980 showed that 57% of households were below the food poverty line compared with 45% in 1970. For the rural areas, the figures were 70% of rural households for 1980 compared to 57% for 1970.

2.1.2 Poverty and income

There were two important income, expenditure and food consumption surveys in Honduras in 1967-68 and 1978-79⁵. These and other studies were concerned about income distribution as well as the relationship between malnutrition and poverty. Molina and Reina (1983) have compared data on income distribution for the two periods. The Gini coefficients (.61 and .51 respectively) indicate an improvement in income distribution, but Molina and Reina suggest that the results are doubtful because the second study underestimated the incomes of the wealthier groups (*ibid*, 78). Whether there was an improvement on income distribution in 1967-68 or not, the data for 1978-79 still indicated that the poorest 30% of the population had only 8% of income, while the wealthiest 30% had 69%. In addition to these data, the Higher Council for Economic Planning, CONSUPLANE (now SECPLAN), calculated that between 1978 and 1984, nominal minimum wages could not cover the cost of the basic family subsistence diet (CONSUPLANE, 1985, 17). Further, the CONSUPLANE

Conclusions from these data should therefore be treated with caution. Important with respect to my study is that cash incomes in rural areas are not the only (or often the main) means of acquiring food.

⁵ The first was a household budget survey carried out by the Honduran Government and elaborated further by the Income Distribution in Latin America Programme directed by ECLA; the second was a survey of family income, expenditure and food consumption carried out by the Honduran statistical office (Dirección General de Estadísticas y Censos, DGEC), supported by the Central Bank (Banco Central de Honduras, BCH), USAID and CONSUPLANE (Molina and Reina, 1983, 77).

study showed that increases in average nominal incomes (as opposed to minimum wages) were less than price increases between 1979 and 1983 (*ibid*, 13), indicating a decline in real purchasing power. In turn, the World Food Programme declared:

'A major cause of malnutrition is the lack of adequate consumer purchasing power. The daily cost of a household food basket in 1980 was about double the minimum daily wage. Since 1966, the prices of food items increased over 100%, especially in the case of maize and beans where the increases were in the order of 235% and 376% respectively. At the same time, the availability of food has decreased. The growth of per capita food production between 1973/74 and 1983/84 for Honduras was -6.5%' (World Food Programme, 1986, 9).

2.1.3 Rural poverty and action on landlessness

There was particular evidence of continuing poverty in the countryside, especially in the nature of land distribution. The 1974 Agricultural Census had shown a highly skewed distribution of land which had changed little since the first major agricultural census of 1952⁶. Nearly 80% of farms had access to only 17% of land in farms in 1974; 64% of farms were under 5 Has, and there was a growing number of very small farms under 1 Ha (17% of all farms compared with 10% in the 1952 census)⁷. Ruhl (1985) categorized any family with a farm of less than 2 Has as 'land poor', or unable to making a living from that land⁸. He estimated that 90,000 families were in this position in the early 1980s, in addition to 125-150,000 landless families (1985, 73).

⁶ The Gini Coefficient for land distribution based on data in the 1952 census was .75; in 1974 it was .76 (Howard, 1987, 470).

⁷ Calculated from data in SRN, 1985.

⁸ Although population density in the rural areas is far less in Honduras than in neighbouring El Salvador, land is less fertile and more is required to establish an economically viable farm. Durham (1979) has noted that land infertility plus skewed land distribution resulted in severe pressures on the land in Honduras in the 1960s, when many Salvadorean farmers came to Honduras but were later expelled as a result of the 'soccer war' between the two countries in 1969.

Thus although Honduras had had programmes of land reform since the 1960s, they had not resolved the problem of access to land for many rural people. In 1962, after pressure from peasant organizations, the National Agrarian Institute (INA), a parastatal body, was set up to distribute and adjudicate land; public lands⁹ were made available to individual farmers. In 1972, Decree Law No 8, which was preceded by further peasant unrest, obliged landowners to rent out unused land. Finally, in January 1975, after land invasions and demonstrations by peasant organizations, Decree Law No 170 specified criteria for land redistribution from existing farms based on efficiency, land use and ceilings on farm size (INA, 1978). Redistributed land would be given to collectively organized groups of landless and near-landless peasants. By 1980, land reform had succeeded in providing land to 22% of landless and near landless producers (Ruhl, 1984a, 53). Only 15% of this land was expropriated or purchased private land from other farmers. The largest proportion (44%) was newly colonized public land, and another 13% was public land reclaimed from illegal occupants. Twenty-eight per cent was land no longer being used by the United States banana companies in northern Honduras (Ruhl, 1984b, 124).

The number of landless and land poor was growing rather than declining in the early 1980s and land fragmentation continued¹⁰. Ruhl (1985) calculated that it would take 50 years for landless and land poor to obtain land at the distribution rate then in operation. However, in the 1980s land distribution was largely superseded in official focus and energy by a USAID-funded land titling project targeting farms between 5 and 50 Has (USAID, 1982), a policy change I address in Section 2.3.1.

⁹ Public lands, also known as 'national' or 'ejidal' lands, are under the jurisdiction of the state or local municipality. They are discussed more fully in Chapter 4.

¹⁰ The process of land degradation and fragmentation after the 1974 Census and 1975 Agrarian Reform Act has been documented for Southern Honduras by Boyer, 1982.

2.1.4 Rural poverty and unemployment

Along with access to land or other resources for production, access to work and adequate remuneration were, and still are, serious problems. Estimates of unemployment are notoriously difficult in economies with high numbers of self-employed and temporary wage workers. Hernandez suggests that 41% of the economically active population was unemployed in 1986, based on calculations made by the *Colegio Hondureño de Economistas* (Honduran Economists' Association) (Hernandez, 1987, 194).¹¹ Underemployment is a generalised problem but even more difficult to estimate. Peek (1984) cites the Economic Commission for Latin America's data on labour absorption in Honduran agriculture which show a large labour surplus on small farms and full employment only on farms larger than 20 Has (only 12% of all farms according to the Agricultural Census of 1974) (*ibid*, 1984, 19). Further, according to Peek, wage employment did not absorb the labour surplus and estimates indicated that 'on a year-round basis, 34.3 per cent of rural labour was unemployed' (*op cit*). My own calculations concerning maize farms also indicated the existence of a large quantity of surplus labour in rural areas (Johnson, 1988, 23).

2.1.5 Economic and political crisis

Honduras was in economic crisis in the early 1980s. The crisis was characterized by very low and negative real growth rates, growing external and fiscal debt¹², and real per capita income declined (Noé Pino, 1988, 159 and 161). Official data showed a rise

¹¹ The extent to which these data take into account types of work often excluded from statistics, particularly those done by women, is unclear.

¹² Hernandez (1987) shows that the fiscal deficit increased from 4.4% of GDP to 16% of GDP in nominal terms between 1970 and 1985. The biggest leap took place in 1979-80 from 6 to 13% (*ibid*, 163). Between 1981 and 1985, total public debt increased in nominal terms from \$3.4 billion to \$5.8 billion (*ibid*, 187).

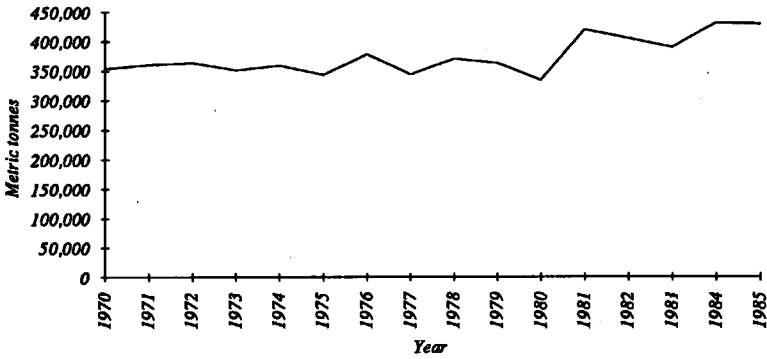
in unemployment and underemployment and (with the possible exception of the agricultural sector) declining real wages (*ibid*, 162-3). Noé Pino concludes: 'Although the economic condition of the majority of the population was already severe at the beginning of the decade, there was a substantial drop in the standard of living for most Hondurans from 1980 to 1984' (*ibid*, 163).

As Noé Pino also points out, the economic crisis in the early 1980s was accompanied by political changes. Military control of the government was replaced with a democratically elected government, accompanied however with an alarming increase in physical repression. Land invasions by peasants became a terrorist act and strikes were curtailed (*ibid*, 164). Honduras was also a focus of United States foreign policy because of its proximity to Nicaragua. The country became a site for Nicaraguan contra-revolutionary activities, and the United States increased its military establishment and aid programme.

2.1.6 Food production, imports and aid

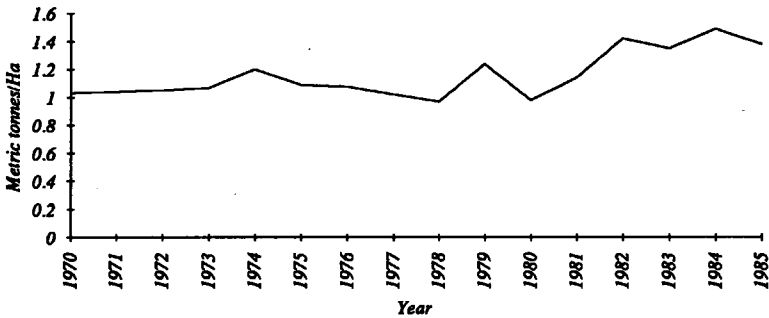
Although declining foreign exchange earnings from a number of agricultural and extractive products in the early 1980s were an additional component in the economic crisis (Noé Pino, 1988, 169), food staple production increased in the early 1980s relative to the 1970s, although it still showed some fluctuations (see Figure 2.1 which shows output trends for maize). There had also been incremental increases in maize yields over the 1970s (Figure 2.2). However, as Figure 2.3 shows, national maize output per capita diminished, and while it could not necessarily have been predicted at the beginning of the 1980s, food grain output generally stagnated or declined again in the latter part of the decade (Noé Pino and Perdomo, 1990, 21).

Figure 2.1 Honduras: maize output, 1970-85



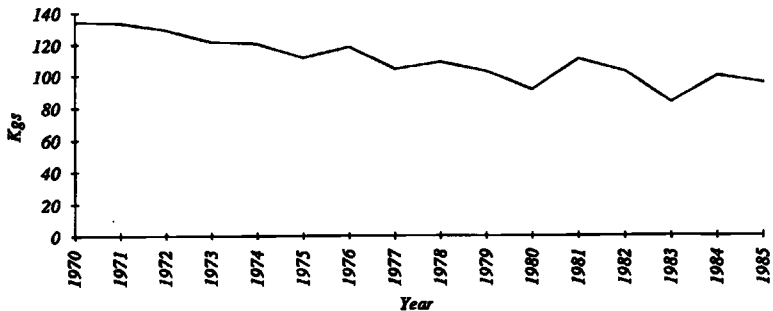
Source: data provided by Banco Central de Honduras, Departamento de Estudios Económicos

Figure 2.2 Honduras: maize yields, 1970-85



Source: SRN, 1985, 39 and additional data provided by MRN

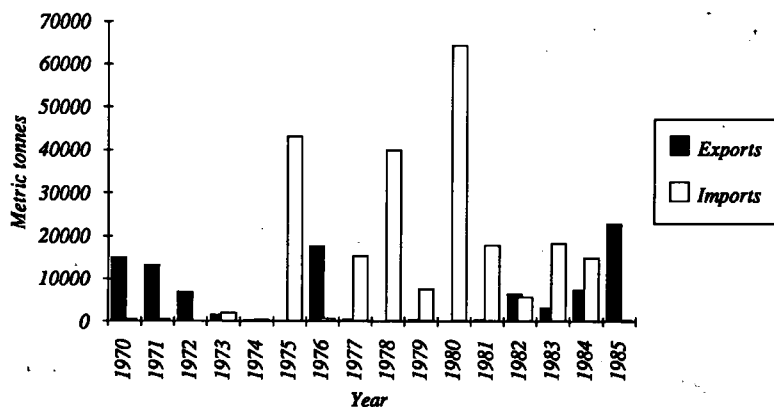
Figure 2.3 Honduras: maize output per capita, 1970-85



Source: calculated from data provided by Banco Central de Honduras, Departamento de Estudios Económicos, and CONSUPLANE

Noé Pino and Perdomo associate the increase in food staple production with contraction in the wider economy in the early 1980s, and the subsequent decline in food production with the programme of economic reactivation directed towards export crops in the later years. Whatever the explanation for food output trends, fluctuations (with incremental growth) in grain harvests remained a concern in the extent to which national food supplies could be provided from local production. The declining per capita production was also a worrying phenomenon given the shortage of foreign exchange to pay for food imports such as maize, which had increased during the 1970s and were still evident in the early 1980s (see Figure 2.4).

Figure 2.4 Honduras: exports and imports of maize, 1970-85 (MT)



Source: data provided by Banco Central de Honduras, Departamento de Estudios Económicos

In addition to grain imports, food aid grew and changed in nature in the early 1980s. These trends were indicative of the changing economic and political context described above. Between 1978 and 1983, food aid increased from 21,295 MT to 108,393 MT (World Food Programme, 1985, 13). Of total food aid, cereals as a component increased from 56 to 90% in the same period (*op cit*). Furthermore, wheat and wheat flour¹³ increased from 19 to 80% of food aid (*op cit*) and PL480 Title 1 increased from zero to 73% of the food aid received (*ibid*, 14)¹⁴. A relatively small proportion (6-7%) of food aid was emergency aid. However, while food aid in 1979 was directed to

¹³ Data from the 1967-78 and 1978-79 income, expenditure and food consumption surveys show some substitution of maize by wheat, particularly in urban areas (Instituto Hondureño de Mercadeo Agrícola(IHMA)/Comisión Económica Europea(CEE), 1981, Table 6). In the 1967-78 survey, no wheat was apparently consumed. In 1978-79, the per capita consumption of wheat in urban areas averaged 12 kgs a year. In rural areas, it had increased to 3 kgs.

¹⁴ PL480 Title 1 is long term, low interest loans used to buy grain which can be sold through commercial channels (World Food Programme, 1985, 14).

projects¹⁵, by 1983, most of it was non-project aid, or basically soft loans and grants which were used to try and improve output and productivity in the rural sector. Although project aid declined as proportion of food aid, the absolute amount increased by 600% in this period because of the presence of refugees from Nicaragua and El Salvador (*ibid*, 18).

2.1.7 Concluding comment

These phenomena and trends, and the extent to which they were made public and addressed in the media or acted on by rural and urban organizations as well as related in official documents, created a heightened awareness of food security issues in government ministries and aid institutions. They were also indicative that food insecurity was an ongoing problem. However, there were some gaps in approaches to understanding food insecurity and associated policy proposals, as I explain in Section 2.3.

2.2 The changing context of agricultural and food policy debate

This thesis concentrates on two main areas of action on food. One is the discussions and policy measures among state institutions and influential international institutions in Honduras, such as USAID, which are directly related to or affect food security (especially with respect to maize) and are discussed in this and the next section. The other is the interplay of relations and strategies for survival and accumulation between maize farmers, and between farmers and traders, which is analysed from my fieldwork data in later chapters.

The key trend affecting policy changes with respect to food and agriculture was the

¹⁵ *Food for work schemes and food assistance to vulnerable groups.*

move from what I would call reformist state 'interventionism' (Thomas and Potter, 1992, 139) in the early 1970s to the gradual spread of neo-liberal policies intent on reinforcing the market and reducing direct state involvement in the economy, increasingly evident in the 1980s.

The 1950s and 1960s in Honduras were a period largely concerned with agricultural modernization for which the state was to provide some of the conditions. Land reform was debated, some modest measures implemented and the National Agrarian Institute (*Instituto Nacional Agrario* - INA) was set up to supervise land distribution. The Central Bank of Honduras (*Banco Central de Honduras* - BCH) and the National Development Bank (*Banco Nacional de Fomento* - BANAFOM) were also established. One of the functions of BANAFOM was to set prices, purchase and store basic grains although its role in the grain market was far less than that of private trade. Honduras, along with four other Central American states, was involved in the Central American Common Market (CACM) until the war with El Salvador in 1969. CACM was established to promote import substituting industrialization and at that time, Honduras was regarded as a potential provider of food staples for the region.

State intervention in the economy became more prominent in the early period of the 1970s, through the creation of public institutions to help direct investment, as well as the accelerated process of land reform and other measures to redistribute wealth and promote production in rural areas. There was 'intense data gathering' (Arriaga, 1986) for planning during this period and later in the decade, such as the nutrition studies mentioned above and the Agricultural Census (1974). In addition to trying to increase rural output and incomes, the government took a further measure to try and control the supply of food staples in urban areas by creating a chain of 'cheap goods' stores throughout the country (*Agencia del Banco Nacional de Fomento para el Suministro de Productos Básicos* - BANASUPRO). Basic grains were supplied to these stores by

BANAFOM.

However, the changing economic context at the end of the 1970s, and external political changes manifest in the Sandinista Revolution on Honduras's borders in 1979, gave rise to a review of state intervention in the economy and the direction of particular policies. Even so, the 1978-83 National Development Plan for the agricultural sector continued to support an interventionist position. It stated that 'as well as its promotional, support and regulation functions and control of agricultural activity, the state will participate directly in the execution and operation of strategic projects, above all when its intervention is considered necessary to guarantee that the results of development specifically benefit low income groups' (CONSUPLANE, 1978, 38; my translation).

Thus the state was seen as having a role in promoting food production by small farmers and in partially regulating food markets and prices. The National Basic Grains Programme (*Programa Nacional de Granos Básicos*) and the Honduran Institute for Agricultural Marketing (*Instituto Hondureño de Mercadeo Agrícola* - IHMA) were set up at this time, as well as the Agricultural Development Bank (*Banco Nacional de Desarrollo Agrícola* - BANADESA). The National Basic Grains Programme comprised a council including representatives from the Ministry of Natural Resources (*Ministerio de Recursos Naturales* - MNR), BANADESA, the INA, IHMA and the planning body, CONSUPLANE, to coordinate programmes of technical assistance, credit, machine hire services, agricultural inputs and to maintain a price support policy.

On the return to civilian government in 1982, regional economic and political crises meant that there was increasing pressure - from external creditors such as the IMF and World Bank, and policy advisers such as USAID - to change the direction of economic policy and, in particular, reduce the role of the state in the economy. A key source of external pressure to change policy direction in the 1980s came from the United States

government. On the re-establishment of civilian government, the United States embassy presented its proposals for policies to revitalize the Honduran economy (so-called 'Reaganomics for Honduras'). In summary, these were to:

- a) strengthen and streamline public administration
- b) emphasize productive activities as well as social welfare measures
- c) divest non-productive state enterprises
- d) reform banking regulations to increase saving
- e) set higher prices for forestry products
- f) give more incentives to mining
- g) promote foreign investment in tourism
- h) eliminate price ceilings on some basic products while giving adequate support to farmgate prices for basic grains
- i) give investment incentives to world market products
- j) plan use of resources better - eliminate large, costly projects
- k) continue land reform by land titling and enabling the renting of land (Peckenham and Street, 1985, 247-249).

These proposals indicated the first steps to reducing state intervention in the economy, and this process was gradually reinforced during the 1980s. Although the proposals were trying in part to reinforce Honduras's 'comparative advantage' in agro-exports to earn more foreign exchange and help reduce foreign debt, they did not encourage full-scale liberalization. Some acknowledgement is made of the need to contain poverty so while price liberalization for some products was suggested, controls on farmgate prices were also urged. Although land distribution in terms of expropriation or colonization was not mentioned, giving secure tenure was supported. These were the first steps to encouraging a proper land market which was to be promoted with some force by the end of the decade.

The influence of liberalization was evident in the 'Immediate Action Plan for 1984/85' drawn up by CONSUPLANE at the end of 1983, in contrast to the perspectives of the National Development Plan for 1978-83 cited above. The action plan emphasized the following measures:

- a) to strengthen exports and ensure an adequate supply of food stuffs
- b) to reduce unemployment and reactivate the economy
- c) to promote and increase the private sector in the economy with the Government providing favourable conditions for investment (World Food Programme, 1985, 11).

This brief account of changes in Honduran government thinking and policies in the 1970s and early 1980s, and the external influences on them, provides a starting point for analysing food security and food policy debates in the 1980s. As we shall see, these debates reflected some of the reformist and interventionist thinking of the 1970s, as well as the pressures to liberalize in the 1980s.

2.3 Gaps in debates and proposals relating to rural food insecurity

In Chapter 1, I argued that the following concepts were key in analysing rural food insecurity: class position, commoditization, exchange relations, social hierarchies, power relations, and strategies for survival and accumulation. I now argue that these concepts, and the processes they help to explain, were only partially addressed by policy analysis and approaches in the 1980s.

2.3.1 Policies affecting access to and control over land

Land is a key aspect of the ownership entitlements of maize farmers. How maize farmers gain access to land - and the types of exchange relations that may be involved - affect their capacities to produce and reproduce maize, both for their own consumption

as well as the market.

There was a radical shift in policy direction between earlier policy measures on land during the 1970s and those developed during the 1980s. The former were centred on land reform which, in rhetoric, tried to create different types of farm based on collective as well as individual property. The latter were more consciously directed to creating and reinforcing a small farmer class.

Officials and advisers in both the 1970s and the 1980s debated and drew up policies which would affect the land, finance and technical inputs for maize production. A common feature was that state ministries and supporting institutions attempted to intensify production - by increasing access to land, providing security of tenure, and by setting up credit schemes so that farmers could purchase new technical inputs, and simultaneously further commoditize their production. Producing maize (and other grain) surpluses for the market was as much a concern among policy-makers as increasing farmers' productivities and incomes. However, given the differentiation of maize farmers, which I analyse in later chapters, increasing market pressures have differential effects on food security.

The *Ley de Reforma Agraria* of 1975 was probably the most developed official statement of land tenure relations in the 1970s. Its proposal to transform the agrarian structure by substituting the *latifundio* and *minifundio* 'by a system of property, tenure and land use which guarantees social justice in the countryside and increases production and productivity in the agricultural sector' (INA, 1978, 13; my translation) acknowledged the highly unequal distribution of land embodied in the *latifundio-minifundio* system as well as the nature of relations between landowners and landless and land poor.

The *latifundio-minifundio* relationship is the classic historical characterization of

agrarian structures in Latin America. Its historical evolution from the *encomienda* resulted in estates (*haciendas* or *latifundios*) operating in relation to different types of peasantries: those who provided labour service to landlords in return for small plots of land on the estate (in Central America, known as *colonos*), and peasants who operated their own small plots of land (*minifundios*) externally to the estates (or *minifundistas*). In Honduras, the combination of capitalist development in agriculture and legislation reduced the incidence of the internal peasant-landlord relations.

The 1975 legislation recognized the existence of differentiation the countryside based on access to land, but had a particular perspective on transformation of agrarian relations. Proposed measures included modernizing the *latifundios*, regrouping *minifundios* into larger, and apparently more economically viable, farm units¹⁶, terminating forms of land tenure which involved older (pre-capitalist) relations of labour service and share-cropping¹⁷, and the collectivization of redistributed land in the hands of peasant groups, *empresas asociativas* (or joint enterprises) and cooperatives. As well as providing land to landless and land-poor producers and security of tenure to small farmers, these measures were intended to transform the nature of agrarian relations and make them more accessible to modernization and capitalization.

Thus the notion of agrarian transformation in the 1975 law, drawn up under the reformist military government of General López Arrellano by officials and advisers who saw a chance of restructuring social relations in the countryside (see for example,

¹⁶ It was proposed that the *minifundios* (holdings under 5 Has) should be expropriated, regrouped and allocated to the best farmers with the most dependants. Other *minifundistas* would be allocated land or compensated (INA, 1978, 27). The *minifundios* were seen as symptomatic of land fragmentation, and considered ecologically destructive and unproductive because of the intensified land use and techniques of cultivation employed (*ibid.* 21).

¹⁷ Some renting arrangements were also brought into question.

Santos de Morais, 1975), implied doing away with pre-capitalist relations, and substituting them with modern farms based on a combination of private and collective ownership. However, implementation met with landowner resistance, and political and personnel changes among the military rulers also served to moderate the original intentions of the law. Furthermore, it is unclear from the literature that the forms of security, as well as insecurity, which different types of access to land might have provided for poor farmers were acknowledged by the law. In particular, the existence of a semi-proletarian population in rural areas which enters into different arrangements to obtain land remains a problem area for legislation as my research will show.

As redistributionist policies gave way to reinforcement of market forces, privatization and commoditization of land tenure relations became key aspects of further policy debate and recent legislation on land. The two main areas of debate focused on land titling and the creation of land markets. A considerable number of farms had national (or public) land and as the redistributive policies of the 1970s declined, government bodies, backed primarily by USAID, turned their attention to the privatization of this land. A land titling programme was begun in the early 1980s after the return to civilian democracy, and legislation to create and reinforce land markets was passed in the early 1990s.

Documents on land titling avoided the issue of unequal land distribution and of semi-proletarian production. However, they did have an interesting analysis of land tenure relations. The perspectives of the land titling programme were encapsulated in this extract from a USAID background project paper:

'...the implementation of agrarian reform legislation has over the years focused exclusively on the creation, legalization, training, servicing, and titling of beneficiary groups. While 246 *campesino* groups received

provisional property titles during the period 1975-81, only 17 provisional titles were issued to individuals. The Suazo government¹⁸ wishes to turn this around; adjudication efforts will emphasize the legalization of tenure of individual, family farm units of production.

The new (1982) administration of the INA shares this view. It is firmly committed to an agrarian reform based on the principles of private property...INA must concentrate on settling the land tenure situation of thousands of Honduran farmers who productively occupy thousands of hectares of national lands...Many of these farmers have occupied their land for years, some have inherited the usufruct rights to their land from their ancestors and a few have purchased these rights from previous "owners". More importantly, they are farmers for whom the provision of expensive, government financed consolidation services would not be required.' (USAID, 1982, 6)

The document goes on to say:

The present structure of land tenure in Honduras can be described as a mixture of fee simple and neofeudal systems. The latter system itself, and the fear it engenders in fee simple holders of larger properties, adversely affect farmer incentives to increase productivity...Farmers in Honduras are uncertain of their future control over the land. This uncertainty is not unique to small producers; it is characteristic of all landholders. Small producers are largely untitled or possess titles of *dominio útil* [use rights] which are defective in that they do not bestow on the individual the ultimate right to definitively own the land he works. Larger producers, many of whom do not have legal titles granting full ownership rights, work their land not knowing when or if their rights of ownership will be challenged by an application of the agrarian reform law or by illegal invasion. Working under a cloud of uncertainty, landholders normally plan only in the short term...' (*ibid*, 10).

I have cited this document at length for two reasons. On one hand, it shows an awareness of the complex nature of land tenure relations in the Honduran countryside and how customary access, loaning, renting can simultaneously provide a means of livelihood (and accumulation) as well as being a source of risk and precariousness. On

¹⁸ Dr Roberto Suazo Córdova was president of Honduras from 1982-86.

the other hand, the document's main concern with these land tenure relations is because they are presumed to damage incentives to increase productivity, undertake innovations and prevent the formation of and access to capital in the countryside (*op cit*). How different forms of tenure are linked, and the plight of those with access to tiny plots of land or no land at all are not addressed. Thus the project is not directed at the landless or land-poor, but what are called 'small, peasant farmers' (*ibid*, 11), specifically those having use rights to national or public land. As Fandino (1989) has commented, the policy does not take into account the widespread existence of semi-proletarian farming.

The land titling project was to be directed initially to coffee farmers, who were (and are) a key source of export earnings and government revenue. However, its orientation prefigured a more general move towards privatization and commoditization of land in farms. These processes could have potentially negative effects on the livelihoods of some groups - such as semi-proletarian and some petty commodity maize producers borrowing (and effectively renting) land. The plots used by semi-proletarian farmers in particular would be too small to be titled. Furthermore, if these farmers rented or borrowed such land from other farmers, they could in principle be dispossessed if the land was reclaimed by its 'owners' for titling.

A later USAID document on agricultural strategy for Honduras (1989) may have foreseen some of these problems and proposed reducing the minimum farm size for receiving titles to 2.5 Has (*ibid*, 59). This still would have excluded many farmers who rented or borrowed small plots, as well as semi-proletarian farmers who may have had access to plots of national land of as little as 1 *manzana* (.7 Ha).

The same document identifies the inability to rent land and ill-functioning land markets as key issues for the future of Honduran agriculture. The status of rented land in the 1975 reform was unclear. On one hand, it was placed in the category of indirect land

use forms (*explotación indirecta*) which were to be abolished (INA, 1978, 27). On the other, certain types of land use were not to be touched by the reform, especially that for export crops (*ibid*, 28). This left food staple production on rented land in a grey area. Although my fieldwork shows that renting land was common among small farmers, interviews indicated that landowners often only let out land to a few, trusted people. Thus proposals to allow the renting of land would not necessarily resolve the problem of access to land by small, land-poor and landless farmers, although a suggested land tax to encourage and intensify productive use of farm land (USAID, 1989, 59) might eventually have freed up some land for small producers. However, implementing generalized taxation can only work if the infrastructure is there to implement it.

These moves to create and reinforce private land ownership were followed by a new law, the Law for the Modernization and Development of the Agricultural Sector (*Ley para la Modernización y el Desarrollo del Sector Agrícola*) of 1992. Measures included: permitting the sale of national land in farms of up to 200 Has which had been farmed for more than three years; changing the definition of *minifundio* to farms of less than 1 Ha rather than 5¹⁹; allowing renting of national land; and permitting joint investment ('*coinversión*') in farming between different types of farm, including between collective and individual enterprises²⁰ (*La Gaceta*, April 6 1992, 6-7). As data in later chapters will substantiate, these proposals were likely to have mixed effects for maize farmers because of the extent of their social differentiation.

In conclusion, the land tenure changes outlined in the 1980s by USAID and later

¹⁹ Proposals for the eradication and regrouping of these landholdings were the same as in the 1975 Agrarian Reform Law (see Section 2.1.3 above).

²⁰ If one of the parties only provided land, s/he would receive rent.

reinforced in Honduran legislation also intended to transform agrarian relations, but through the privatization and commoditization of land. From these changes, a class of small and medium farmers (petty commodity producers) was to be reinforced. While these policy ideas recognized the uneven development of land markets, they risked jeopardizing the means and relations through which many small farmers acquired access to land.

2.3.2 Policies directed to productive capacities

In the 1970s and 1980s, there was an ongoing programme to increase credit and technical assistance to maize farmers, largely run by the MRN with administrative backing from BANADESA (for credit) and the IHMA (which helped to recuperate loans from maize sales made to it by those receiving credit). In the 1970s, credit programmes were to run in parallel with land reform to reinforce the production of collectively organized peasant groups. In the 1980s, more attention was given to individual farmers.

In principle, such policies could help enhance producers' entitlements and capacities to reproduce maize. However the literature discussed below and my own research suggest that credit and technical assistance programmes did not generally reach farmers with very small plots, semi-proletarian farmers, and some types of peasant groups. Furthermore, the effects of creating and reinforcing petty commodity production and the potential risks faced by such farmers were not apparently foreseen. Thus on one hand, many maize farmers were excluded from credit and technical assistance programmes. On the other, where implemented, credit and technical assistance programmes could increase the risk of debt for many petty commodity producers of maize by putting additional pressures on them to commoditize production, when their possibilities of producing marketable surpluses and repaying their loans were often

slim.

Peasant organizations often argued that they could not set up viable enterprises to produce basic grains (maize, rice, beans and sorghum) because of lack of access to credit. In the 1970s, most credit and technical assistance for organized groups and cooperatives was for producing export crops. Posas (1979) cited the INA policy of that time: 'The production of basic grains will be promoted principally in the areas and enterprises where there are no other production alternatives...or in those situations in which the diversification of production is not viable because [groups are] just establishing themselves' (*ibid*, 104-105; my translation). As well as the articulated demand for credit and technical assistance from peasant organizations, there was pressure from foreign aid donors to make these services available to small individual producers of basic grains. For example, a World Food Programme report in the 1980s stated that the problems of achieving self-sufficiency in basic grain production - an aim of the 1982-86 National Development Plan - was the 'lack of sufficient resources at national level to implement an adequate technical assistance and credit scheme for small farmers'²¹ (World Food Programme, 1986, 3). Evidence on bank credit from the 1980s indicates that small maize farmers did not generally receive loans. My estimates based on data from the main agricultural lending bank, BANADESA, suggest that, in the early 1980s, about 90% of credit for maize went to farmers with more than 35 Has of land (Johnson, 1988, 60). At the end of the decade USAID stated that less than

²¹ The report went on to say: 'small producers suffer from low yields due to their productive structure and lack of support services, technological transfer, efficient distribution systems and utilization of improved seeds, fertilizers and credit. They cannot overcome their situation on their own. Therefore, it is important that the government and international donors encourage and support the development of farmer organizations that would permit higher productivity, higher production volumes, lower input (*sic*) costs, better storage facilities, commercialization circuits and easier access to technical assistance and credit' (*ibid*, 5). It is interesting that this position (similar to that taken by the FAO and CEE during the same period) was running in parallel with the more liberal economic views put forward by USAID.

10% of all grain farmers received institutional credit at all (1989, 39).

Even so, at the end of the 1970s and during the 1980s, with assistance and intervention from external funders, special programmes known as *Desarrollo Rural Integrado* (DRI - Integrated Rural Development) were set up (Gálvez, 1986²²). These projects were directed to the development of areas where most small farmers, whether organized in peasant groups or working individual plots, were producing the main food crops of maize and beans. Their objectives were to help diversify production into vegetables and fruit crops and promote marketing, as well as provide credit and technical assistance. For example, in one of my fieldwork areas, the DRI's mission was to: (i) increase the incomes of over 2,000 rural families by diversifying production; (ii) integrate organized groups, cooperatives and small individual farmers into local agricultural committees; and, (iii) improve nutrition and reduce dependence on producing basic grains through crop diversification (MRN/DARCO²³ *et al*, 1984, 1-2). The means for carrying out these objectives were primarily credit programmes and technical assistance, financed 90% by the European Economic Community (Gálvez, 1986, 26). However, the possibly negative effects of debt arising from increasingly commoditized production promoted by credit schemes was not evident in the documents. My data suggest that this was a serious problem for some of the farmers that I interviewed.

In practice, the DRIs were designed to assist and reinforce the production of petty

²² Gálvez's view was that 'in the case of the DRIs in Honduras, the policy of rural development does not appear as a proposal from a private pressure group, nor from the peasants, nor from the government. It rather originates as a particular policy arising from an analysis of trends in the international economy by centres of finance or international development and which have decided to promote a policy of support for Third World governments by initiating programmes and projects directed towards small producers' (*ibid*, 9; my translation).

²³ Dirección Agrícola Regional Centro Oriental

commodity producers. They were not directed at the needs of semi-proletarian farmers. In the experience of the MRN/European Economic Community project mentioned above, such farmers fell outside the credit scheme. The analysis carried out by Gálvez argues that poor farmers were effectively excluded because they did not own land and it was expected that they would therefore not want to invest in production and make technical innovations (*ibid*, 13-14). Gálvez further points out that the supposed participatory and integrative nature of the programmes was made difficult by the social differentiation of the producers involved. In the DRI I became familiar with, extension workers had to try and negotiate the complexity of social relations in the communities in which they worked, as well as try to implement a programme of technical change.

Thus, policies directed to credit and technical assistance in Honduras reflected several dilemmas for food security and food policy. How was it possible to reach even the smallest farmers with limited finance, when they were often atomized (hence the attempts to integrate farmers into agricultural committees through the DRIs)? Could credit and technical assistance reinforce the food security of maize farmers only if other social relations of production and exchange were changed? Could credit and technical assistance programmes help to change social relations which impeded maize production and help provide individual farmer as well as national self-sufficiency²⁴ in maize? Or were such programmes really a means to pressurize farmers into making maize sales which undermined their consumption needs to pay back their debts - in other words, a form of 'institutionalized forced commerce'? My fieldwork throws further light on

²⁴ Note that, as other analysts of Honduran food and agricultural policy have pointed out (for example, Norton, 1988), I do not regard self-sufficiency in maize as the same as food security in maize. As well as by increasing national output, national food security in maize may also be achieved by a combination of imports and national output if people have adequate incomes to buy maize, and if the government is able to finance imports without incurring unwanted debts or undesired political and economic ties.

these issues in Chapters 5-7.

2.3.3 Market efficiency and market incentives

Much of the policy discussion and many of the measures of the 1980s, in particular, centred on how to make markets operate more smoothly and with as few price distortions as possible, while simultaneously trying to implement a pricing policy which would act as an incentive to maize producers and not penalize maize consumers. I argue that notions such as market efficiency and market incentives are insufficient alone to analyse the effects that market forces might have on maize farmers.

The extent of documentation, articles and studies on different aspects of basic grain markets in the 1980s is notable (for example, Aguirre and Tablada, 1988, 1989; Economic Perspectives, 1986; Hanrahan, 1983; KSU, 1985; Larson, 1982; Loria and Cuevas, 1984; Norton and Benito, 1987; Pollard *et al*, 1984; Quezada and Scobie, n.d.; USAID, 1978b). I cannot deal with all the issues and points of debate which were raised by this literature. The issues I focus on here are state intervention in output markets and prices, and the role of price incentives.

(i) State intervention and prices

Whether and to what extent the state should intervene in grain markets was a policy issue raised by the perceived weaknesses of the grain marketing board, IHMA. As indicated in Section 2.2, serious state intervention in maize markets started with BANAFOM grain purchases in the 1950s. In 1978, the IHMA took on the functions of price stabilization to urban consumers and providing guaranteed prices to farmers, as well as those of controlling all imports and exports of grains.²⁵ However, evaluations

²⁵ *Apart from its monopoly of imports and exports, the IHMA has in practice only controlled a small percentage of the marketed grain produced in Honduras - most trade is in the hands of private traders*

of the IHMA's role (for example, *Economic Perspectives*, 1986) suggested that state intervention in markets should be reduced and refined.²⁶

There were many problems with state intervention in maize markets in Honduras in the 1980s. The IHMA was underfinanced. There were difficulties with price setting: when guaranteed prices were considerably higher than farmgate prices, IHMA did not necessarily have the financial capacity to buy, and it was suggested that the IHMA did not actually help to increase farmgate maize prices (USAID, 1989, 12). The majority of farmers, especially small ones, did not in practice sell maize to the IHMA, either because they did not receive institutional credit whose terms would have involved the possibility of repaying part of their debt through sales to the IHMA, or because of the lengthy and costly process of transporting maize and having it valued. IHMA projects to attempt to reach other than large commercial farmers, such as organized peasant groups and cooperatives, through rural storage programmes also had financial and managerial difficulties.

Thus, as in other parts of the world, the state marketing board in Honduras came under criticism. The conclusions from the criticisms were to propose limiting or reducing the IHMA's role and that of state intervention in grain markets in general. For example, the 1986 evaluation of the IHMA made for USAID suggested that the IHMA should be

(and millers, in the case of rice). One estimate of IHMA's participation in national trade was that it purchased an average of 8% of marketed maize (in my estimates fluctuating between 1 and 16% of marketed maize between 1978 and 1985 (Johnson, 1988, 180b)), 12, 8 and 3% of beans, rice and sorghum respectively; 78% of all IHMA's purchases and sales were maize, the rest being 19% beans, 8% rice and 4% sorghum (Economic Perspectives, 1986, ii).

²⁶ *Personal interviews with IHMA personnel between 1986-88 indicated differences of opinion between external funders of the IHMA as to its appropriate role. For example, the European Economic Community, which was supporting an IHMA project for establishing regional grain silos to be managed by organized peasant groups, favoured a much more interventionist IHMA than USAID. While critical of IHMA operations, the FAO also advocated measures to make its activities more efficient but did not make any proposals for privatization or deregulation (FAO/FSAS, 1986).*

a market facilitator, should have price bands just for maize and beans, intervening only when farmgate prices fell below or consumer prices rose above them. It should also privatize its storage facilities, and generally assist market efficiency by providing information about harvests and prices, and by improving the control of grain quality, weights and measures (Economic Perspectives, 1986). These proposals were further reinforced in a USAID strategy paper for the agricultural sector, which also promoted removing most, if not all, price controls and compensating the poor with a targeted food aid programme (USAID, 1989).

The proposal to limit state intervention in markets to the role of facilitating efficiency reflects a particular perspective on how markets function, how prices are determined and the importance of price in allocating resources, goods and services. Although the 1986 USAID view did not advocate complete deregulation, it was characteristic of widespread attempts to establish greater free trade in food grains in the 1980s (Harriss and Crow, 1992²⁷). There were a number of problems with this approach - conceptually and in how it could affect food security.

Measures to deregulate food markets are generally based on economic models which use a rather abstract conception of market forces. Supply and demand, through the price mechanism, are seen as the best and most efficient allocators of resources, goods and services²⁸. Furthermore, people are seen to enter economic transactions

27 *Harriss and Crow have made a useful analysis and summary of these processes and their effects in Somalia, Bangladesh and Malawi.*

28 *It should be noted that there are quite sophisticated formulations of this position as well as of critiques within orthodox economics. For example, Timmer (1986) states: 'Markets are fragile instruments for the efficient allocation of resources, but they are tenacious in providing contrary signals to a government whose price policy is badly out of line with available resources' (ibid. 149). Timmer argues that prices are key signals to decision-makers involved in supply and demand. In food markets, price acts as a means of adjustment from one disequilibrium to another. Governments should help the more painful aspects of these processes by keeping transport costs down, providing better access to credit etc. However, this view still presupposes that producers are able to make*

voluntarily. But even under capitalism, transactions can include coercive elements. As stated by Bhaduri: 'Exchange is a surface phenomenon of economic life - reflecting the underlying economic and social organization of production. Consequently, exchange relations are not general, but specific to each mode of economic organization that shapes them' (1983, 1).

The social content of exchange relations and the uneven development of markets, which may be part of the development of capitalism and people's strategies for accumulation and survival, can affect supply and demand, and hence prices. As argued by Indian economist, Bharadwaj, agricultural prices are determined by a combination of structural conditions of production which affect how and whether marketable surpluses are produced, and different market relations and networks into which output is sold (Bharadwaj, 1990, 9).

This perspective implies that price policies alone cannot resolve the problems of increasing output and productivity, nor the structural issues underlying food insecurity. This is in contrast to a 1980s World Bank view, cited by Barker (1989) which suggested that peasants would respond to price increases resulting from deregulation by increasing their output and productivity, as long as other aspects of markets (for example, transport) worked smoothly (*ibid*, 104). However, other issues need to be taken into account: peasants' social positions, the uneven effects of commoditization, and the role of other social processes in decisions about livelihood strategies. As economist, C.P. Timmer, has pointed out (1986), understanding the potentially wider

different kinds of decisions based on price information and are able to make choices about investing their resources. Many semi-proletarian and petty commodity producers will not necessarily have other options or the social and physical mobility to take advantage of price signals. As Bardhan suggests, peasants may engage in strategic behaviour which is only partially integrated into the market and involves (non-market) links to provide insurance against (market) risks (1989, 6).

effects of price policies requires a political economy approach.

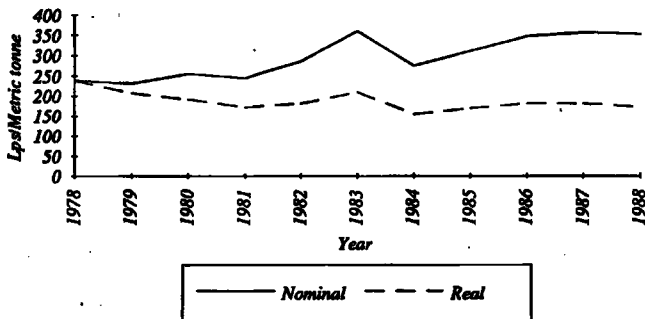
My own position is closer to that argued by Junankar, in his discussion of peasant responses to price signals, namely that 'The matrix within which a rich, powerful, capitalist farmer operates is very different from that in which a small peasant operates' (1989, 179). Thus, if peasant maize farmers, or petty commodity and semi-proletarian producers, in Honduras are part of capitalist relations of production and distribution, but resort to non-commoditized or non-market mechanisms of reproducing maize production and access to maize (as well as operating in the market), price and price changes will not *necessarily* have the expected effects. Furthermore, semi-proletarian farmers, who are usually net purchasers of maize, will not necessarily benefit if farmgate (and therefore consumer) prices rise. As stated by Bharadwaj, 'The question is therefore not so much whether prices matter but their differential impact. Furthermore, the question is not only whether the price policy is effective but whether it produces the effects desired' (Bharadwaj, 1990, 25).

(ii) The role of price incentives

Some of the problems raised by this discussion were present in other aspects of Honduran debates on price policy, for example protectionism and price incentives. The issue of protectionism is related to the role and nature of state intervention. In the early 1980s, some analysts (for example, Hanrahan, 1983; Quezada and Scobie, n.d.) had concluded that maize producers were being protected and subsidized by the guaranteed prices set by the IHMA and the IHMA's control and sale of all maize imports (at prices related to IHMA's stabilization price to traders). However, Aguirre and Tablada (1989) calculated not only that average real farmgate prices had declined between 1978-88 (see Figure 2.5), but that the nominal and effective rates of protection for maize and other basic grains producers were negative. They concluded that

production was not as subsidized or inefficient as had been thought in the earlier analyses. They also argued that there was a transfer of resources from maize producers to traders and industry which actually acted as a *disincentive* to production. In price terms, 'improving' farmers who used new technologies were being discouraged from producing because of the transfer of resources taking place through the imported component of inputs²⁹. In other words, terms of trade were unfavourable to maize and other basic grains farmers. Aguirre and Tablada promoted the idea of more transparent markets, especially for inputs, which they thought would lead in turn to a better distribution of resources, higher output and productivity and would raise agricultural wages and incomes. However, aware of the differentiation among maize producers, they were also strong proponents of differentiated policies in technology change and pricing structures (although were not explicit about how such policies would be implemented).

Figure 2.5 Honduras: nominal and real farmgate prices for maize, 1978-88



Source: calculated from Aguirre and Tablada, 1988, Table 22 (prices indexed to 1978 - *ibid*, 21)

²⁹ A study by CONSUPLANE estimated that companies importing and marketing chemical inputs had gross profit rates of 70-78% for fertilizers and even more for herbicides and insecticides (CONSUPLANE, 1986, Appendix 17).

There are two issues involved in this debate. One is whether price incentives to farmers would help increase marketed output and achieve self-sufficiency in maize. The other, of particular concern here, is whether price policies (combined with other measures in Aguirre and Tablada's view) could help achieve food security among maize producers by improving their exchange entitlements. Again, key questions are the differentiation of producers, the degree of commoditization of production, what means producers use to acquire land and inputs, and what interlinkages exist between the different processes of exchange they engage in and how exchange affects their productive capacities. However Aguirre and Tablada concentrated on market variables and did not analyse the links between the types of production they identified. Although their analysis employed a sophisticated use of data, their recommendations might have had unanticipated effects.

(iii) Conclusion

In conclusion, while one of the key areas of debate during the 1980s was the role of markets and prices in increasing maize output, there was little analysis of markets as social phenomena comprising different interests and capacities to participate. The main absences were any recognition of the role of non-market exchange in producing and reproducing maize, and how social differentiation and local power relations might affect the capacities of farmers to respond to price signals in the ways expected. This is not an argument against policies to increase farmgate prices or control the prices of farm inputs (assuming, as Bharadwaj pointed out, that such policies can have the desired effects). It is an argument for understanding better the social relations in which maize is produced, the strategies of survival and accumulation used by producers, and how market and non-market forces affect them.

2.4 Summary

This chapter has provided some of the context of policy discussions on maize production and rural food insecurity in Honduras during the 1980s. It has argued that an increasing awareness of food security issues developed during the 1980s as a result of nutritional and poverty studies in both urban and rural areas, pressures from peasant organizations on land, and increasing food imports and aid in a context of economic crisis. This awareness coincided with a changing political and policy context. As Honduras moved from military to civilian government, it also moved from an era of reform and state intervention in the economy to a period of increasing liberalization, partly resulting from external financial and policy pressures. This meant that although there were attempts to effect redistributive measures in the countryside in the 1970s which would have helped some maize farmers, tendencies towards reinforcing market forces in the 1980s would have been likely to maintain unequal social relations adversely affecting many small farmers. The role of social relations in production and exchange, and the effects that social hierarchies and forms of non-market exchange might have on access to land, credit and technical assistance programmes, and the organization and functioning of markets and prices, were only partially evident in policy debates.

CHAPTER 3

RESEARCHING MAIZE

Introduction

This chapter explains how I researched the relations of production and exchange of maize in Honduras. Research is a dialectical process relating the abstract and theoretical with the tangible and empirical, each of which is constantly informing the other. Thus initial assumptions and questions are often challenged. Research is also often much more unpredictable than text books would have us believe, although this aspect is not always evident in how research results are presented. Data analysis and reflection take place alongside data collection, but it is only in writing up that evidence and explanation are linked.

The outcomes of research can never provide final or complete explanations of phenomena. In the social sciences they contribute to ongoing debates about social organization and change. It is the hope of this researcher that they also contribute to the process of bringing about changes for the better of the rural poor in Honduras.

I look first at some of the general questions and issues involved in carrying out this research and explain the use I have made of data and evidence which existed before I did my fieldwork. Then I outline the stages of my fieldwork and explain how I carried it out, pointing out some the problems and surprises.

3.1 General questions and issues

The main questions when I started this research were (i) what were the obstacles preventing farmers from producing adequate maize for direct consumption and

impeding them from reproducing or expanding the crop in the following season? (ii) what role was played by exchange relations in creating or reinforcing these obstacles? These questions arose out of earlier work on a maize sub-system study which was part of a Central American project on agricultural production, biotechnology and food security (Johnson, 1988). I began working with some general theoretical ideas about the social differentiation of producers, how commoditization might affect productive capacities, and how the uneven development and control of markets might have different effects for different types of producer. Thus, there were many issues of interest to me in maize production and maize markets at that time.

There were absences and preconceptions of my own that I had to contend with. One was that I was not an agronomist and had much to learn about the processes of growing, harvesting and processing maize. Another was that although I had visited Honduras several times during the latter half of the 1970s to look at projects being run by peasant organizations, I had no real experience of life in the Honduran countryside. I had a relatively simple view of rural social relations and was to discover that they were much more complex than I had initially thought. I also had certain assumptions about the nature of trade, partly arising from field studies in other parts of the world (for example, Crow, 1987; Harriss, 1980) and partly from anecdotal information and press reports in Honduras. For example, I thought that there would be evidence of oligopolies in trade affecting prices, that farmers' relations with traders would be their main source of indebtedness, and that social differentiation among farmers would result in different farmers receiving different prices. I neither proved nor disproved the first point: maize markets appeared competitive in the areas I worked in but I would hesitate to say that the large traders in urban market centres exerted no control over

trade¹. I discovered that more important as a source of loans and potential debts were other local farmers (who may, however, also have engaged in some trading) rather than the truckers and traders who came from outside the community. Finally, my evidence on price differentials suggested, if farmers were grouped into class categories they could be shown to receive a different average price, but individual prices received could vary across the spectrum irrespective of social position. Thus I had many things to learn.

To research my main questions, I undertook two main areas of work. The first was to look at all existing data and studies on maize and to talk to as many people as I could (ministry officials, other researchers, agronomists and extension workers, and peasant group organizers). The second was to interview maize farmers (individual producers and those organized in peasant groups), traders, and those running companies which processed maize, as well as extension workers in the fieldwork areas. I return to the interviewing process below and discuss my secondary sources and initial contacts here.

The main source of statistical data (apart from those which had been gathered and processed in other studies) was the agricultural censuses and surveys. There had been three major agricultural censuses, in 1952, 1966 and 1974. These censuses contained data on land distribution, forms of tenure, land use, farms, area occupied by specific crops and output, livestock and use of machinery. Published data existed by *municipio* and department as well as farm size. Some of the data had been well-worked,

¹ Other studies of basic grains markets in Honduras have implied that there is a high level of competition, although not necessarily a high level of 'market efficiency' (Chapter 2) with respect to infrastructure, storage, weights and measures etc (eg IRI Research Institute, 1985; Loria and Cuevas, 1984; Pollard, Graham and Cuevas, 1984).

summarized, and digested in many subsequent studies². As no-one seemed to have analysed precisely how changing access to land might have affected the entitlements of maize producers, I extracted and computerized data on land distribution, tenure and use, as well as data on maize production, from the 1952 and 1974 censuses, for further processing. I chose these data in part because they used compatible measurement categories, but mainly because they represented information on two key periods of Honduran agrarian history: the modernization processes beginning in the 1950s, and the era of land reform in the 1970s (see Chapter 2, Section 2.2). These, as well as other data from an agricultural survey in 1984, data on commercialization, imports and exports from the IHMA and the MRN, and economic data from CONSUPLANE and the BCH, formed the backbone of my initial attempts to understand the place of maize in the Honduran economy. Some of this secondary data work is analysed in Johnson 1988, but further analysis relevant to this thesis is presented in Chapter 4.

Although aware at the time of the problems of data collection, analysis and interpretation (some of which I was also to encounter in my own fieldwork), I knew that the changes in land distribution, use and tenure observed from the 1952 to the 1974 censuses had generally been accepted in official and academic circles in Honduras as indicative of real trends. (Post 1974, the data are less comprehensive.) However, I am aware of the serious and well-founded criticisms of census and survey data (and statistics in general), particularly of their conceptual frameworks and the manner of their collection, as well as the use of questionnaires or schedules in fieldwork (which I

² *Notable among which is del Cid (1977) who analysed data from the 1952 and 1966 censuses for a study on 'agrarian reform and dependent capitalism'.*

return to below)³. I should thus point out that my use of these data in this thesis is to indicate trends rather than provide a definitive analysis of land and maize production in the Honduran countryside. They indicate how Honduran agrarian structures changed over time, and suggest how these structures might have been at the time of my fieldwork.

Apart from reading available studies, the other means of gaining a basic understanding of the dynamics of maize production and markets was by talking to as many people as possible. I interviewed people in the MRN, IHMA, CONSUPLANE, INA, BCH, and various departments in the Ministry of the Economy. I also talked to members of NGOs working with maize producers, and quizzed agronomists and individuals working with peasant organizations on production processes, knowledge of markets, and social relations in the villages where they worked. Some of these notes have found their way into this thesis.

Maize is ubiquitous in Honduras, but there is considerable regional variation in the precise forms of and agreements over access to land, the quality of the land available, techniques of production used and yields, how people organize access to labour, and the extent to which they can produce marketable surpluses (or have to sell maize). Some regions, particularly the north and east, were increasingly seen by policy-makers as the grainbowl of the country, while in other areas, notably parts of the west and south, maize was regarded as a rather precarious, subsistence crop⁴. Furthermore,

³ Useful critiques have been articulated by writers on research and policy issues in rural areas such as Chambers (1983) and Gill (1993), and authors in the field of gender and development, for example Dixon-Mueller, 1985; Jackson, 1991; Poats et al, 1988.

⁴ The differences and changes in number of maize farms, area and output for the departments over the 1952-74 period can be seen in Appendix 3.1. Of particular note is the growth in maize area and output in the departments of Atlántida, Colón, Cortés, El Paraíso, Olancho and Yoro, all of which lie in the north, north-east and east of Honduras. Some of these departments were sites for colonization of new lands. By contrast, a few departments have substantially increased their number of maize

although there were regional grain markets, the key centres were in three major cities, Tegucigalpa, the capital, San Pedro Sula in the north, and Choluteca in the south. How was I going to decide where to do my fieldwork, and how generalizable would my findings be?

I discuss the choice of my fieldwork sites below. On the extent to which I would be able to generalize from my findings, I decided to take the following approach. First, as my research progressed, I would compare my experiences with those of agronomists, peasant leaders and others I knew working in different parts of the country. This would not necessarily establish the veracity or general nature of my findings but would provide a context and sounding board. Second, was to recognize that case studies would enable me to research social relations. Case studies permit the collection of different kinds of detailed information which can in turn be set in (and inform analysis of) the wider context.

3.2 Doing field research

Work constraints required relatively easy access to fieldwork sites and the use of existing contacts (or to be where I could readily make them). I also wanted be situated where there were established grain market centres so that I could explore links between these markets and the farmers I would be interviewing. In addition, I wanted to look at two different areas of the country, to situate my fieldwork within the wider context, analyse different types of maize production, and investigate different market places. I

farms without equivalent increases in area and output. Choluteca and Valle are two examples, located in the poor and relatively arid south of the country. Ocotepeque, an underdeveloped department in the west, actually lost farms and area planted with maize during this period, primarily because of substantial out-migration (Kramer, 1986), although output was sustained because of increased yields.

thus wanted to interview different types of maize farmer, including peasant groups, as well as a range of traders, from petty traders to large wholesalers. I also wanted access to those working in industrial processing to understand the nature of industrial demand for maize, although much of this material subsequently fell outside the scope of this thesis.

Combining these requirements with different kinds of contacts led me to carry out my fieldwork in two stages. The first was in Danlí and the valley of Jamastrán in the eastern department of El Paraíso, near the Nicaraguan border (see Figure 3.1). It was carried out during the period of land preparation for sowing the *primera*⁵ crop in 1987. Here, I interviewed 28 individual farmers and members of 4 peasant groups from different peasant organizations in two villages called Chichicaste and Jutiapa, both located in the Jamastrán Valley. I then interviewed a cross-section of traders, 8 in all, in the town of Danlí. In addition, I carried out further interviews with personnel working in the local integrated rural development project (DRI), the INA and the IHMA, as well as talking to other informants in the area. The second stage of my fieldwork took place about a year later and was located in the rural community of Quita Sueño in the valley of Quimistán in the department of Santa Bárbara, and the city of San Pedro Sula, in the neighbouring department of Cortés (see also Figure 3.1). In this part of my fieldwork, I interviewed the members of 10 peasant groups in Quita Sueño who formed a *sectorial*, or section, within a national peasant organization, and also talked to other informants such as extension workers and members of a local cooperative as well as one or two village traders mentioned by the groups. In the city

⁵ There are two maize crops in Honduras. The first, called the *primera*, is usually sown in May/June and harvested between September and January. This is the main crop. A second crop, the *postrera* or *segunda*, is sown mainly in the northern fertile and rainy areas in the early months of the year and harvested around April/May/June, although some farmers in other parts of the country also manage to cultivate a second harvest.

of San Pedro Sula I interviewed 9 of large wholesalers, and managers in 10 companies which processed maize. Again, I also talked to other informants in the Chamber of Commerce and in the IHMA. A summary of the two stages of my fieldwork is presented in Table 3.1.

I now describe the fieldwork process in more detail. Rather than taking it in chronological order, I first explain how I interviewed maize farmers, in both Jamastrán (El Paraíso) and Quita Sueño (Santa Bárbara). Then I discuss some of the issues involved in interviewing traders and describe what I did. Finally, I briefly outline interviewing industrialists, although few of those data are included in this thesis.

Table 3.1 Summary of fieldwork stages

1987		1988	
<i>Villages of Chichicaste and Jutiapa, Valley of Jamastrán, in the Department of El Paraíso</i>	Interviewed 28 farmers and members of 4 separate groups from different peasant organizations; other informants: extension workers, DRI personnel, INA	<i>Community of Quita Sueño, Valley of Quimistán, in the Department of Santa Bárbara</i>	Interviewed members of 10 groups forming a section of a national peasant organization; other informants: extension workers, members of a local cooperative, local traders
<i>Town of Danlí, in the Department of El Paraíso</i>	Interviewed 8 traders; other informants: DRI personnel, IHMA, other personal contacts	<i>City of San Pedro Sula, in the Department of Cortés</i>	Interviewed 9 wholesalers and 10 industrialists; other informants: personnel in the IHMA and Chamber of Commerce

Figure 3.1 Map of Honduras, showing departments



Source: adapted from Rudolph, 1983, xxiv

3.2.1 Interviewing individual maize farmers and peasant groups in El Paraíso

El Paraíso lies on the eastern side of Honduras, near the Nicaraguan border. Its main market centre, Danlí, is about 100 kms or one and a half hours' journey by road from the capital of Honduras, Tegucigalpa. Danlí is a market town but also has some local agro-industry, including tobacco processing, saw mills, and a slaughter house and meat-packing plant and, at that time, was also the site of an IHMA granary. Apart from basic food crops, especially maize and beans, the department of El Paraíso produces coffee, cotton, tobacco, sugar cane and beef.

Jamastrán is the largest valley in the department and is seen as one of the growth areas for maize production in Honduras, although it is not as key in terms of area and output as some of the departments in the north and north-east (see Appendix 3.1 and Footnote 4 above). Although marketed maize leaves the area for urban centres during the harvest, it is also brought in for local sale in the lean season. Maize is not however the main crop in terms of land area. Pasture occupies most of the land, and tobacco and cotton are important crops. Coffee is grown in the mountainous areas bordering the valley.

The villages of Chichicaste and Jutiapa are located in the Jamastrán Valley. Chichicaste is a village of over 1,000 inhabitants, including migrants from other parts of El Paraíso as well as Francisco Morazán, who arrived during the fifties and sixties looking for land⁶. It is 37 kilometres from Danlí at the end of the valley, on the edge of the mountainous border with Nicaragua. The land in the village and surrounding hamlets is a mixture of narrow valleys and hills. Jutiapa has about 2,500 inhabitants, also

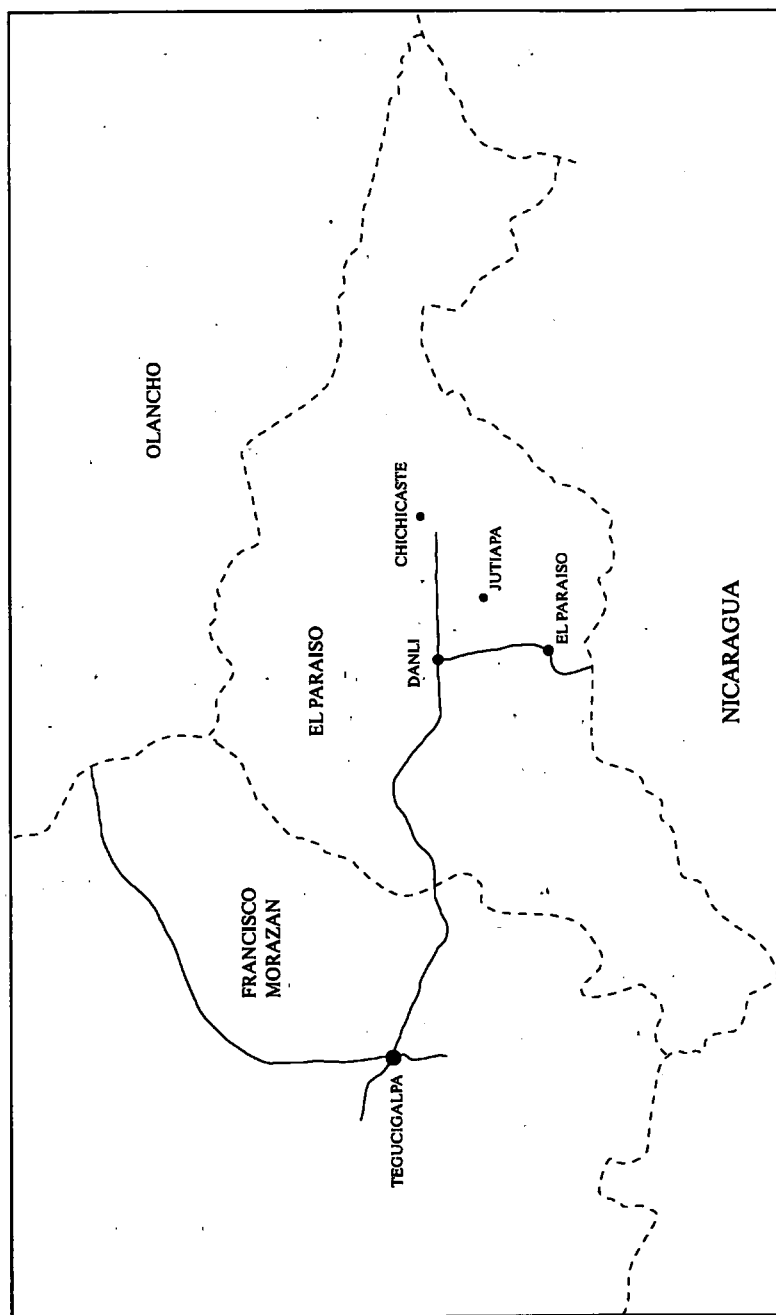
⁶ Although there was migration into El Paraíso in the 1950s and 1960s, there were even more people who left the department during this period, particularly for Francisco Morazán and the capital, Tegucigalpa (Howard Ballard, 1987, 608, 616, 619).

including first generation migrants, but many families have spent several generations there. It is located some kilometres down a dirt road off the main route through Jamastrán, about half-way between Chichicaste and Danlí, but about 30 kms from Danlí. The land is mainly flat although there are more undulating areas in the hamlets near the hilly, coffee-growing areas near Danlí and the nearby capital town of El Paraíso. The location of these villages is shown in Figure 3.2.

I chose these villages for the following reasons. First, there were differences which would allow some comparison of relations of production and exchange.⁷ The villages were different in terrain and in distance from markets. An initial visit suggested that Jutiapa was integrated into the commercialization of agricultural production in the valley, and was surrounded by large farms engaged in commercial crops and beef production. Young people (in other words, teenagers and young adults) were more evident in Jutiapa than in Chichicaste suggesting that work was available. There was also public transport connecting the village to Danlí. Chichicaste appeared (in relative terms) more isolated from commercial developments in the valley, and the limits of its undulating terrain (as well as the concentration of landownership in the valley) meant that large farmers were colonizing land further afield, especially in the department of Olancho. Being near the Nicaraguan border, Chichicaste was subject to some of the side effects of the war taking place in Nicaragua. On one hand, trucks of Honduran troops would pass through the village on their way to a nearby camp, and there were stories of Nicaraguan Contra coming to the village to buy provisions. On the other hand, the village had become a focus for infrastructural improvements, such as piped

⁷ *Because these villages have some different characteristics, in the analysis of my fieldwork I sometime treat the data separately because important variations are apparent. When data differences are insignificant, I put the data for the two villages together.*

Figure 3.2 Map of El Paraíso, showing Danlí, Chichicasté and Jutiapa (and paved roads)



Source: adapted from Ministerio de Recursos Naturales/DARCO, Fondo Europeo para el Desarrollo/CEE, BOOM, Asesores el Desarrollo, 1984, 189

water pumped up from the nearby River Guayambre (every second day), and better roads, as well as services such as mobile health brigades from the United States.

The second reason was that both villages were within relatively easy reach from Danlí which I could use as my organizational base. Furthermore, the MRN was running an integrated rural development project (a DRI) in the area and had operational extension offices in both Chichicaste and Jutiapa which I could use as additional sources of information and as a means of contacting a range of maize producers. In Danlí I had access to information held by the regional office of the MRN and contacts there were able to help me find accommodation in the villages. The INA also had an office in Danlí as did the IHMA. Furthermore, there was a local, and dynamic, maize market where I would be able to interview traders.

To obtain the collaboration of the MRN and the extension offices, I had to be interviewed by the heads of the local office in Danlí. Although I had been given a recommendation from officials in Tegucigalpa, local staff rightly wanted to establish my credentials. I was then introduced to a number of staff who could help with information in Danlí and then to the heads of the extension offices. Other staff helped with local information and introductions.

Because of the existence of the DRI, there was considerable information in both Danlí and the village extension offices about local production conditions and farmers participating in the project. As I did not have time to do a general household survey from which to select a sample, I decided to ask the extension workers to help me identify maize farmers as well as introduce me to some of them. I wanted to interview different types of maize producer, including some of the very large farmers as well as collectively-organized peasant groups. I decided to base my selection on farm size - irrespective of means of access to land - rather than area planted with maize. This was

in part because the latter can change from year to year, and in part because I wanted to test evidence gleaned from the agricultural censuses on the type and degree of intensity of land use by farm size⁸. I also tried to interview maize farmers in proportion to the numbers in each farm size category, according to the distribution indicated in the 1974 census. However, I found that estimates of land area often changed in the course of interviews and it was difficult to stick to my categories. A category not included in the census was peasant groups and I selected two in each village, making sure that they were affiliated to different national peasant organization (or independent). Finally I wanted about half my interviewees to be participants in the DRI, to see what effect the project was having on their productive capacities. The other half was a mixture of farmers who received no credit or technical assistance, as well as those who obtained credit from banks. The resulting distribution of interviewees (with the hindsight of more precise information on the land they held) is given in Table 3.2. Although this distribution was not quite what I had originally intended, in practice I was successful in interviewing a range of maize farmers, and was able to build up a picture of different types of production and mechanisms of reproduction.

I carried out all the interviews by myself and only in one instance was accompanied by an extensionist. It was certainly much easier to have relaxed interviews if project staff were not present. Although I was not regarded as associated with the DRI, my foreign status meant that I was sometimes seen as a potential source of aid. Furthermore, I made the initial mistake of carrying an interview schedule and trying to fill it in as the interviewee talked, rightly criticized by Gill (1993). Although many informants were used to being questioned in that way because it was a method often used by the MRN extensionists, I rapidly realized that it severely limited the nature of the interview, and

⁸ Broadly, the larger the farm, the lower the proportion of land dedicated to maize and vice versa.

that answers frequently did not fit with the nature or order of the questions, or with my preconceptions. Thus I immediately dropped that procedure and carried a small notebook, trying valiantly to remember my list of questions. Thereafter, interviews became much more non-linear in approach and often revealed information about issues other than those I had noted on my list, which was extremely useful for building up a broader picture of social relations. For example, it was as a result of this that I became increasingly aware of the personalized links between farmers. I used my schedules only to organize my notes when I wrote them up after the interviews, and my field diary acted as a means of systematizing the additional information I had gained.

Table 3.2 Distribution of maize farmers interviewed in Jamastrán

	<i>Chichicaste</i>		<i>Juliapa</i>	
<i>Farm size grouping (Has)</i>	<i>Project participants</i>	<i>Non-participants</i>	<i>Project participants</i>	<i>Non-participants</i>
< 1		1		
1-5	2	4	1	1
5-10	1		1	2
10-20	4		2	1
20-50	1		1	
>50*		3		3
<i>Total individual farmers</i>	8	8	5	7
<i>Peasant groups</i>	1	1	1	1

* Over 80% of maize farming takes place in farms of less than 50 Has; I therefore did not specify farm size groupings for larger farms than this.

These are the basic topics I investigated in these interviews:

1. Personal data, including

- Birth place
- Length of time in village
- Reasons for moving
- Other occupations

2. Others living in the house, and immediate family

- Who
- Ages
- Occupations/work

3. Farm data, including
 - Farm size
 - Number of plots and sizes
 - Type of land
 - Type and source of tenure
4. Sources of income
 - Farming
 - Wage work
 - Other
5. Sources and conditions of credit
6. Animals kept
7. Crop production, including
 - Maize area planted 1986-87
 - Maize area intending to plant 1987-88
 - Beans area planted 1986-87⁹
 - Beans area intending to plant 1987-88
 - Other crops planted 1986-87
 - Other crops intending to plant 1987-88
8. Quantities and type of hired labour, purchased and rented agricultural inputs, source and means of acquisition
9. Costs of production (*primera*) 1986-87 (maize and beans, including land, labour, inputs, machinery)
 - Payments for land
 - Cost of credit
 - Land preparation costs
 - Sowing costs
 - Cultivation costs
 - Harvesting costs
 - Post-harvest costs
10. Output
 - Quantity harvested 1986-87
 - Losses (and reasons)

⁹ Beans are the complementary food staple to maize and are often interplanted with maize although may also be grown separately (especially as a commercial crop). Although I included questions about bean crops in my fieldwork, analysis of the data does not form part of this thesis.

11. Destination of output 1986-87

- Sales
- To whom
- Prices received
- Time of sales
- Output needed for direct consumption (including seed, animals etc)

Although I wanted as precise data as I could obtain on these topics (which were broken down further in the interview process as well as being a means to discussing other aspects of production and exchange relations), I was aware that some issues (such as land, or income from maize) were sensitive areas and that farmers might be careful about what they told me (or, as Gill (1993) has pointed out, tell me what they thought I wanted to hear). Other problems were farmers' remembering data precisely, or my being able to convey to them clearly what I wanted to know. All my interviewees (among maize farmers) were men¹⁰, and it was often useful if other family members (especially wives) were present at the interviews because they might contradict or substantiate data, and provide additional information.

Other informants were useful in a number of ways. They provided additional information on maize production and trade, different aspects of social relations in the area, problems with local projects, and general gossip. They were also useful for cross-checking some of my data (as were some of the data held on official records of DRI project participants).

¹⁰ *The production of food staple crops such as maize and beans is largely the domain of men, while processing and utilization is 'women's work'. Women do have farms but often use or hire male labour to work them. Wives and children can also provide family labour in weeding or harvesting. But the control of the labour processes in production and the destination of output (and income) is generally in the hands of men.*

3.2.2 General note on interviewing peasant groups; interviewing groups in Santa Bárbara

Interviewing organized producers is a different process from interviewing individuals. In general, the groups wanted to be present as collective entities in the interview, even if not all members participated. Members wanted to hear what was asked and what was said. The groups were socially and politically aware and I had to establish my credentials: thus one group in Jutiapa met with me first to consider whether they would agree to being questioned about their productive activities; before interviews could be carried out in Quita Sueño, Santa Bárbara, I had to obtain permission from the national organization in Tegucigalpa to which the groups belonged, then meet with the committee of the local cooperative who worked together with the groups, and be introduced to the group leaders and explain the purpose of my presence.

Collecting precise data by group interviews is an even more precarious process than interviewing individuals. Although, members of groups often corrected each other over information given, it was often difficult to disentangle data about group and individual activities. Some groups did not always want to reveal exactly how they had organized their production, or what problems they faced. Some groups presented a rosy picture of their activities, while others emphasized their poverty.

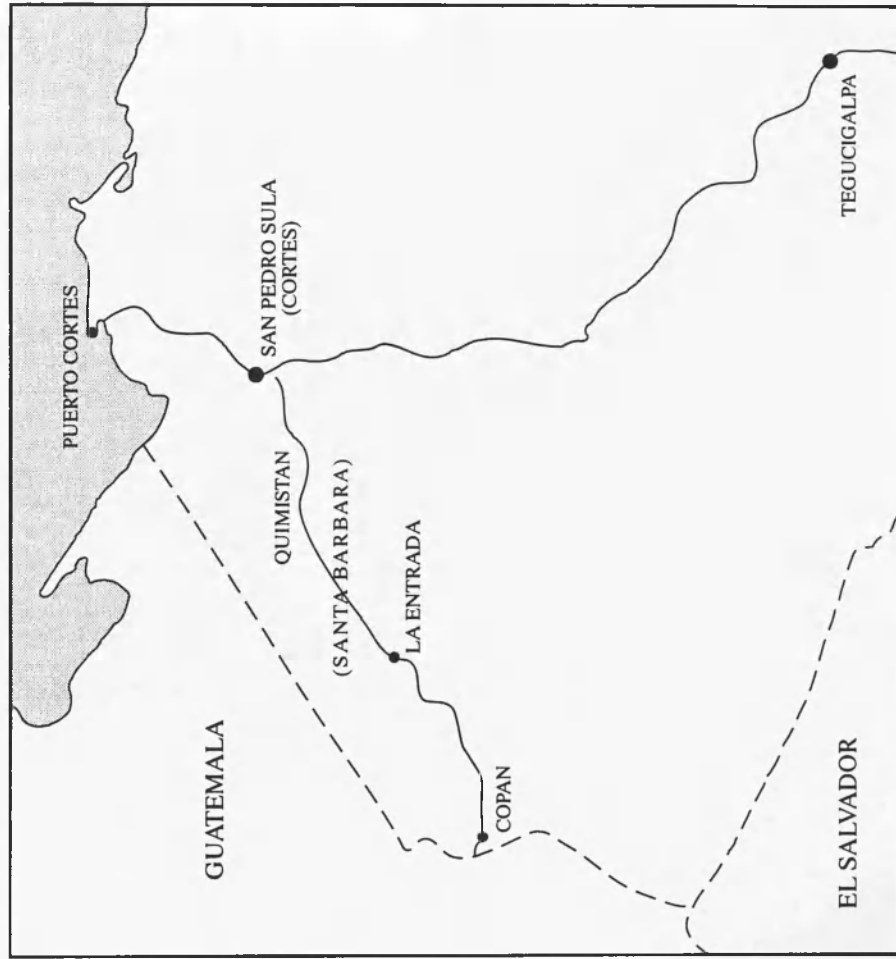
These issues led me to have rather different foci in the two sets of interviews. In Chichicasté and Jutiapa, I followed most of the production questions I had used with individual farmers, although I had to take into account that they usually had collective as well as individual maize plots. In Quita Sueño, Santa Bárbara, I concentrated on the histories and more general and qualitative experiences of the groups rather than trying to obtain a lot of precise production data. I wanted to gain an impression of how maize production had changed for them since they became organized. Nevertheless, in both

cases, I did consider many of the variables analysed among individual farmers: access to and use of land; access to credit; use of labour and technology; output, income and consumption; access to markets and prices; relations with traders; relations with other farmers.

I came to interview the groups in Quita Sueño partly because I had sought the help of a national peasant organization in locating groups who would be prepared to discuss the changes they had experienced over time in production and exchange relations, as well as the history of how they became organized. As I also wanted to spend some time in San Pedro Sula, in the north of Honduras, interviewing traders and industrialists, I also hoped to find peasant groups in reasonable geographical proximity. The national leadership of the peasant organization was sympathetic to my research, and directed me to the groups in Quita Sueño who had established themselves successfully on land they had claimed from a deceased landowner.

Quita Sueño lies in the Valley of Quimistán (see Figure 3.3) in the north-western department of Santa Bárbara. There were some similarities between this fieldwork site and the Valley of Jamastrán in El Paraíso. There was a main route connecting the Quita Sueño area to the city of San Pedro Sula on the east and which went to Copán and the Guatemalan border in the west. Quita Sueño was about the same distance away from San Pedro Sula as Danlí was from Tegucigalpa (although the road was better in Santa Bárbara). However, the nearest market town similar to Danlí was La Entrada, in the opposite direction from San Pedro Sula towards the Guatemalan border. (It also had an IHMA granary.) As in Jamastrán, the Quita Sueño groups were situated in a large valley, 'the main source of development in the north of the department' (SECPLAN et al, 1986, 4; my translation). However, while the groups in Jamastrán were located in villages or related hamlets some distance from the main road

Figure 3.3 Map of North-west Honduras, showing Quimistán, La Entrada and San Pedro Sula



Source: adapted from Rand McNally & Co, 1983

through the valley (which, furthermore, was not the main road to Tegucigalpa), the Quita Sueño groups were actually on the main route to San Pedro Sula. This made for differences in the extent of competition in trade relations between the groups in the two areas. Furthermore, being located on a main road contrasted with many of the Quita Sueño group members' earlier situation of relative isolation in the mountains.

Agriculture in this part of Santa Bárbara, as in El Paraíso, was centred on cattle and basic grains, as well as sugar cane, with coffee in the hilly areas. Much of the farmland in the Quimistán valley was used as pasture. Similar to El Paraíso, Santa Bárbara was also a department where there was net-outmigration. Migrants had arrived from the poorer departments of Copán, Ocotepeque and Lempira during the 1950s and 1960s, but greater numbers had left Santa Bárbara than arrived in the 1960s. They mainly went to Cortés (Howard Ballard, 1987, 608, 617) where there was the possibility of finding wage work in farming as well as in the industrial centre of San Pedro Sula. Finally, in common with El Paraíso, there was an integrated rural development project (a 'DRI')¹¹, although its activities were not a focus for this part of my research.

The peasant groups in Quita Sueño provided me with some useful perspectives on the changing nature of agrarian relations, partly because they were keen to talk about their role as actors in the changes. With these groups, I decided to carry out an inquiry that compared their relations of production and exchange in maize when they were landless farmers who had rented or borrowed small plots of land, with the relations experienced as organized groups having land of their own. The main areas covered in interviews were:

1. Membership of group and origins

¹¹ *Programa de Desarrollo de Santa Bárbara - PRODESBA*

2. Sources of work and income prior to obtaining group land
3. Perspectives on class relations and changes in the countryside (before organization and at time of interview)
4. Land
 - previous means of access and use
 - previous payments for land
 - history of obtaining current land and legal position
 - current land use
5. Maize production (before organization and *primera*, 1987-88)
 - use of biochemical inputs and mechanization
 - access to and use of labour (and payments)
 - access to credit
 - costs of production
 - output and yields
6. Destination of maize output (before organization and 1987-88)
 - sales (quantities, to whom, time and prices)
 - group and household consumption needs

Not all the groups answered questions on these areas consistently. Although the 10 groups had jointly claimed the land they were now on, which had been divided equally between them, and although they formed a section (or *sectorial*) within a peasant organization, they had different attitudes, not only to their internal operation and priorities, but also to meeting and discussing with me. Again, I tried to do as much cross-checking as I could with other informants in the area.

3.2.3 Interviewing traders in Danlí and San Pedro Sula

I interviewed 8 maize traders in Danlí (1987) and 9 in San Pedro Sula (1988). Danlí is the main market centre for El Paraíso and for the producers in the Jamastrán Valley. San Pedro Sula in the department of Cortés is the main industrial centre in Honduras and site for the maize trade in the high output areas of the northern regions. Much of the maize grown in the Valley of Quimistán went to San Pedro Sula. As well as a focal point for the personal consumption of maize, and distribution to other market centres

further south, many of the food processing companies which buy maize are located in or near the city¹².

The populations of the two centres were very different, although they were difficult to estimate at the time of fieldwork. Although Danlí had expanded as an urban centre and market town during the late 1970s and 1980s, it was still a relatively small place. The smallest of the twelve largest cities in the 1974 population census only had 12,456 inhabitants (del Cid, 1988, 280), and Danlí did not feature among these. However, the *municipio* of Danlí, as an administrative unit, encompasses quite a large area. San Pedro Sula, on the other hand, had an estimated 150,881 inhabitants in 1974 (*ibid*), and was said to have about 56,000 families (possibly 336,000 inhabitants) in 1986 (Esquelf, 1986, [iv]). The urban population of the department of Cortés was estimated at 387,432 in the 1988 population census. Most of this population would have been located in San Pedro Sula.

I chose these two centres for the following reasons. In Danlí, I wanted to see how a market centre local to farmers I had interviewed operated. Danlí, which also had an IHMA granary, was also a market in which maize flowed in several directions. Maize was brought into Danlí at harvest time from the surrounding rural areas. This maize was either sold for local consumption or was taken to Tegucigalpa or Choluteca (in the south) for further sale (equally, traders would come from Tegucigalpa and Choluteca to buy maize). Although El Paraíso was regarded as a surplus maize producing area at harvest time, during the scarce period before harvest, maize was in deficit and flowed into the department from Tegucigalpa¹³.

¹² There was no industrial processing of maize in Danlí, although there were plants in Tegucigalpa.

¹³ As well as the urban market, Danlí traders supplied coffee producers in the area with maize, as well as deficit areas outside El Paraíso. In addition, given that Nicaraguan Contra and refugees, as

Of the major maize market centres, I chose San Pedro Sula because I wanted to see a substantial and dynamic market in operation. As well as being the main maize market for the north of Honduras, some parts of which have two harvests a year, it was an industrial centre and site for many maize processing companies. San Pedro Sula also lay on the route to the main port, Puerto Cortés, through which maize imports and exports passed. In addition, the San Pedro Sula markets supplied maize to Tegucigalpa and Choluteca, as well as other deficit areas, in the scarce period. Informants were later to describe the growth of maize trade in the area:

'When we began [19 years ago], there were only 10-15 maize traders (wholesalers). Now there is a lot of competition.'

'Until the 1960s, maize used to come in on the train. When I started [1955], there were only 10 warehouses. San Pedro Sula used to be a village - now it's a city and demand has increased. There are now many traders in the market.'

Interviewing traders is often experienced as problematic. The perceived social position of traders and the speculative nature of trade suggest that traders will be resistant to revealing too much about their operations. This view is implied in theoretical analyses of the role of trade as well as in popular perceptions of traders. For example, from a political economy perspective, trade is seen as an activity which does not create value but helps to realize value - and therefore capital for reinvestment - by circulating commodities. This view sees traders as parasitic on the value generated in production as well as functional to the process of capitalist expansion (Harvey, 1984). That traders make profits from the process of exchange rather than production has also

well as Honduran military, were camped in the region, there were also other sources of demand for maize at this time.

suggested that trade may act as an obstacle or deterrent to production because profit rates may be higher in the former (Kay, 1975).

These theoretical perspectives are often paralleled in everyday views of traders, their functions and the way they make profits. Nevertheless, some researchers have managed detailed and substantial investigations of traders, and special methodologies have been developed for interviewing traders (for example, Crow and Murshid, 1989; Harriss, 1979). Furthermore, traders' responses, gaps and silences in interviews reveal much about the nature of trade and the traders' attitudes.

Although some of the commonly held views and perceived characteristics of traders were found in my fieldwork - and undoubtedly affected the interviews - stereotypes were also challenged. For example, a common image of a 'typical trader' in Honduras was of an ill-dressed man with a wodge of bank notes in his shirt pocket - someone who simultaneously exuded the symbols of poverty and wealth. He might not be literate, have no bank account, keep no records, but despite his poor appearance, he was probably relatively well-off. Above all, traders were seen to be cautious, resisting giving information about their businesses.

By contrast to this image, in one of my locations, the majority of maize traders interviewed were women. In the other location, many had bank accounts and some kept their own financial records. A trader who may have been wearing a vest when agreeing an appointment, dressed up for the interview. While some, especially older traders, were not schooled, others were highly literate and numerate. Traders also responded very differently to the prospect of being interviewed - some of my notes are indicative:

He gave the impression he didn't want to be interviewed but when I explained the purpose of it, he surprisingly began to talk...and gave much more discriminating answers than [another trader].

His wife had told me that he was planning to go out, but [when he appeared] he took me upstairs to the flat and we sat down at the table and talked for 45 minutes without interruption.

We talked standing up in the back of the store where he could observe everything that was happening. [Unlike the previous occasion] he was looking quite smart with a white shirt and red trousers.

This interview had been postponed from the day before because the trader had forgotten [and had gone out]. When I arrived today, he was well-dressed (previously he had been in a vest and unshaven), and it seemed as though he was waiting for me. He apologised for having let me down.

Most traders had their own agendas about what they were prepared to discuss, as well as issues they diligently avoided. Examples from my notes again:

Difficult interview [to extract information] - she had had problems with the tax office...was also aware that traders are often accused of speculation and mentioned the case of a journalist who had come asking lots of questions and then published an article in the press.

He started by saying that he wouldn't be able to tell me much - he had no schooling and I was doing a doctorate.

There was also a problem of accuracy and memory (as with producers):

He said he had been recording price changes in a notebook but had lost it.

Initially he said that prices had changed little in recent years.

In practice, I found interviewing traders in Danlí more difficult than in San Pedro Sula. Several were suspicious. Furthermore, maize trade was a relatively sensitive topic at that time because of the proximity of Danlí to the Nicaraguan border. As a foreigner, I could have publicized activities, or declared traders' interests to officials. In general, in spite of Harriss's well-documented and tested methods for interviewing traders (1979), I do believe that there are many reasons for their resisting giving too much detailed information to researchers.

Nevertheless, my first interviews with traders in Danlí allowed me to test some early ideas about the functioning and organization of trade. I did not select a random sample from all the known traders in the Danlí market-place, but talked to a diverse range of traders (wholesalers and wholesaler/retailers) who were mentioned or pointed out to me by reputation¹⁴. This process allowed me to see some of the links between them and with other traders as well as farmers. These interviews, as well as information about maize trade and traders gleaned from farmers in Jamastrán, made it clear that maize trade was a varied activity with many participants. It also made me realize that it was important to understand the operations of wholesalers who managed large quantities of grain and were therefore likely to set the patterns of trade for urban maize markets.

In San Pedro Sula, I interviewed large wholesalers in the main maize market of Medina-Concepción. I had considerable help from the Chamber of Commerce and the IHMA in getting general information on traders and in identifying those who were considered among the largest. I was also able to go with a young employee of the Chamber of Commerce who carried out regular price surveys to be introduced to particular traders.

The main topics I questioned traders about were as follows:

1. Origins of the trader
2. Trading histories and previous occupations
3. How started (capital sources)
4. Type of trade (wholesale/retail)

¹⁴ Their reputation might have been for size of operation, honesty, accessibility, as well as notoriety etc.

5. Commodities traded
6. Other economic activities
7. How financed trade
8. Whether financed other traders
9. Storage
 - space
 - location
 - cost
10. Access to transport and transport costs
11. Organization
 - employees
 - telephone
 - accounting
 - trading networks and contracts
12. Turnover data
13. Source of maize purchases
14. Destination of maize sales
15. Prices

Other informants were invaluable in both Danlí and San Pedro Sula for cross-checking information and obtaining other market data, including serial price data, and perspectives on the operation of maize markets. Price data are one of the most difficult kinds of data to collect and corroborate. Although there is often much recorded information on prices, I found many discrepancies in the information traders gave me, as well as between traders' data and official sources, and among the official sources themselves.

3.2.4 Note on interviewing industrialists in San Pedro Sula

My purpose in interviewing industrialists was to see how industrial demand might affect maize markets in Honduras and what links industrialists might have with traders and farmers. At the time of my fieldwork, I was interested in what processes affected the flows, distribution and destination of maize, and from limited background data and discussions with IHMA sources, I thought that industry might have some influence over what happened to maize as well as the prices paid to producers. There was very little secondary information on industrial processing of maize; what existed was relatively superficial and partial.

Some indication of the nature of industrial demand for maize is outlined in Table 3.3 which provides a brief profile of the companies I contacted. At that time, they comprised the majority of the firms using maize as raw material in San Pedro Sula and the bulk of the commercial demand in that part of the country¹⁵. I estimate that these companies' maize needs approximated 18-25% of average national maize output in the 1980s; however, part of these needs were met by imports.

While I draw on the material from my interviews in this thesis, links with the food insecurity of rural maize producers were difficult to establish and I have not therefore addressed this part of my fieldwork in much detail. The kind of information provided by industry was useful for cross-checking my data from traders and the IHMA in San Pedro Sula (and vice versa). In addition, my interviews with industrialists provided me with a much broader perspective on the nature of maize markets as a whole and the role of maize in the Honduran economy.

¹⁵ *Firms excluded are the tortillerías, or tortilla makers.*

In locating and arranging to interview them, I had help from the Chamber of Commerce in San Pedro Sula, through which I was able to have an official introduction and set up appointments. This official backing for my research was useful in the world of industry and did not have the potentially negative connotations that it can have among small maize farmers or even traders. I was also able to carry out my interviews in a more structured way than with farmers and most traders. Although interviewees may have had reasons for evading my questions, the interviews were extremely informative. As with traders, the gaps and silences were also instructive.

Table 3.3 Industrial use of maize among selected companies in San Pedro Sula, 1988

	<i>Year activities started</i>	<i>Activities</i>
PROINCESA	1984/5	Maize flour
BOQUITAS FIESTA	1968	Maize-based snacks
ALCON	1961	Animal feeds
ARROCERA CENTROAMERICANA	1961	Carbohydrate extraction for the beer industry; proteins sold to animal feed companies
INDUSTRIAS SULA	1969	Maize-based snacks and drinks
ALCOFA	1982/83	Animal feeds
ALISA	1960	By-product processing: maize starch; oil; glucose
ALIMENTOS DIXIE S.A.	1977	Maize-based snacks
MOLINO HARINERO SULA	1945	Maize flour (but mainly wheat milling)
AVICOLA DE SULA	1973	Poultry feeds

Questions put to the 10 industrialists I interviewed were based on the following areas:

1. Industrial history

- years of operation
- how started
- ownership
- what produce, quantities, changes etc

2. Demand for maize

- quantities
- type of maize needed
- from whom bought and how

- timing of maize purchases
- prices
- cost of maize relative to costs of production
- storage possessed by company

3. Industrial development

- use of industrial capacity
- problems in obtaining raw materials
- demand for industrial products and perspectives

3.3 Summary

In this chapter, I have explained the main aspects of the processes I engaged in to research the production and exchange relations of maize. I have discussed my use of secondary data and informants in key institutions, and have outlined how I did my fieldwork. As I stated initially, research is a dialectical process. I was constantly reflecting on my initial ideas about the role of exchange relations in the production and reproduction of maize as I carried out my investigation. I was acutely aware of the limitations of what I was doing (and how I was doing it) - but that is because research is a two-way process and feeds back into the thoughts and activities of the researcher.

APPENDIX 3.1

Changes in number of maize farms, area harvested and output by department, 1952-74

Departments	Number of farms			Area harvested (Has)			Output (MT)		
	1952	1974	Change 1952-74	1952	1974	Change 1952-74	1952	1974	Change 1952-74
Atlántida	2514	6169	3655	5871	11050	5179	5270	17947	12677
Colón y GD	1879	4844	2965	2836	8751	5915	3049	17772	14723
Comayagua	7120	9324	2204	13431	14522	1091	10079	13192	3113
Copán	11523	14677	3154	16892	20137	3245	15472	34685	19213
Cortés	4465	7108	2643	8564	11393	2829	7439	15267	7828
Choluteca	10391	14076	3685	16052	18579	2527	10814	12378	1564
El Paraíso	8766	12317	3551	16638	22904	6266	11532	21388	9855
F. Morazán	14750	15503	753	28398	23828	-4570	17334	19681	2347
Intibucá	8412	11010	2598	12952	15020	2068	7733	10017	2284
Islas	92	94	2	55	90	35	34	143	109
La Paz	6537	7429	892	11163	10411	-752	6735	6204	-531
Lempira	13672	16608	2936	21273	21400	127	13708	22617	8908
Ocateque	5167	4260	-907	7559	6104	-1456	5100	5702	602
Olancho	8116	12201	4085	14210	25616	11406	14734	48171	33437
Sia Bárbara	10436	12756	2320	19303	19596	293	17608	25986	8378
Valle	6238	7491	1253	9795	10030	235	6501	7098	597
Yoro	6734	10086	3352	14484	18909	4425	14170	31529	17359
Total	126812	165953	39141	219476	258339	38863	167311	309774	142463

Source: calculated from DGEC, 1952 and 1974

CHAPTER 4

CHANGES AFFECTING MAIZE PRODUCTION, 1952-74

Introduction

This chapter sets maize production in Honduras in its historical context and outlines some of the key changes between the two major censuses of 1952 and 1974. As explained in Chapter 2, this period experienced considerable commoditization and growth of capitalist relations in agriculture, as well as being a time of important reforms in the agricultural sector. Data from this period therefore act as a baseline for analysing the problems in reproducing maize production in the 1980s.

The chapter argues that food insecurity in maize has been a problem in Honduras since colonial times. Peasant production of maize has always been prevalent, as has the appropriation of maize from peasants by large landowners and urban traders. However, the nature of peasant production of maize has changed over time, and with the growth of maize markets, maize has become a crop grown on different types of farm. The majority of producers trying to make a living from maize are *minifundistas* (until recent legislation, farmers with under 5 Has). Many of these small farmers have experienced a reduction in their endowments in land. These trends, as well as evidence of commoditization of land and crop production, suggest that small maize farmers in particular are under pressure to intensify production. Analysis of aggregate data from census and survey statistics can help explain only some aspects of changes in maize production, however. It is through the case material in subsequent chapters that strategies and problems in reproducing maize among different types of producer are analysed.

The chapter first provides a historical perspective on current maize production. It then analyses the changes shown by census data between 1952 and 1974. Finally, it looks specifically at the changes in El Paraíso and Santa Bárbara, the two departments in which I did fieldwork.

4.1 Historical perspectives on current-day maize production

Maize has long had a dual role in the Honduran economy. It has been a food produced for the direct consumption of farmers. It has also been a surplus food, extracted by coercion as tribute during colonial times, or sold as a commodity and consumed by urban populations as well as non-maize producers in rural areas. These two functions have been intimately related historically through the control and use of land, and the provision of food requirements for the labour force. Looking at the broad outlines of how these relations have changed over time helps to identify some of the parallels in more recent changes affecting maize production.

In pre-Columbian times, many varieties of maize were planted using the *barbecho* system which involved two or three times as much fallow as cultivated land. Under Spanish colonialism, maize continued to be produced by the indigenous population for direct consumption. It was also appropriated by the colonists for their food needs and those of their workers (slaves and forced labour), who were primarily engaged in mineral extraction. Agriculture only became important to the colonizers when mineral wealth declined in the latter part of the sixteenth century.

The main social processes affecting maize production under Spanish colonialism were the extraction of tribute in goods and labour service through the *encomienda* system,

and the appropriation of land (*mercedes de tierra*)¹. Tribute payments of goods were primarily in the form of maize and were affected by a variety of factors. Originally the colonisers required wheat, not maize, to be paid in tribute to meet their dietary needs. However, the techniques of wheat cultivation were not known by the indigenous population and the Spanish were obliged to teach people how to grow wheat and provide the technology if they wanted to have wheat paid in tribute (Newson, 1986, 107). The Spanish produced some wheat in the central valleys of Honduras in the sixteenth and seventeenth centuries, although it competed with cattle for land (*ibid*, 149). However, most indigenous peoples consumed maize or root crops, and beans, as their main staples. Over time, the colonisers also adopted maize and beans as their staple foods and maize became the most important item of tribute.

The labour of the indigenous population was also extracted in the mines and by other types of labour service. One result was that maize farmers had less time in which to cultivate their fields and had great difficulty in producing sufficient maize for their own needs as well as for tribute payments. This situation was compounded by a decline in the indigenous population because of the harsh conditions of labour service. In addition, community officials, called *jueces de milpa*², were supposed to regulate output, both for local consumption as well as tribute payments, but did not always carry out their responsibilities by making sure enough maize was planted. Producers often had to make up their tribute, or their own maize needs, by buying maize at high prices from local merchants (*ibid*, 197).

¹ The early Spanish colonists were granted rights to levy tribute in goods or labour from the indigenous populations. This was called *encomienda*. They were also granted rights to land (*mercedes de tierra*) in return for military service for the Spanish crown.

² Literally, judges of the maize fields.

The other main process affecting maize production during this time (as well as later) was the appropriation of land. Although the colonizers were apparently concerned about the availability of land for maize production - including for indigenous food needs so that the population would not become a burden on the colonial state (*ibid*, 211) - estates expanded and much land was taken over for cattle grazing, as well as for export crops such as sugar cane. Cattle grazing had the most profound effect on land use and has been closely correlated with social status and the agrarian class structure in Honduras until the present time. In 1590, there were 30,000 head of cattle in the then ruling department of Comayagua (*ibid*, 141), more than a third of the 82,393 counted in the most recent Agricultural Census of 1974. "...It was said that six or seven of the richest cattle owners held such power over the city's [i.e. Comayagua's] affairs that it was impossible to pass ordinances prohibiting cattle from grazing in the valley in order to develop the production of maize and wheat." (*op cit*). By 1804, there were 0.5 million cattle in the 'province' of Honduras (*op cit*), only rather less than a third of the 1.8 million counted 170 years later.

These social processes involving land, labour and tribute were further compounded by problems in technical conditions of maize production such as variations in rainfall and pests. There were considerable fluctuations in maize output and frequent maize shortages which continued into the eighteenth century, by which time maize farmers often preferred to pay tribute in cash rather than kind (*ibid*, 218-219). Maize markets existed alongside tribute extraction, and maize shortages led to price fluctuations from which producers could benefit.

In post-colonial times, the growth of the export crop economy in the nineteenth and early twentieth century had further implications for land appropriation and use. Although coffee and other crops were important exports in post-colonial times, the single most influential process in the growth of exports, as well as in creating a wage

labour force, was the commercialization of banana production in the north of Honduras in the late nineteenth century. While banana expansion started with many small and medium farmers exporting fruit to New Orleans, real growth occurred when transport concessions were granted to three main United States companies at the beginning of the twentieth century. After building port facilities and railway lines, and making early investments in factories and a bank, these companies were conceded vast tracts of previously unused and nationally owned land, and developed banana plantations directed to the US market (Arancibia, 1985, 37-39).

Thus the *latifundio-minifundio* pattern of land holdings (Chapter 2, Section 2.3.1) which started under Spanish colonialism continued in the growth of export crop production and ongoing concentration of land. The *latifundios* had substantial areas of pasture as well as domestic and export oriented crops (until relatively recently, using the labour of *colonos* - or peasants internal to the estates) while the *minifundistas* generally produced basic food staples.

Although maize continues to be produced by small farmers for their own consumption and to supply urban and rural food demands, the precise nature of the relations between small and larger farms and estates (including how land is obtained and used, and how labour is organized and appropriated) has changed over time with the development of capitalist relations of production, and the increasing integration of the Honduran economy in the world market. By the 1974 agricultural census, maize was also produced in substantial quantities on large farms, as will be seen in the next section. Furthermore, my fieldwork demonstrates that, although there were still non-commoditized relations within farms in the 1980s, and personalized as well as commoditized links between different types of farm, maize production by both small and large farmers was highly commoditized. In addition, maize markets expanded as the numbers of wage workers and landless increased in rural areas and as urban

populations grew. Whereas about 13% of the Honduran population lived in the ten largest cities in 1930 (del Cid, 1988, 176-177), about 31% of the population lived in urban areas by the 1950 population census. By the 1980s, maize was as critical for the daily reproduction of urban and rural wage and informal sector workers, especially those with lower incomes, as it was for small maize farmers.

The daily reproduction link between rural and urban maize consumers through product markets is accompanied by a connection in the labour market, as many of the urban poor and rural wage workers were formerly maize producers. The cattle-maize relations in the countryside in more recent times show one of the ways that this link between rural maize producers and urban maize consumers has come about.

As already mentioned, pasture land long took precedence over maize and other basic grains. Between 1952 and 1974, the expansion of land under pasture developed rapidly, as the next section shows. This expansion involved an enclosure process which removed small maize farmers from land they had been farming (but did not necessarily have title to). In addition, wealthy farmers used landless labour to help clear previously unused forest land. Such farmers occupied land (with or without title) and 'rented out' small parcels to landless producers who cleared it and used it for their own maize production for one or two seasons. These tenants then sowed the parcels with pasture before returning them to the landlord. In return for these cleared and empastured plots, tenants often had to pay sacks of maize to the landlord as rent in kind, as well as help him put up fences to enclose the land (interviews in El Paraíso, 1987, and Santa Bárbara, 1988).

Although maize was produced in these small and precariously held lands by what was effectively the landlord's own labour force, and may also have been produced by the landlord himself, the enclosure process prevented land being used for maize production

on a more general scale. Furthermore, the enclosures had adverse effects for many small maize farmers because the unequal distribution of land combined with population growth led to demographic pressures on the land available to them and eventual displacement in many cases.

Thus landlessness and near-landlessness became serious problems in Honduras. It has been estimated that between a third and one half of the economically active population in rural areas was working as day labourers by 1974 (Table 4.1). However, landless labour has only partially been absorbed into permanent wage work by the export crop economy and its associated linkages, and there is widespread use of temporary labour as well as ongoing migration to urban centres and other rural areas. The ability of this population to earn adequate wages and provide for its own food security is precarious, as shown by data in Chapter 2. Although it is not the focus of this thesis, food insecurity among the rural and urban waged population and informal sector is the other side of food insecurity among rural maize farmers.

Table 4.1 Rural landlessness by region in Honduras as indicated by population engaged in day labour (based on 1974 population census data)

<i>Region</i>	<i>Percentage of the economically active population in rural areas working as day labourers</i>
<i>South</i>	33
<i>West-central</i>	30
<i>North</i>	49
<i>Litoral Atlántico</i>	54
<i>North-east</i>	42
<i>East-central</i>	41
<i>West</i>	54

Source: SIECA, 1984, various pages

This brief historical overview indicates some of the areas in which maize production and producers might be at risk: inadequate access to land for many, hierarchical social relations between different types of farmers, and a complex and evolving relationship between the demand for and supply of maize (and the means of its appropriation and

distribution). Food insecurity among maize farmers was already a problem in colonial times and continued to be so in the 1980s.

4.2 Changes affecting maize production from 1952-1974

Census data from 1952 and 1974, and later survey data, can provide a clearer picture of changes in more recent times and how they affected maize farmers. Analysing access to and control over land by maize farmers between 1952 and 1974, and the links between these data and those on maize production, can identify key areas of risk and potential loss of endowments and entitlements in land that some farmers faced in the 1980s. The complex nature of the risks involved is presented in later chapters.

The censuses categorize farms by farm size groups. Up to 5 Has, the data are categorized by each additional hectare (that is, less than 1 Ha, 1-2 Has, 2-3 Has, and so on). Although the agrarian reform law of 1974 grouped all these farmers and called them *minifundistas*, I have grouped them slightly differently into a category of less than 1 hectare, and then 1-5 Has. Singling out farmers having less than 1 hectare gives a picture of the trends operative for the smallest and most vulnerable farms, while the 1-5 Ha category will still indicate trends for *minifundistas* as a whole. Thereafter, the censuses use increasingly broad farm size categories; in hectares: 5-10, 10-20, 20-50, 50-100, 100-200, 200-500, 500-1,000, 1,000-2,500, and greater than 2,500. I conform to these in the presentation of the data.

However, I also refer to small, medium and large farmers in this and later chapters. I use these categories to approximate a classification often used in Honduran texts (for example, del Cid, 1977) which is based on the supposed carrying capacity of the land, again by farm size. Thus, del Cid, who was one of the first social scientists to attempt to characterize the nature of rural class relations using systematic analysis of statistical

data, uses the categories of landless workers, tiny farms, sub-family farms (*minifundios*), family farms, multi-family farms (medium and large). Excluding landless workers, my small, medium and large farmers correspond as follows:

<i>Farm category (Johnson)</i>	<i>Farm category (del Cid)</i>	<i>del Cid (manzanas* and hectares both used)</i>	<i>Johnson (hectares)</i>
<i>Small</i>	Tiny farms (<i>microfincas</i>) Sub-family farms (<i>fincas subfamiliares, minifundios</i>)	<1-9	<1-5
<i>Medium</i>	Family farms (<i>fincas familiares</i>)	10-49	5-50
<i>Large</i>	Multi-family farms (medium and large) (<i>fincas multifamiliares: median as, grandes</i>)	50-499 (medium) 500 + (large)	50+**

* 1 hectare = 1.43 manzanas

** Although this measure can incorporate relatively moderate-sized to huge farms, most maize production is in farms of less than 50 Has.

These measures are crude ones. Ten hectares of coffee-growing land cannot equate to 10 hectares of arid and denuded hillside where only basic food staples may be grown. The size and composition of 'family' (and therefore its needs in land) is variable. Furthermore, using the notion of 'family' is similar to using the notion of household with all the ensuing assumptions about who household heads are, who controls resources, who provides income (and from what), who makes decisions, and so on. However, these categories act an initial means to group farmers before the social relations are better understood and other criteria can be employed.

Given that well over 80% of farms produced maize according to the 1974 census, general changes in distribution and tenure of land are likely to have affected most maize farmers, particularly in farms up to 50 Has where maize farmers predominate. Thus I first analyse general changes in land distribution, tenure and use and then see how they relate to the data on maize production.

4.2.1 General changes in land distribution, tenure and use

The evidence from census data for 1952 and 1974 shows a reduction in farm sizes, particularly critical for small farmers, growing privatization of farms and access to land (suggesting that land was gradually being commoditized), and commoditization and intensification³ of land use. I look at the evidence on these processes in turn.

(i) Declining access to land

The period between 1952 and 1974 saw a 25% increase in the number of farms in Honduras with only a 5% increase in land in farms (Tables 4.2 and 4.3). Average farm sizes fell for all farms but the loss of land is especially important among the *minifundistas* (1-5 Has), for whom declining farm size and fragmentation threatened future viability as supposedly self-sufficient units of subsistence. Furthermore, although the increase in the number of smallest farms (less than 1 Ha) and land area in those farms increased in similar proportion, such farms cannot provide income and maize for the direct consumption of an average family in Honduras, where much of the land is not as fertile as in neighbouring countries (Durham, 1979).

³ Two types of intensification are discussed in this chapter: the intensification of maize and other crop production, involving incorporation of further land in farms into cultivation; and attempts to increase productivity of a given area of land.

Table 4.2 Distribution of farms by farm size in Honduras, 1952-74

Farm size grouping (Has)	1952	Percentage of farms in group	1974	Percentage of farms in group	Percentage change 1952-74
<1	15,394	10	33,771	17	119
1-5	73,617	47	91,010	47	24
5-10	28,092	18	28,264	14	1
10-20	18,620	12	19,220	10	3
20-50	13,752	9	15,170	8	10
50-100	3,865	2	4,433	2	15
100-200	1,514	1	1,971	1	30
200-500	803	<1	1,057	<1	32
500-1,000	284	<1	276	<1	-3
1,000-2,500	126	<1	129	<1	2
2,500+	68	<1	40	<1	41
Total	156,135	100	195,341	100	25

Source: calculated from DGEC, 1952 and 1974

Table 4.3 Distribution of land in farms by farm size in Honduras, 1952-74

Farm size grouping (Has)	1952 (Has)	Percentage of land in group	1974 (Has)	Percentage of land in group	Percentage change 1952-74
<1	9,991	<1	21,542	1	116
1-5	192,241	8	217,351	8	13
5-10	201,554	8	201,274	8	<-1
10-20	259,213	10	268,145	10	3
20-50	417,317	17	461,216	18	11
50-100	265,929	11	301,228	11	13
100-200	207,726	8	266,697	10	28
200-500	244,129	10	313,207	12	28
500-1,000	193,844	8	183,769	7	-5
1,000-2,500	183,977	7	185,980	7	1
2,500+	331,283	13	209,350	8	-37
Total	2,507,404	100	2,629,859	100	5

Source: calculated from DGEC, 1952 and 1974

(ii) Privatization of land

In a situation of highly skewed land distribution, access to untitled, rented or borrowed land may easily be affected by the encroachment of the wealthy and powerful. Renting small plots can be precarious and subject to the whims of the landowner. However, the varied nature of access to land in Honduras, and the existence in particular of national land, can provide opportunities to farm which might not be available if all land were

privately owned. Thus the conditions of access to land are an important issue for maize farmers in being able to sustain their production. Furthermore, different forms of tenure are imbued with different kinds of risk. Although census data do not reveal *how* farmers actually gained access to their land at the time of survey, they show the general *type* and distribution of tenure relations and how they changed during that period.

There were three main types of land tenure in the 1952-74 census period:

(a) *Tierra propia*: privately owned land to which the owner has a title and is regarded as having full rights over the land, or *dominio pleno*; this land can be bought and sold as well as inherited.

(b) *Tierra nacional* or *ejidal*: this is national or public land and may be owned by the state (*tierra nacional*) or by the local municipality (*tierra ejidal*)⁴ who give concessions to use rights, or *dominio útil*. National or *ejidal* land cannot legally be sold, although it is often passed on to children, and there is often confusion as to who has legal rights over such land, as indicated by the USAID analysis cited in Chapter 2. Much national land has been occupied without permission, especially by large landowners (del Cid, 1977, 14), as well as by small or previously landless producers.

(c) *Tierra arrendada*: rented land, usually for a determined period, such as an agricultural season or a year. Payments can be made in money or kind and are fixed (*ibid*, 13). After the 1975 agrarian reform law, renting land became a grey area in spite of the fact that it had become more common (Table 4.4), and in practice it has continued.

⁴ Below, I also used the category of national land to encompass both types of public land.

As well as these three main categories of land tenure, there were also other historical forms. One was *aparcería*, or sharecropping. The other was *colonato*, where a farmworker had a plot of land on the employer's farm for which he or she might pay nothing (except the obligation to work for the landowner) or might make a payment in cash or in kind (*ibid*, 13, and informants in Santa Bárbara, 1988). The 1975 reform sought to abolish these types of land tenure. Finally, there were farmers who squatted on private or public land without right of access having been given. In the censuses, all these three categories were grouped as 'other forms'.

In the censuses, data were categorized by single tenure (farms with access to only one type of land) and mixed tenure (farms combining different types of land tenure). Analysing these data shows that between 1952 and 1974 there was a proportional increase in privately-owned farms and rented farms, and a substantial decline in the proportion of farms having 'other forms' of tenure (see Table 4.4). Even by 1952 the forms seen as pre-capitalist by the land reformers of the inter-census period, such as *aparcería* and *colonato*, comprised only 8% of farms with single tenancies. Most farms with these 'other forms' of land (over 17,000 or 11% of all farms) were based on non-legal occupation or squatting (del Cid, 1977, 148).

There were also signs that smaller farms in particular had reduced access to national or *ejidal* land, traditionally an important source of means of production for these farmers. Firstly, although the proportion of national land held in farms does not seem to have changed much, there was a decline in the proportion of smaller farms having access to national land and a percentage increase of this type of land in larger farms. These data may also reflect the growing colonization of new land among large farmers during this period. Secondly, although the proportion of farms with mixed tenancies is relatively small overall, the decline in these forms has particularly affected smaller farms, suggesting that the range of access to different types of land was diminishing.

Table 4.4 Percentage distribution of farms by type of tenure and farm size, 1952 and 1974

Farm size group	Single tenure												Mixed tenure		Total
	Privately owned land				National/leijdal land				Rented land				Other forms		
	1952	1974	1952	1974	1952	1974	1952	1974	1952	1974	1952	1974	1952	1974	
<1	15	24	22	18	23	54	24	2	2	16	2				
1-5	16	31	31	25	11	25	11	2	2	31	17				
5-10	22	41	42	37	3	6	31	2	1	31	15				
10-20	27	41	43	41	2	4	4	1	1	27	13				
20-30	34	42	37	39	2	4	<1	1	1	27	14				
50-100	43	44	29	33	2	3	<1	1	1	26	19				
100-200	52	49	19	24	2	4	<1	1	1	27	22				
200-500	62	57	12	18	2	2	-	<1		24	23				
500-1,000	67	63	7	12	5	4	-	-		21	21				
1,000-2,500	74	72	5	6	2	4	-	2	2	19	18				
2,500	74	75	6	5	4	8	-	-		16	12				
Total	21	34	34	30	9	23	19	1	1	17	13				

Source: calculated from DGEC, 1952 and 1974

Thus the nature of land tenure was changing and particularly affected the type of access to land by smaller farms (which were those predominantly producing maize). Although access to national and privately-owned land predominated among farms with more than 10 Has, for the smallest farms, renting land increased, and other forms of access to non-owned land declined. These trends suggest a particular loss of entitlements to land by very small farmers, within a context of overall reductions in farm size.

The trends are demonstrated even more clearly by looking only at farms with a single type of tenure (the majority of farms in both censuses - 83% in 1952 and 87% in 1974). The number of privately-owned farms nearly doubled and those with rented land more than doubled, whereas farms occupying national land increased by only 9% and there was an 92% decline in those based on 'other forms' of tenure (Table 4.5). Small farms below 5 Has showed considerable growth in both privately-owned and rented tenure. The substantial decline in 'other forms' of tenure among these small farms⁵, and the increase in rented farms indicate that relations between landowners and landless were changing.

Although the number of farms with private and rented land increased dramatically, the actual land area in these categories increased relatively much less. This is principally because the total land area in farms increased far less than the number of farms between 1952 and 1974. The data for farms with a single type of tenure show that the privately-owned land area increased by only 10% (Table 4.6) compared with 97% for the number of farms (Table 4.5). Rented land increased by 81% (Table 4.6) compared with an increase of 227% in the number of farms with this land (Table 4.5). However,

⁵ The increase in 'other forms' of tenure among some very large farms may represent concessional land holdings such as those held by banana companies as well as the formation of cooperative or collective landholdings under the earlier land reform laws.

Table 4.5 Distribution of farms with a single type of tenure and farm size, 1952 and 1974

Farm size group	Privately owned farms				Number of farms				Farms with other forms of land			
	1952	1974	Percent change 1952-74		Farms with national/feudal land		Rented farms		1952		1974	
					1952	1974	Percent change 1952-74		1952	1974	Percent change 1952-74	Percent change 1952-74
<1	2,342	8,001	242		3,415	6,013	76		3,572	18,138	408	541
1-5	11,880	27,916	135		22,883	25,441	11		8,219	22,747	177	1,396
5-10	6,191	11,547	87		11,906	10,483	-12		885	1,608	82	258
10-20	4,952	7,815	58		8,069	7,800	-3		384	768	100	148
20-50	4,650	6,414	38		5,152	5,881	14		270	545	102	112
50-100	1,662	1,965	18		1,107	1,445	31		73	132	81	40
100-200	781	957	23		290	473	63		32	75	134	16
200-500	497	606	22		96	193	101		20	21	5	3
500-1 000	191	174	-9		19	34	79		13	12	-7	0
1 000-2 500	93	93	0		6	8	33		2	5	150	2
2 500+	50	30	-40		4	2	-50		3	3	0	0
Total	33,289	65,518	97		52,947	57,773	9		13,473	44,054	227	2,516
												29,758
												-92

Source: calculated from DGEC, 1952 and 1974

Table 4.6 Changes in land area in single tenure farms by type of land tenure, 1952-74

		Land area (Has)	Percentage of total land area in single tenure farms	Change in land area, 1952-74 (Has)	Percentage change in land area, 1952-74
Private land	1952	1,159,668	58	118,477	10
	1974	1,278,145	60		
National land	1952	616,871	31	75,568	12
	1974	692,439	33		
Rented land	1952	77,544	4	62,843	81
	1974	140,387	7		
Other forms	1952	158,412	8	-139,159	-88
	1974	19,253	1		
Total land in single tenure farms	1952	1,878,934	101*	251,290	13
	1974	2,130,224	101*		

* Greater than 100 because of rounding

Source: calculated from data in DGEC, 1952 and 1974

although rented land as a proportion of land in farms overall was a very small element, it was significant as a key source of land for small farms at the time of the 1974 census. Furthermore, the decline in farms and land area in 'other forms' between 1952 and 1974 suggest that landowners might have taken back land from sharecroppers or *colonos* and then rented it out, placing the tenancy on a different footing.⁶

Thus while land markets may not have been highly developed at the time of the 1974 census, privatized land relations (including renting land) were on the increase. Furthermore, instead of having *colonos* or sharecroppers, landowners could choose to have the more flexible system of renting out land to their own workers to whom they would pay a wage as temporary or permanent labour. As the data on day labouring in Table 4.1 above show, there was no shortage of wage workers by 1974. However, my

⁶ Others in non-legal occupation of land might have had their tenure formalized in some form.

fieldwork data will later demonstrate that tenancy relations between semi-proletarian maize farmers and large landowners in the 1980s also exhibited personalized characteristics.

Even though the census data show that private land was becoming more prevalent than previously, access to national or *ejidal* land, particularly for smaller farmers, continued to be key to survival. For *minifundistas* with less than 5 Has, who were mainly maize farmers, national and rented lands together provided the main source of land. Sixty per cent of land in farms with a single type of land tenure had national and rented land, while only 38% had private land (DGEC, 1952 and 1974, and Johnson, 1988, 113). Thus, for these farmers, sustaining their means of access to national and rented land would be key to sustaining production. However it is likely that the general growth in private tenure (later reinforced by legislation) in a situation of unequal land distribution would eventually lead to greater land concentration and put these farmers even further at risk.

(iii) Commoditization of land use

Evidence that commoditized relations were on the increase during the 1952-74 period is provided by census data on land use. Product markets tend to develop more rapidly than land markets (Bharadwaj, 1985). In the 1952-74 period, commoditization affected land use in particular ways.

The biggest change in land use was the growth of pasture land for extensive cattle ranging (see Table 4.7), which was a response to new markets for Honduran beef exports in the United States, which continued into the 1980s (Howard Ballard, 1988). This change was a source of increased social differentiation in the countryside. First, the expansion of extensive cattle-grazing led to expulsions and migrations, as argued above, and demonstrated eloquently by Kramer (1986) and Howard Ballard (*op cit*).

Second, the extensive nature of land use involved in cattle rearing involves a particular attitude to land and land productivity which is different from growing export or food crops: large areas were deforested for pasture, as shown by the decline in woodlands in Table 4.7, while improving the quality of pasture was relatively rare. Third, cattle require relatively little labour compared with crop production, and the more land there is under cattle as opposed to crops, the less ability the countryside has to absorb the landless labour which pasture expansion has helped to create.

Table 4.7 Changes in land use in farms, Honduras 1952-74

<i>Land use</i>	<i>1952 (Has)</i>	<i>Percent of total land in farms</i>	<i>1974 (Has)</i>	<i>Percent of total land in farms</i>	<i>Absolute change 1952-74 (Has)</i>	<i>Percent change 1952-74</i>
<i>Annual crops</i>	296,411	12	366,344	14	69,933	24
<i>Permanent crops</i>	174,653	7	212,011	8	37,358	21
<i>Fallow</i>	424,767	17	140,291	5	-284,476	-77
<i>Pasture</i>	822,562	33	1,347,777	51	525,215	64
<i>Woodland</i>	528,551	21	193,071	7	-335,480	-63
<i>Wasteland</i>	198,814	8	339,975	13	141,161	71
<i>Other</i>	61,646	2	30,390	1	-31,256	-51
<i>Total</i>	2,507,404	100	2,629,859	100	122,455	5

Source: calculated from DGEC, 1952 and 1974

However there was also an increase in the use of arable land in farms. The areas under annual and permanent crops⁷ both increased by over 20% (although there was only a 5% increase of land in farms overall), indicating an expansion of basic grain and food crops and growing export crop production. Thus there was a general intensification of land use in farms, in large part directed to the market. Substantial areas of land were taken out of fallow and woodlands disappeared. However, wasteland in farms also

⁷ Annual crops include food staples such as maize, beans, rice and sorghum, root crops, vegetables, sugar cane. Permanent crops include coffee, bananas and other tree crops such as African palm, cotton etc.

increased. This suggests that some of the newly colonized land may have been of poor quality. More probably it indicates that there was arable land loss through over-exploitation arising from declining farm sizes and lack of access to other land, especially among smaller farmers.

These trends varied with farm size. Some were inversely associated with farm size: for example, the increase in pasture land was greatest among farms larger than 20 Has farms which comprised 85% of pasture in farms (while 69% of pasture was in farms larger than 50 Has). However, although 80% of annual crops was in farms of less than 50 Has, the largest proportional increases in area planted with annual crops was in farms over 100 Has. For permanent crops, 62% of the cropping area was in farms of less than 50 Has in 1974, but the biggest source of relative increase in area planted was in medium sized farms between 10 and 200 Has and in very large farms of over 1,000 Has (calculated from Johnson, 1988, Table 53).

The increases in pasture land have already been explained. The changes in annual crops and their relationship to farm size may well have been the result of marketing and price incentives adopted by the state during this period: thus, while only 10% of maize output came from farms over 50 has in 1952, 17% was produced by them in 1974 (*ibid*, Table 57). However, there was also a 164% increase in area cultivated with annual crops in farms of less than 1 Ha (*ibid*, Table 53), also indicating the growth of very small farms, mainly on rented land as shown above, which were producing food staples. The trends in permanent crops are indicative of increasing production for export during this period, primarily affecting the larger farms.

4.2.2 Changes affecting maize production

Given that over 80% of farmers grew maize in 1974, the implications of the broad trends described above are that (i) maize farm sizes declined; (ii) national land was an

important source of land for maize farmers under 50 Has, as was rented land for *minifundistas* and very small farmers; however, a growing number of farmers would also have their own land; and (iii) maize production was expanding on larger farms as well as being intensified on smaller ones. Only some of these contentions can be substantiated (or contradicted) by census data, which I analyse below. Other issues are illuminated by my fieldwork evidence, which explains processes that cannot be revealed in census data such as the nature of the relations between socially differentiated farmers, how access to land was actually negotiated, and how it was retained or lost.

(i) Distribution of maize farms and access to land

There was a 31% increase in the number of maize farms between 1952 and 1974, from 125,812 to 165,953 (DGEC, 1952 and 1974). This percentage is greater than the increase in the number of farms in general (25%). Thus the proportion of farms growing maize was 85% of the total in 1974 compared with 80% in 1952 (Table 4.8). As stated in the Introduction, maize is a key crop for small farmers, and, as might be expected, the proportion of farms growing maize varies inversely with size in both 1952 and 1974 (Table 4.8).

Table 4.8 Number of farms growing maize by farm size, Honduras 1952 and 1974

<i>Farm size grouping</i>	<i>1952</i>	<i>1974</i>	<i>Change 1952-74</i>	<i>Percentage of all farms in stratum, 1952</i>	<i>Percentage of all farms in stratum, 1974</i>
<1	9,212	27,489	18,277	60	81
1-5	61,000	78,942	17,342	84	87
5-10	23,957	24,545	588	85	87
10-20	15,893	16,603	710	85	86
20-50	11,370	12,596	1,226	83	83
50-100	3,004	3,413	409	78	77
100-200	1,005	1,378	373	70	70
200-500	486	715	229	61	68
500-1,000	145	193	48	51	70
1,000-2,500	66	64	-2	52	50
2,500+	24	15	-9	35	38
<i>Total</i>	<i>126,812</i>	<i>165,953</i>	<i>39,141</i>	<i>80</i>	<i>85</i>

Source: calculated from DGEC, 1952 and 1974

Establishing whether maize farms declined in size can only be inferred from the weight of maize farms among farms in general, as the area of total land in farms growing maize is not given by the census. There are also no data on the forms of land tenure in maize farms, but again these can be inferred with a reasonable degree of security from general census data on land tenure patterns. As stated above, rented and national land would appear to have been important sources of land for many maize farmers, although privately-owned farms would also have been on the increase. How some maize farmers gained access to land in practice is explained further in Chapter 5.

(ii) Land use in maize farms

It is possible to say more from the censuses about land use in maize farms than about access to land. The area under maize increased by 18% between 1952 and 1974 from 219,276 to 258,559 Has (DGEC, 1952 and 1974), however the overall area of land in all farms grew by only 5%. Thus the proportion of land in farms being used for maize was increasing (see Table 4.9), probably because of increased access to markets, as well as the growth of small farmers cultivating maize for direct consumption.

The trend was accompanied by a rise in average yields from .76 MT/Ha to 1.20 MT/Ha and an 85% increase in output (Johnson, 1988, 118, 120). Furthermore the distribution of maize output between farm size categories changed. Although there was an increase in output from all farm categories, 17% came from farms of over 50 Has in 1974 compared with 10% in 1952, a doubling or tripling of output from these farms in absolute terms (*ibid*, 117-118). Farms having less than 1 Ha of land also more than doubled their output, even though they only counted for 6% of total output in 1974. Output increased by 264% among these farms while the number of maize farms of this size increased by 198% and the area harvested with maize, 165% (*op cit*).

Table 4.9 Maize farms: estimated percentage of land used for growing maize within farms by farm size, Honduras 1952 and 1974

<i>Farm size grouping (Has)</i>	<i>Estimated percentage of farm area used for maize, 1952</i>	<i>Estimated percentage of farm area used for maize, 1974</i>
<1	100	100
1-5	49	58
5-10	26	26
10-20	16	17
20-50	10	10
50-100	6	7
100-200	3	6
100-500	2	5
500-1,000	1	5
1,000-2,500	1	3
2,500+	<1	1

Note: there are no data on the total land area in farms growing maize. These data were calculated by dividing the area planted with maize by the average amount of land per farm for all farms in the stratum. This gives a reasonable estimate given the weight of farms growing maize in the total number of farms.

Source: calculated from DGEC, 1952 and 1974

Thus while there was a general expansion in the area used for growing maize, and considerable expansion in output, the growth in yields also suggests that there was an intensified use of inputs and labour occurring within farms, giving rise to increasing productivity, however gradual. This intensification within farms is also evinced by the general increase in the proportion of land used for maize. Furthermore, the smaller the farm, the greater was the proportion of land used for cultivation. As well as indicating the importance of maize for small farmers (especially those with only 1 Ha of land), these data show that less land was being left to fallow in these farms, leading to possible long-term degradation and entitlement loss⁸.

(iii) Reproducing maize production

Although maize output from large farms provides substantial marketed surpluses and is important for national maize supplies, the conditions of reproduction and survival of

⁸ Trends of this nature have been established for the south of Honduras by Boyer (1982).

small maize farms are critical for rural food security. These conditions are analysed in Chapters 5-7 on the basis of my fieldwork. However, clues from survey data collected since the 1974 census are shown in Table 4.10. This table shows the extent of off-farm income by farm size, calculated in a 1982 survey, and the use of wage labour in maize production based on data from a survey in 1984. The data show an opposite but complementary relationship between farm size and wage labour relations: the smaller the farm size, the greater the off-farm income as a percentage of total income; the greater the farm size, the greater the use of wage labour in maize production. To the extent that maize producers on small farms cannot reproduce their maize (or other crops) from their own production, one would expect them to be engaged in wage or other income-generating work on and off the farm. What is unclear is the extent to which the smallest farmers (who would generally have been maize producers) provided permanent or temporary wage labour for large maize farmers, perhaps in return for access to small plots of rented land. Later chapters analyse the evidence for such a relationship, particularly as they were found in El Paraíso.

Table 4.10 Extent of off-farm income by farm size (all farms, 1982) and use of wage labour in maize production by farm size (1984), Honduras

<i>Farm size grouping (Has)*</i>	<i>Off-farm income as percentage of total farm income, 1982</i>	<i>Use of wage labour as percentage of total required labour days, 1984</i>
<2	58	<1
2-3.5	50	<1
3.5-7	40	2
7-14	30	14
14-35	21	27
35-70	14	43
70-140	15	70
140-350	4	93
350-700	10	94
700+	3	96

** These farm size groupings are different from previous tables because the original data were measured in manzanas*

Source: calculated from Secretaría de Recursos Naturales, 1982, 47-48 and DGEC, 1984, unpublished data

4.3 Changes affecting maize production in El Paraíso and Santa Bárbara, 1952-74

Changes in access to land and growing commoditization have affected maize farmers in El Paraíso and Santa Bárbara similarly to the general trends identified for Honduras. However, there were some specific characteristics in each of these departments which are pertinent to the analysis presented in later chapters using my fieldwork data. As with the general trends, it is also possible to draw some initial conclusions about the nature of social relations in the countryside.

I look at the same variables as in Section 4.2: changes in land distribution and farm size; changes in forms of land tenure; changes in land use; changes in maize production and their relationship to farmers' entitlements in land. I present data on these variables and draw out the differences from national trends, and their implications.

4.3.1 Evidence of pressures on access to land

Increasing pressure on land and declining farm sizes are evident from the data on El Paraíso and Santa Bárbara, although in both instances the pressure was apparently less acute than the national figures would suggest. For El Paraíso, farms and land in farms expanded more than the average rate of expansion for Honduras - at 35% and 23%, compared to 25% and 5%, respectively. Thus the difference between the increase in farms and increase in land was not as great as for the rest of Honduras.

Nevertheless, El Paraíso was a department of net out-migration as well as land colonization during the census period (Chapter 3), thus some increase in land concentration may have occurred. In fact the Gini coefficients for the two census periods were slightly higher than those for Honduras (.77 and .78 compared with .75 and .76 [Howard Ballard, 1988, 470]) but did not increase proportionately more than

for Honduras as a whole. However, if the changing distribution of farms and farmland are presented graphically (Figures 4.1a and b), it is evident that the real growth in farms was among those under 5 Has, and the growth in land in farms was primarily in farms of 50 to 2,500 Has. The largest farms showed an apparently dramatic loss of land which may be explained by fragmentation through inheritance (or distribution to family members to avoid expropriation in the land reform), resulting in fewer large farms.

For Santa Bárbara, slightly different trends from those in El Paraíso are discernible. Farms increased by 17% (lower than the national average) while land in farms increased by 15% - higher than the national average, and nearly matching the increase in farms. One might therefore expect the Gini coefficients to have remained relatively static but in fact they increased more than the national average from .75 to .79. Although not a large increase, where did this relatively greater degree of concentration come from?

Again, if the distribution is presented graphically (Figures 4.2a and b), we can see that (i) the biggest proportional increase in farms was in the smallest farms of less than 1 Ha (with an equivalent increase in land), (ii) land in farms of 1-20 Has remained static or even declined slightly, and (iii) land increased among the larger farms, especially those between 100-500 Has and in the very few farms (only 4 by 1974) having more than 2,500 Has. Thus although farms and land increased roughly equally overall, the skewed distribution of land became even more skewed.

Figure 4.1a El Paraíso: distribution of farms by farm size group, 1952 and 1974

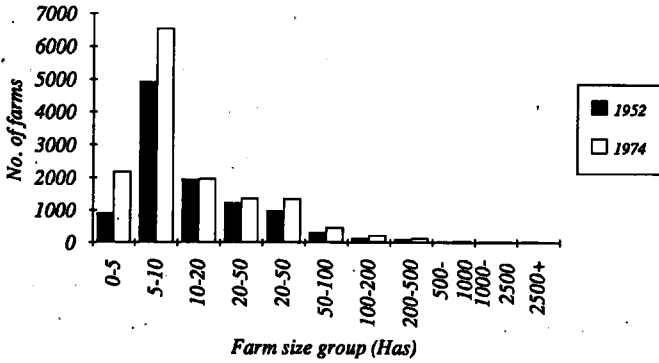


Figure 4.1b El Paraíso: distribution of farmland by farm size group, 1952 and 1974

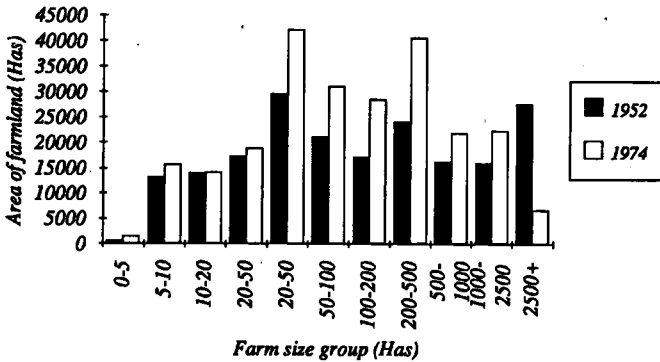


Figure 4.2a Santa Bárbara: distribution of farms by farm size group, 1952 and 1974

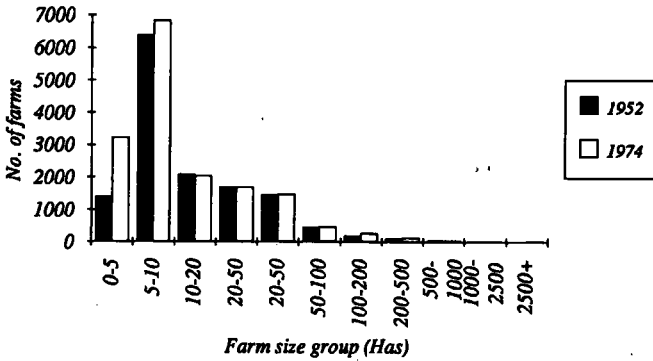
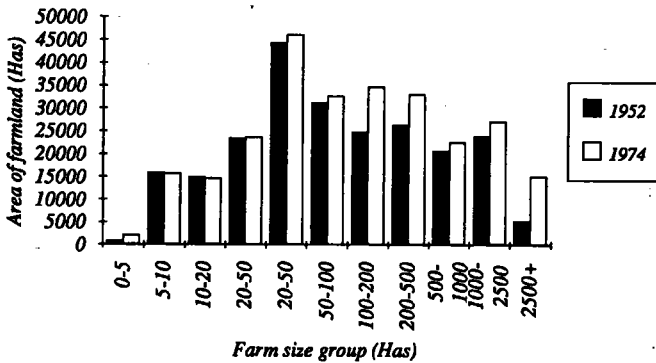


Figure 4.2b Santa Bárbara: distribution of farmland by farm size group, 1952 and 1974



Source for Figures 4.1a-4.2b: calculated from DGEC, 1962 and 1974

These trends of increasing pressure on land for small farmers in both departments were reinforced by changing land tenure relations, as elsewhere in Honduras. Both departments experienced a three or fourfold increase in the number of rented farms, and in El Paraíso the number of privately-owned farms more than doubled (Figures

4.3a and b, and 4.4a and b). However, in El Paraíso, there were still means of gaining access to land that was not privately owned: farms with national land increased by more than 30% and national land in farms more than doubled. Furthermore, national land became an increasingly significant source of land for small and medium farms of over 1 Ha during this period (Appendix 4.1), although, as in Santa Bárbara, renting land became much more common than owning it or having access to national land for farms of less than 1 Ha. In fact, for the equivalent farmers in Santa Bárbara, the main source of land by 1974 was by renting (Appendix 4.2). These changing forms of tenure for small farmers is evidence of their increasing incorporation into commoditized relations given the decline in obtaining land through 'other forms', in other words *aparcería*, *colonatos* or occupying land without any formal arrangements.

Furthermore, these data suggest a change in the social relations between landowners and tenants, a relationship which I analyse for the 1980s in later chapters. The change was substantiated for the census period by informants in Santa Bárbara. Their account explained that the land enclosures for cattle pasture from the 1950s onwards had required large numbers of campesinos to help clear land and fence it off for cattle, as described in Section 4.1 above. This process of renting out small parcels of land to *campesinos* for limited periods raised dramatically the number of tenant farmers (as well as the number of landless when they were thereafter displaced). After land was fenced off and put to pasture, informants stated that landowners in the valleys only rented out land to their own workers, while renting on a more general scale continued in the mountainous areas.

Figure 4.3a El Paraiso: number of single tenure farms by type of tenure, 1952 and 1974

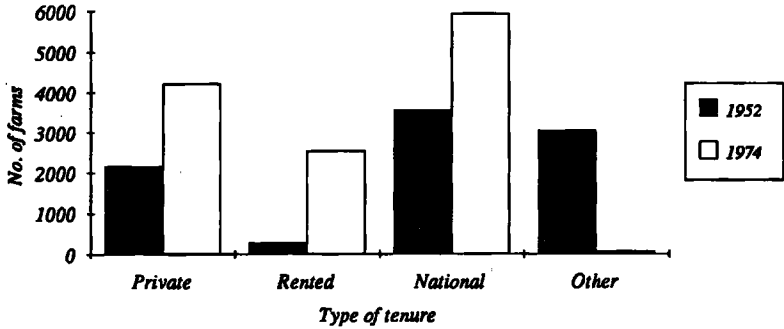


Figure 4.3b El Paraiso: land in single tenure farms by type of tenure, 1952 and 1974

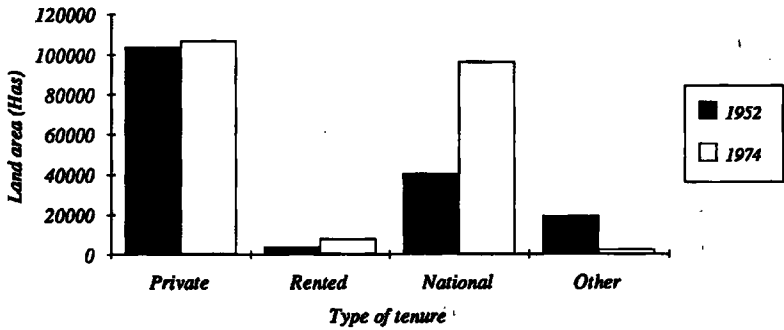


Figure 4.4a Santa Bárbara: number of single tenure farms by type of tenure, 1952 and 1974

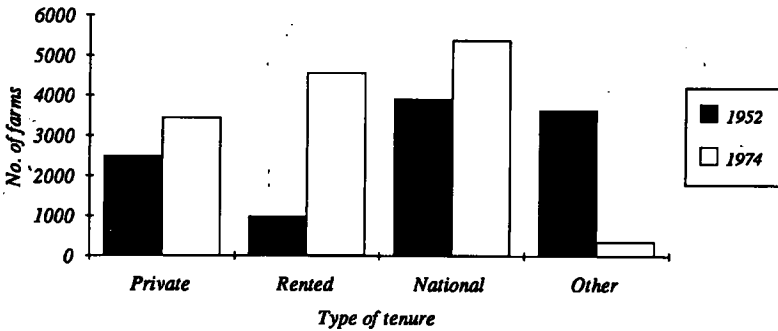
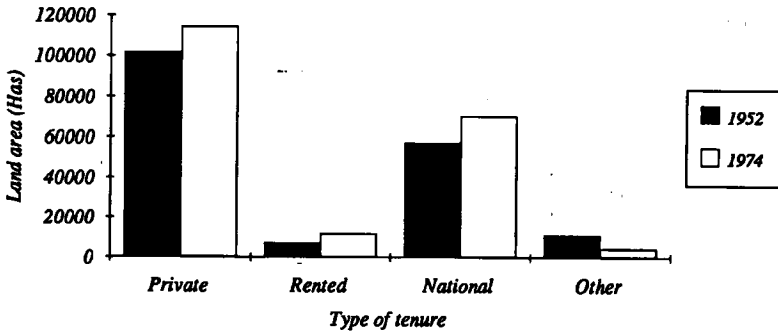


Figure 4.4b Santa Bárbara: land in single tenure farms by type of tenure, 1952 and 1974



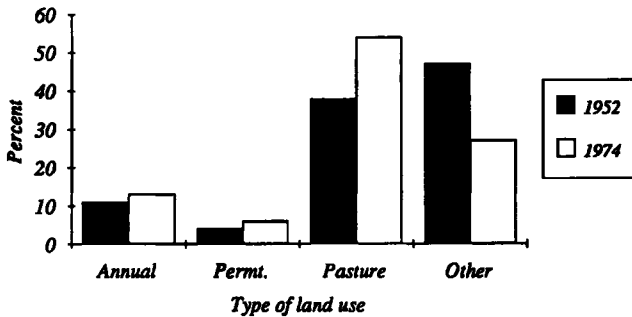
Source for Figures 4.3a-4.4b: calculated from DGEC, 1952 and 1974

4.3.2 Evidence of commoditization in land use

Similar trends to the national picture are evident with respect to commoditization. Both El Paraíso and Santa Bárbara are departments with considerable production of export crops and livestock products and growth in land use for these commodities took place between 1952 and 1974. Santa Bárbara, which had a relatively greater proportion

of land under permanent crops than El Paraíso, actually experienced a relative decline in the proportion of area dedicated to annual crops, which comprise predominantly food staples⁹. However, pasture land experienced the biggest growth in land area, especially in Santa Bárbara (Figures 4.5a and b). Furthermore, although land area in farms increased relatively more for both El Paraíso and Santa Bárbara than nationally¹⁰, much of the land for the large increases in pasture came from cutting forest and taking over fallow and wasteland (the 'Other' category in the figures).

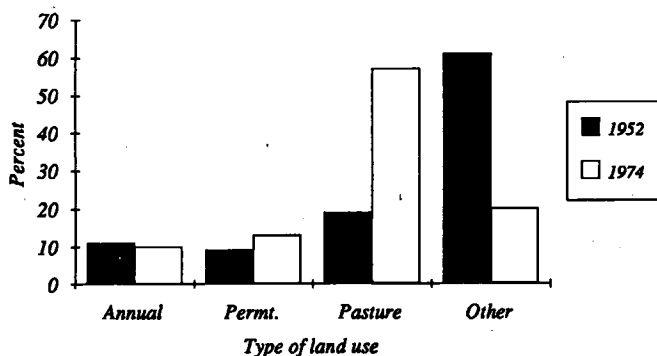
Figure 4.5a El Paraíso: land use in farms, 1952 and 1974



⁹ Further analysis of census data reveals that while maize farms increased from 76 to 79% of all farms in Santa Bárbara, maize area harvested declined from 8 to 7% of land in farms.

¹⁰ Santa Bárbara had the largest total land area in farms of all departments in 1974 and El Paraíso came third.

Figure 4.5b Santa Bárbara: land use in farms, 1952 and 1974



Source for Figures 4.5a and b: calculated from DGEC, 1952 and 1974

Thus, as well as increasing commoditization of land use in both departments, intensification was also taking place. By 1974, a very small proportion of land in farms remained fallow (see Appendix 4.3) suggesting that cropland was particularly subject to intensification. This trend seemed to apply to export crops rather than food staples. In El Paraíso, there was an increase of over 100% of land in coffee and tobacco, and of over 4,000% in cotton (Howard Ballard, 1988, 600-601). Moreover, in the Jamastrán Valley in El Paraíso, it was estimated in 1980 that about 40% of land in farms was used for crop production, which included maize, beans, rice and vegetables, as well as tobacco and cotton (MRN/DARCO, 1984, 29). In fact, crop production was almost as important in area as pasture in the valley. Santa Bárbara also increased its area in coffee, and had the second largest area in sugar cane of all departments in 1974 (DGEC, 1979, 47). However, although the land area in maize production in both departments increased absolutely in this period, the average proportion of farm land used for maize production actually declined in many farms, as is seen below. Although not fully conclusive from these data alone, the commoditization and intensification of

land use for export crops and for pasture were likely to have put further pressures on the production of maize and other food staples.

4.3.3 Evidence of intensification in maize production

The evidence for intensification in maize production presents a more complex picture than nationally in both departments. Although there was an increase in the number of farms growing maize (particularly, but not only, among farms of less than 5 Has) and an increase in overall area (see Figures 4.6a and b, and 4.7a and b), there was a decline in average farm area harvested with maize in farms of less than 100 Has in El Paraíso and farms of 1 to 50 Has in Santa Bárbara. Furthermore, the decline cannot be explained only by the general decline in farm sizes (which was not very substantial in Santa Bárbara, except in farms under 5 Has) because reductions in average maize area harvested were considerably greater than reductions in average farm size (see Appendix 4.4). However, as nationally, the increases in output and yields suggests that the use of inputs and labour was being intensified to increase productivity (Figures 4.6c, 4.7c, and Table 4.11). The general changes in output and yields would also have been affected by the growth in land used for maize in some of the very large farms, particularly in El Paraíso - also in line with national trends.

Figure 4.6a El Paraiso: number of maize farms by farm size group, primera 1952 and 1974

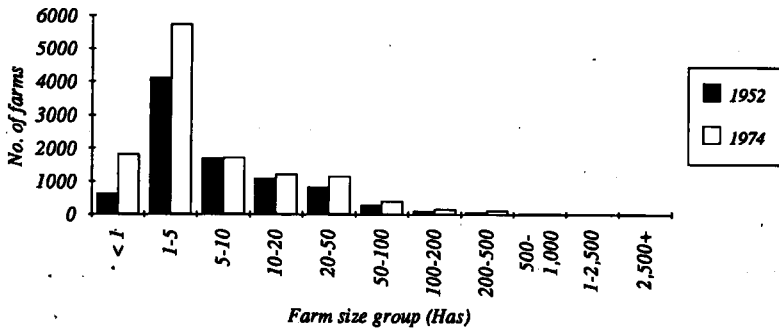


Figure 4.6b El Paraiso: maize area harvested by farm size group, primera 1952 and 1974

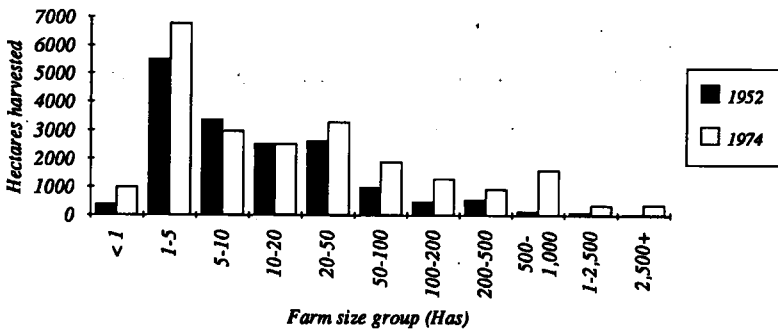


Figure 4.6c El Paraiso: maize output by farm size group, primera 1952 and 1974

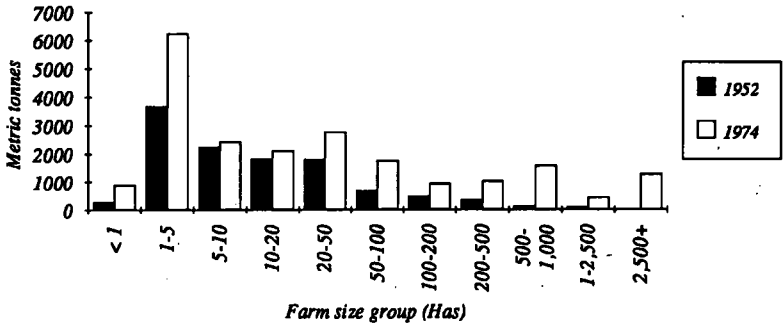


Figure 4.7a Santa Bárbara: number of maize farms by farm size group, primera 1952 and 1974

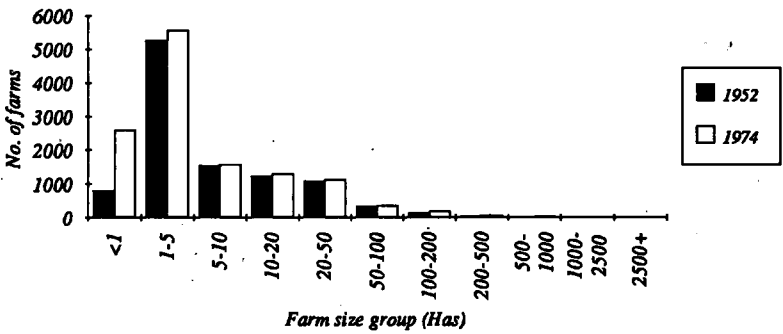


Figure 4.7b Santa Bárbara: maize area harvested by farm size group, primera 1952 and 1974

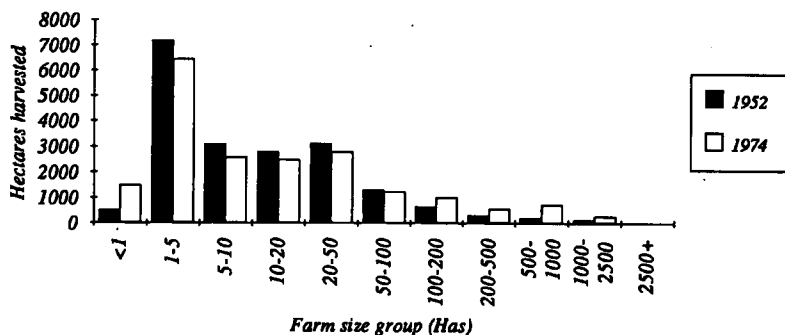
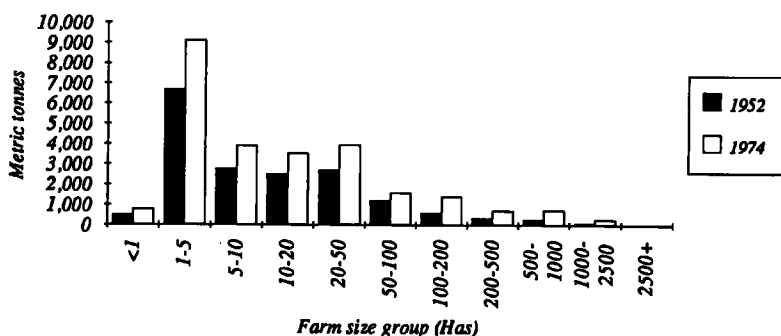


Figure 4.7c Santa Bárbara: maize output by farm size group, primera 1952 and 1974



Source for Figures 4.6a-4.7c: calculated from DGEC, 1952 and 1974

Land use for maize was undoubtedly affected by the increase in pasture and export crop production as suggested above. In addition, small farmers may have been able to increase their incomes through wage labour, or may have had to undertake wage labour to survive, and would therefore have had less time to devote to maize production. Thus, as suggested by national data, some small maize farmers may have been working

as wage labour for large maize farmers. If this were so, farmers would have been under pressure to increase their yields through changes in techniques of production, which along with the incorporation of larger farmers into maize production would also have increased overall maize output. Although it is not possible to substantiate these hypotheses further from the census data, later chapters illuminate some of the complex relations involved in the intensification of maize production in the 1980s and the strategies pursued by different types of farmer.

Table 4.11 El Paraíso and Santa Bárbara: average maize yields, 1952-74 (MT/Ha)

<i>Departments</i>	<i>1952</i>	<i>1974</i>	<i>Absolute change 1952-74</i>	<i>Percentage change 1952-74</i>
<i>El Paraíso</i>	.69	.93	.24	35
<i>Santa Bárbara</i>	.91	1.33	.41	45

Source: calculated from DGEC, 1952 and 1974

4.4 Summary

This chapter has argued that reproducing maize production and providing adequate maize for national consumption needs have been affected by problems in access to land, and forms of forced appropriation and commerce since colonial times. In more recent years, evidence in the agricultural censuses of 1952 and 1974 shows that maize farmers experienced increasing pressures in access to land, as well as processes of commoditization and intensification. Threats to land, particularly among small farmers, were manifested in land fragmentation, declining farm sizes, increasingly difficult access to public lands, insecure tenure, and the considerable expansion of farmland used for pasture. Given the weight of maize farms in the overall number of farms, and their predominance in farms of less than 5 Has, small maize farmers were particularly vulnerable to these changes. Further pressures on maize farmers were evident in the increasing commoditization and intensification of land use, including that used for maize with the growth of maize farming in large farms. Nationally, data indicate that

smaller farms were using an increasing proportion of their land for maize. Increases in yields also suggest an intensification of inputs and labour as well as of land use. Data on off-farm incomes and use of labour further suggest that small maize farmers were providing wage labour for large maize-producing farms.

Although many of these trends are mirrored in the census data for the departments of El Paraíso and Santa Bárbara, where I carried out fieldwork, the pressures resulting from threats to entitlements in land, commoditization and intensification appear to involve more complex relations than can be analysed from census data alone. Succeeding chapters will look further at these relationships, especially in El Paraíso.

APPENDIX 4.1

El Paraíso: distribution of types of land tenure in farms with a single type of tenure by farm size, 1952 (percent)

<i>Farm size grouping</i>	<i>Privately owned</i>	<i>Rented land</i>	<i>National land</i>	<i>Other forms</i>	<i>Total</i>
<1	17	5	32	47	100
1-5	18	3	38	41	100
5-10	23	3	45	29	100
10-20	29	3	46	22	100
20-50	41	3	39	18	100
50-100	48	4	34	14	100
100-200	66	5	23	5	100
200-500	69	4	24	3	100
500-1,000	86	0	14	0	100
1,000-2,500	100	0	0	0	100
2,500+	100	0	0	0	100

Source: calculated from DGEC, 1952 and 1974

El Paraíso: distribution of types of land tenure in farms with a single type of tenure by farm size, 1974 (percent)

<i>Farm size grouping</i>	<i>Privately owned</i>	<i>Rented land</i>	<i>National land</i>	<i>Other forms</i>	<i>Total</i>
<1	27	46	27	1	100
1-5	33	25	42	0	100
5-10	37	5	58	0	100
10-20	34	2	63	0	100
20-50	32	1	67	0	100
50-100	36	1	63	0	100
100-200	41	3	54	1	100
200-500	65	4	30	1	100
500-1,000	76	3	21	0	100
1,000-2,500	80	0	13	7	100
2,500+	100	0	0	0	100

Source: calculated from DGEC, 1952 and 1974

APPENDIX 4.2

Santa Bárbara: distribution of types of land tenure in farms with a single type of tenure by farm size, 1952 (percent)

<i>Farm size grouping</i>	<i>Privately owned</i>	<i>Rented land</i>	<i>National land</i>	<i>Other forms</i>	<i>Total</i>
<1	10	12	19	59	100
1-5	15	14	25	46	100
5-10	28	4	52	16	100
10-20	31	2	58	9	100
20-50	37	1	58	4	100
50-100	53	2	42	3	100
100-200	62	2	35	2	100
200-500	84	1	14	0	100
500-1,000	85	4	11	0	100
1,000-2,500	100	0	0	0	100
2,500+	50	50	0	0	100

Source: calculated from DGEC, 1952 and 1974

Santa Bárbara: distribution of types of land tenure in farms with a single type of tenure by farm size, 1974 (percent)

<i>Farm size grouping</i>	<i>Privately owned</i>	<i>Rented land</i>	<i>National land</i>	<i>Other forms</i>	<i>Total</i>
<1	12	66	19	3	100
1-5	20	40	38	3	100
5-10	35	7	55	3	100
10-20	35	3	60	2	100
20-50	39	2	56	3	100
50-100	46	2	49	3	100
100-200	62	3	32	3	100
200-500	78	0	20	2	100
500-1,000	83	4	13	0	100
1,000-2,500	87	13	0	0	100
2,500+	100	0	0	0	100

Source: calculated from DGEC, 1952 and 1974

APPENDIX 4.3

Land use in farms, El Paraiso and Santa Bárbara, 1974

<i>Land use</i>	<i>El Paraiso</i>		<i>Santa Bárbara</i>	
	<i>1974 (Has)</i>	<i>Percent of total land in farms</i>	<i>1974 (Has)</i>	<i>Percent of total land in farms</i>
<i>Annual crops</i>	31,223	13	25,376	10
<i>Permanent crops</i>	15,445	6	34,279	13
<i>Fallow</i>	7,961	3	16,436	6
<i>Pasture</i>	132,337	54	150,816	57
<i>Woodland</i>	27,745	11	16,851	6
<i>Wasteland</i>	26,260	11	19,631	7
<i>Other</i>	2,508	1	2,548	1
<i>Total</i>	243,246	99*	265,937	100

* Less than 100 because of rounding

Source: calculated from DGEC, 1979, 31-32

APPENDIX 4.4

*El Paraiso and Santa Bárbara: changes in average farm size and maize area harvested, 1952-74
(percent)*

<i>Farm size grouping</i>	<i>El Paraiso</i>		<i>Santa Bárbara</i>	
	<i>Change in average farm size</i>	<i>Change in average maize area harvested</i>	<i>Change in average farm size</i>	<i>Change in average maize area harvested</i>
<i><1</i>	-1	-12	-4	0
<i>1-5</i>	-10	-12	-7	-14
<i>5-10</i>	1	-14	<1	-15
<i>10-20</i>	-2	-11	<1	-17
<i>20-50</i>	4	-11	2	-14
<i>50-100</i>	-4	30	<1	-5
<i>100-200</i>	-1	75	<1	6
<i>200-500</i>	2	5	1	33
<i>500-1,000</i>	-1	735	2	129
<i>1,000-2,500</i>	-4	379	8	107
<i>2,500+</i>	-16	1,606	43	0
<i>Total</i>	-8	-2	-2	-17

Source: calculated from DGEC, 1952 and 1974

CHAPTER 5

PRODUCING MAIZE IN EL PARAISO: OBSTACLES, RISKS AND STRATEGIES

Introduction

This chapter shows that the social relations of maize production in the 1980s were both complex and contradictory. The different spaces and possibilities open to Honduran maize farmers were located in social hierarchies which depended on access to resources and labour. These social hierarchies provided the basis for power relations which affected how exchanges over goods and services took place, as well as who benefited from them. On one hand, relations between different types of maize farmers were hierarchical and unequal and served to undermine productive capacities; on the other, they also helped those farmers with least resources to sustain their maize production. While all maize farmers were subject to risk, risk averting strategies for the poorest farmers - which included their relations with wealthy farmers - still left them in a precarious and vulnerable position. Within this context, the state's policies to increase maize production among small and medium farmers were directed towards the increasing commoditization of all relations and processes. Such policies sought to 'modernize' the social and technical conditions of production as well as improve productive capacities. However, they also introduced new types of risk, especially financial, which could leave these maize farmers highly vulnerable.

The analysis in this chapter thus concentrates on the contradictory nature of social relations in the countryside in terms of its effects on the productive capacities of maize farmers. The contradictions I examine are those of risk and security, survival and intensification, and the role of personalized and non-commoditized relations in

commoditized production. This approach is different from that which analyses the conditions of maize farming by such criteria as farm size or destination of output, often found in the Honduran literature.

The chapter uses field data from the villages of Chichicaste and Jutiapa in the Jamastrán Valley in El Paraíso to analyse the inter-relations between maize farmers, as well as between farmers and state institutions. For the moment, I continue to use the word 'farmer' to denote all those who grow maize, whether on a hectare of land using their own labour or as part of the activities of a large farm using hired workers. While this term may seem highly undifferentiated given that a landowner and cattle farmer growing maize is unlikely to be operating under the same conditions as a small producer renting a single hectare plot, it is easier and less confusing at this stage to talk about the conditions of maize farming without imposing a set of labels which may not adequately characterize the nature of that production. Nor, as argued in Chapters 1 and 4, does it seem appropriate to impose a 'class structure' on maize farmers before discussing the conditions under which maize is produced. Thus my only distinction for the moment is by farm size into small, medium and large farmers (see Chapter 4, Section 4.2). The number of farmers in each group and village is shown in Table 5.1.

Table 5.1 Number of small, medium and large farmers interviewed in Chichicaste and Jutiapa, 1987

<i>Farm size group</i>	<i>Farm size range (Has)</i>	<i>Chichicaste interviewees</i>	<i>Jutiapa interviewees</i>
<i>Small</i>	<1-5	7	5
<i>Medium</i>	5-50	6	4
<i>Large</i>	50+	3	3
<i>Total</i>	<1-50+	16	12

I take a step-by-step approach to building up a picture of social relations, starting with access to land and then looking at labour use, access to credit and use of technology. Some preliminary conclusions about the nature of social relations and how they

affected maize production are drawn. The implications for farmers' capacities to reproduce maize production and access to maize for consumption are discussed in Chapters 6 and 7.

In Chapter 3, I pointed out some of the differences between the two villages of Chichicaste and Jutiapa. In analysing my data, these differences are sometimes important and sometimes not so significant. When there are key differences between the two villages, I treat the data separately. When not, I combine them.

5.1 Obtaining land

Understanding how farmers obtain land, and what mechanisms enhance or undermine their access to land, is crucial to explaining social relations in the countryside as well as whether farmers are able to reproduce their maize production. This section examines the social relations of land tenure among maize farmers in Chichicaste and Jutiapa in the mid-1980s, and looks at the concepts of risk and security in farmers' access to land. I argue that access to land for maize production among small farmers frequently involved processes of hierarchical exchange between small and large farmers which were not apparent from aggregate data such as those in agricultural censuses and surveys. These exchanges involved risk as well as a means of achieving security in access to means of production.

Arriving at these conclusions involves unravelling the often complex land tenure relations and people's perceptions of them. The formal categories of census data or the stated property status of specific farms need to be compared with farmers' own land stories. Thus, there are several questions that can be asked about maize farmers in Chichicaste and Jutiapa. How did the forms of access to land compare with the census

data for the area? How did farmers obtain their land in practice? How did they hold on to it?

5.1.1 *Land tenure patterns in Chichicaste and Jutiapa*

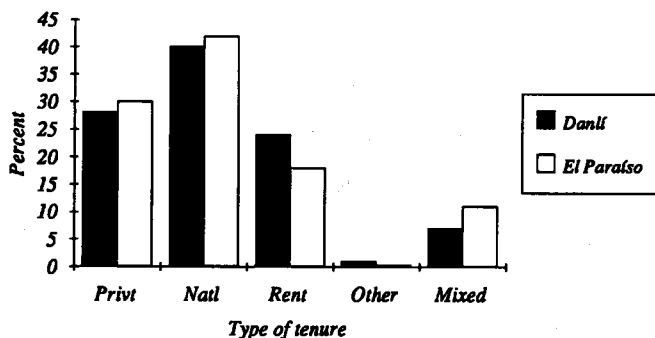
As well as evaluating the extent to which the Danlí area (which includes the Jamastrán Valley) seemed typical of El Paraíso prior to my fieldwork, analysing 1974 census data on land tenure allows comparison of apparent trends in the 1970s with how maize farmers characterized their access to land in Jamastrán in the 1980s. For both Danlí and the department, national land farms formed the largest proportion followed by private and rented farms, although the percentage of rented farms in the Danlí area was greater than for El Paraíso as a whole (Figure 5.1a). National land accounted for a relatively larger area in farms than private land in the Danlí area, while the opposite was true for El Paraíso as a whole (Figure 5.1b). These data point to the continuing importance of access to national land in the mid-1970s in Danlí, as well as indicating that private and rented farms were also important forms of tenure for many farmers.

The privatization of land affected different farmers in different ways. Disaggregating some of these data for Danlí showed that 88% of privately-owned land was held by only 20% of farms with that land. However, the rented land area in farms was a very small proportion of land for both the *municipio* and the department, indicating that only the smallest farms generally rented land. Although national and *ejidal* land were important sources of land for all farms in the Danlí area, most of the national land (73%) was held by only a relatively small proportion of national land farms (31%). There was even one farm which alone had over 400 Has of *ejidal* land while five farms

between them had apparently occupied 1,300 Has without any form of legal tenure ('other forms')¹.

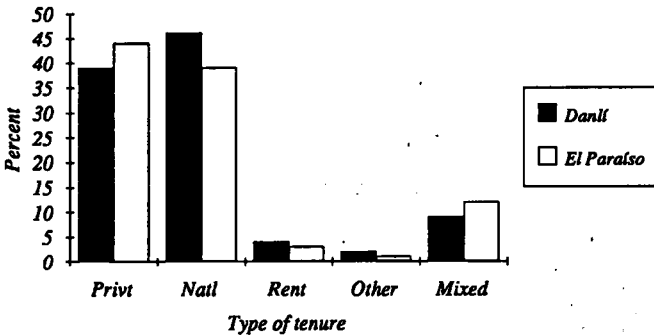
Mixed forms of tenure were generally in a minority although more common in the department as a whole than in Danlí. Disaggregation of the mixed tenure data for Danlí showed that those who combined rented land with other forms of tenure appeared to be medium farms of 10-20 Has, while those who obtained access to both national and private land tended to have larger farms averaging 80 Has in size. Both these observations paralleled the trends for wholly rented, national and private farms: the larger the farm, the more private and national land; the smaller the farm, the more important was access to rented land.

Figure 5.1a Distribution of farms by tenure, Danlí and El Paraíso, 1974



¹ They were obviously not *colonatos* or share-cropper.

Figure 5.1b Distribution of land area in farms by tenure, Danlí and El Paraíso, 1974



Source for Figures 5.1a and b: calculated from DGEC, 1974

As pointed out in Chapter 3, El Paraíso was a department of population expulsion as well as a pole for migration and colonization between the 1950s and 1970s. The department is varied in terrain, and although many areas experience relative isolation and poverty, the Jamastrán Valley was a location for migrant farmers. In both Chichicaste and Jutiapa, about half of the interviewees stated that they had come to the villages to obtain land. The average length of residence by migrant interviewees in both villages was about 20 years, although some had been there as long as 30 or 40 years. In Jutiapa, migrant interviewees were mainly from other villages in El Paraíso, whereas in Chichicaste most had come from other departments, mainly Francisco Morazán and Choluteca where there was relative poverty, density of population and pressure on land. Migration patterns among interviewees appeared to arise from their networks of contacts rather than time of migration. Several migrants in each village had come from the same place of origin.

It is difficult to know how and whether these population movements affected land tenure relations. Only some aspects of the patterns of land tenure apparent in the

census data were evident from my fieldwork data in the 1980s. In the twelve year gap, increasing privatization of land had probably taken place². Although I do not claim that my data are representative of the general trends in the villages, privately-owned and rented farms appear as the most important categories of land tenure from my fieldwork. However, how farmers talked about their land was in much vaguer categories than the apparently clear distinctions made by the census. In addition, to understand the significance of different land tenure relations, they have to be seen in the context of, and in relation to, other aspects of production.

Thus a first look at data given by interviewees in the villages of Chichicaste and Jutiapa indicates that land was generally in single forms of tenure and privately-owned, although some farmers did gain access to national or *ejidal* land, and others had borrowed land (usually from family members) (Table 5.2a). However, there was greater incidence of mixed forms of access to land in farms up to 50 Has than apparent from the census a decade before, but even disaggregating these data still presents a picture of largely privately held land, whether owned or rented by the user (Table 5.2b).

There were differences between the two villages not evident from these tables and which suggest that land tenure relations were more precarious in Chichicaste than Jutiapa and also more dependent on relations with other farmers. For example, all the small maize farmers I interviewed in Chichicaste rented or borrowed part, if not all, of their land, whereas only one small farmer interviewed in Jutiapa stated that he rented land, while another had borrowed part of his. There was also greater incidence of renting land among medium farmers in Chichicaste, whereas none of the equivalent

² I do not know of any analysis in the Honduran literature to establish this generalization.

interviewees in Jutiapa stated that they rented land, although one indicated that he only had use rights (*dominio útil*) to the land he farmed.

Table 5.2a Distribution of farms by stated type of land tenure among farmers interviewed in Chichicasté and Jutiapa, 1987 (all farms)

<i>Number of farms by stated type of land tenure</i>						
<i>Farm size group (Has)</i>	<i>Number in farm size group</i>	<i>Private</i>	<i>Rented</i>	<i>National</i>	<i>Other</i>	<i>Mixed</i>
<1-5	12	2	2	1	2*	5
5-50	9	5	0	1	0	4
50+	6	6	0	0	0	0
<i>Total</i>	28	13	2	2	2	9

* 'Other' land was loaned in these instances

Table 5.2b Distribution of farms by stated type of mixed land tenure among farmers interviewed in Chichicasté and Jutiapa, 1987

<i>Number of farms by stated type of mixed tenure</i>					
<i>Farm size group (Has)</i>	<i>Number in group</i>	<i>Private and rented</i>	<i>National and rented</i>	<i>Private and national</i>	<i>Other*</i>
<1-5	5	3	0	0	2
5-50	4	3	0	0	1
<i>Total</i>	9	6	0	0	3

* Other: <1-5 were private and loaned; the 5-50 farm combined private, rented and *ejidal* land

Comparing my data with those collected in a limited survey made for the integrated rural development project (DRI) confirm the complexity of access and rights to land³, and how difficult they are to investigate. How people define or talk about their land may not tally with juridical categories and frameworks, a point made in the USAID documents supporting land titling (Chapter 2, Section 2.3.1). On one hand, the DRI data showed that most land in these villages was privately held and the remainder rented, consistent with data that I collected (DARCO, 1985a and b). On the other hand, the survey did not indicate any evidence of farmers having use rights to national land in Chichicasté, although it found that use rights were more common in Jutiapa than my own data suggest.

³ As well as possible idiosyncracies in the two sets of data.

5.1.2 Large farmers

Having access to substantial amounts of land gave large maize farmers a special position in maize production: they had the possibility of producing maize on a considerable scale; they could confer land on others; they could provide employment. As we shall also see later, they could command bank credit, could buy agricultural inputs, and could hence supply workers and tenants with agricultural supplies. The nature of their access to land, and their attitudes towards land use, therefore affected relations to other maize farmers.

All but one of large farmers I interviewed were born locally. This contrasts with the incidence of migration among the other farmers interviewed. Although most came from established families in the area, the large farmers I interviewed were not the largest landowners in the Jamastrán Valley. However, property, power and influence were evident in relative scale among them. They were often reluctant to provide data on how they came to acquire such large areas of land. It was also difficult to obtain precise data on actual landholdings - although easier to find out how much land was used for crops and how many cattle they owned, from which it was possible to approximate the total land held⁴. However, their 'land stories' are indicative of their wealth and social positions as landowners and large farmers.

I interviewed six large farmers. They all produced some maize although some were more dedicated maize farmers than others. Above all, they all had cattle. Two, living in Chichicaste, already had considerable amounts of land which they had either inherited or come into through marriage (Table 5.3) but they were also expanding their

⁴ For example, one farmer stated that he needed 2-3 *manzanas* (1.4-2 Has) per head of cattle, a common estimate especially for unimproved pasture land.

cattle production into newly colonized national land in the next-door department of Olancho. Land expansion still seemed possible from Chichicasté if farmers were prepared to ride through the mountains and cut down forest. In the heart of the Jamastrán Valley in Jutiapa, however, possibilities for expansion were more constrained. One of the large farmers I interviewed was going to rent further land (for maize) from a well-known local landowner.

Of the farmers I interviewed, the largest offered a clear example of land tenure relations involving patronage. Although he described himself as a *campesino* and came from humble origins, over 30 years he had accumulated a large amount of land to become the reputedly largest landowner in Chichicasté. This farmer's self-definition in relation to his origins was overlaid by behaviour appropriate to a landowner. He rented land to his permanent workers and, as we shall see, was a source of agricultural inputs for them. This farmer had given land to his sons. Some sons worked with him and others had their own farms.

Table 5.3 Access to land by six large maize farmers in Chichicasté and Jutiapa, 1987

<i>Large farmer</i>	<i>Estimated farm size (Has)</i>	<i>How obtained land</i>	<i>Percentage of land used for maize</i>
1	52	Inherited from father	20
2	66+	Not known	21
3	125+	Not known	16
4	200+	Joint inheritance with brother	17
5	300+	Inherited and newly purchased land	3
6	600	Through marriage, purchase, and possible access to national land	8

Whether they considered themselves old-style *hacendados* (see Chapter 4, Section 4.1) or not, the farmers interviewed saw their farms as commercial enterprises. All received bank credit which financed their use of purchased seeds, fertilizers and machinery. They all employed some permanent wage labour, and all were either concerned with

expansion or with obtaining maximum profits from their farms. Thus two were considering dedicating more land to pasture than food crops because they thought it would yield higher returns. Another was increasing his maize area by renting land. While some were expanding their farms by acquiring new land, others were seeking to intensify production on their existing farms.

However, owning large amounts of land was also a means to obtaining social or political as well as economic influence. Two of the three large farmers interviewed in Chichicaste were among the three main landowners in the village and were treated with considerable respect. The three Jutiapa farmers interviewed were involved in local politics or had other businesses. Nearly all the six farmers had some connection with the integrated rural development programme (DRI). Furthermore, at least two had been identified by the programme as '*líderes productivos*'. This may have been an indication that they were considered progressive or model farmers, but it may also have been a reference to their economic and social importance.

I shall return to the position of these large farmers in maize production. The relations between these farmers, and others in their social position, and the small maize farmers of Chichicaste and Jutiapa formed a critical, but contradictory, part of the processes of survival and accumulation.

5.1.3 Small and medium farmers

Small and medium farmers had diverse strategies for gaining access to land. Although many farmers, including small ones, inherited plots of land from family members, inherited land was often combined with other forms of access. Thus farms were often composed of several small plots (see Table 5.4). The most common pattern for small farmers in both villages was to have access to two parcels of land, one of which was

usually rented or borrowed. Medium farmers often had access to three or four plots, although usually with a single type of tenure.

Table 5.4 Number of plots per farm among small and medium maize farmers in Chichicaste and Jutiapa, 1987

Farm size group (Has)	Number of plots	1	2	3	4	5	6	7
<1-5	Number of farmers with this number of plots	4	6	1	1	0	0	0
5-50		1	1	5	1	0	0	1

Analysing data on land that was reported as rented, borrowed or occupied in another form, shows that among small and medium farmers interviewed, renting predominated (Table 5.5). However, gaining access to land was frequently dependent on personal contacts and developing some sort of mutual exchange relationship. Furthermore, many farmers (especially small ones) relied on their relationships with family members and landowners to provide them with land, whether as a loan or on a cash rent basis. Access to land often had the nature of a 'favour', even when rent was paid. There was a range of phrases used to explain the relationship: '*me presta una manzana*' or '*me da una manzana*' or '*me alquila una manzana*'. These phrases did not necessarily translate literally into 'he lends me a *manzana*', 'he gives me a *manzana*' or 'he rents me a *manzana*' in terms of what actually happened. For example, within families, the term 'rent' might have been used, but not necessarily paid. Even renting land from landowners who were not relatives did not always mean that rent was paid. Equally 'giving' (whether within families or between larger and small farmers) usually meant 'loaning' (although it could also have meant 'renting').

Table 5.5 Type of access to unowned land by small and medium maize farmers in Chichicaste and Jutiapa, 1987

<i>Type of access</i>	<i>Number of plots by land source and type of access</i>			
	<i>From family member</i>	<i>From landowner or large maize farmer</i>	<i>National land</i>	<i>Private land</i>
<i>Rent</i>	0	7	0	0
<i>Borrow</i>	3	1	0	0
<i>Occupy</i>	0	0	2	2

There were, however, some differences between the two villages. As stated above, there was greater incidence of renting land among small farmers in Chichicaste than Jutiapa as well as greater reliance on the goodwill of landowners. This may reflect idiosyncracies in the data. Nevertheless, further analysis of data for Chichicaste show that there was a range of ways in which small farmers obtained land, and that these ways often involved implicit or explicit exchanges with landowners, which may or may not have been commoditized. While inheritance and acquiring land through families were important, access to loaned or rented land may have been based on forms of patronage, for example, when there was a prior relationship with the landowner (as in one case, when farmer and tenant originated from the same village), or when tenants carried out wage work for a landowner.

5.1.4 Paying for rented or borrowed land

Some of the strategies used by Chichicaste and Jutiapa maize farmers to obtain land were responses to changes resulting from the spread of commercialized crop production and the enactment of legislation. On one hand, land had become a commodity through gradual privatization which was being reinforced by state policies in the 1980s: private land could be bought and sold, people knew its market price and its rental value. On the other hand, there were constraints on privatization and the development of land markets, especially the continuing existence of national or *ejidal*

land which was held legally, or non-legally, by individual farmers⁵. With the decline of *colonos*, and the uneasy context for renting land, landless and land poor had to find other means of obtaining land, and large farmers had to find ways of obtaining labour.

In Chichicaste and Jutiapa, it is possible to see a range of responses (see Table 5.6). The number of responses recorded in the table is greater than the number farmers renting or borrowing land because some arrangements varied. Furthermore, the table does not take into account those who occupied private or national land without any title or payment. There were one or two medium farmers in this category.

Chichicaste farmers were prepared to discuss their land tenure arrangements more readily than those in Jutiapa and might have skewed the evidence summarized in Table 5.6. Nevertheless, I had a strong impression of less complex and personalized relationships around gaining access to and paying for land in the Jutiapa area than in Chichicaste. Thus, only one small Jutiapa farmer stated that he 'rented' a plot of land from his brother but did not in fact pay a cash rent, although he did provide labour on his brother's farm. Another small farmer who had the use of a privately-owned plot, which he hoped to buy with financial help from the DRI, occasionally also rented land for cash payment. A third also rented land for cash payment only. In general, land tenancies seemed to be based on the cash nexus in Jutiapa, which can perhaps be explained by the commoditization of production more generally in the heart of the valley (see Chapter 4, Section 4.3.2) and the difficulty of finding land that was not already occupied.

⁵ Furthermore, non-legal national land in the hands of large farmers was potentially under threat of appropriation as part of land reform or, more likely, occupation by organized peasant groups.

Table 5.6 Type of contractual arrangement for rented or borrowed land among small and medium maize farmers in Chichicaste and Jutiapa, 1987

		Number of farmers in each group						
		Cash rent		Rent in kind		No rent		N.d.*
Small and medium farms (Has)	Number in group	Works for owner	Does not work for owner	Works for owner	Does not work for owner	Works for owner	Does not work for owner	
Chichicaste								
<1-5	8	3	1	1	0	1	2	0
5-50	4	0	3	0	0	0	0	1
Jutiapa								
<1-5	3	0	2	0	0	0	0	1
5-50	0	0	0	0	0	0	0	0

* N.d. = no data

However, responses to pressures on land in Chichicaste were complex and diverse. They combined commoditized relations such as paying cash rents - which, however, were often established on a personalized basis because of the patronage of the landowner in other farm activities - and non-commoditized relations if land was loaned, either by the patron/landowner or relatives⁶. Thus the combination of ways of 'paying' for land among small farmers is striking: (i) cash rents with or without wage labour, (ii) rent paid in kind with wage labour (usually a sack⁷ of maize/manzana); (iii) no rent but the farmer worked for the landowner; and (iv) no apparent obligations at all. One small farmer stated that he rented a plot from a large farmer who originated from his village and for whom he now also worked. He either paid rent in kind or in cash. Paying in kind for land seemed relatively unusual in this area in the 1980s, and with the 1980s' land prices and rents, it would have been worth more to a landowner to charge a cash

⁶ This does not mean that the landowner or family member derived no benefit from the arrangement; the loan of land might well have been linked to other exchanges.

⁷ A sack is the same as a *carga* - about 2 quintals (about 200 lbs or 91 kgs).

rent rather than one or two sacks of maize per *manzana*⁸. However, this small farmer had an established relationship with the landowner, and the agreement was evidence of the range of possible arrangements that could be made. The type of agreement that they had established might hold particularly if the tenant were a worker on the owner's farm. Thus another small farmer stated that he was not asked to pay any rent at all by the owner of his land for whom he also worked (even though the owner was not a family member), while others claimed both to pay cash rents as well as undertake waged work.

However, renting arrangements for medium farmers in Chichicaste appeared to be based on the cash nexus and involved no waged work. It is more difficult, however, to locate these farmers in terms their relationships to landowners and how they perceived their access to land. Often medium farmers who did not own all their land had aspirations to buy it although their financial capacity to do so was often limited. Information from interviews indicated that some had been small or rather poor medium farmers who were beginning to expand their production by renting extra land. To do this, they might have had access to institutional credit, such as from the DRI.

5.1.5 Land and exchange relations: balancing risk and security

The above analysis demonstrates that knowing the farm size of maize farmers cannot alone provide the basis for making assumptions about the nature of maize production, especially how land is obtained and how access to it is sustained over time. In Chichicaste, exchanges over land and labour were part of maintaining access to land for small farmers (as well as to labour for landowners). On one hand the existence of the

⁸ In Chichicaste, rents ranged from Lps75-100/*manzana* (or Lps107-143/hectare), whereas one or two sacks of maize per *manzana* might have sold on the market for Lps34-68 at harvest-time.

large farmers and their extensive landholdings acted as an obstacle to obtaining land for many small maize farmers (particularly if such holdings included national land). On the other, setting up a relationship with a large farmer enabled small maize farmers to gain access to land, and as we shall see later in this chapter, to other agricultural inputs.

These exchanges combined different characteristics. Firstly they depended on commoditized relations: even though rents were not always exacted in practice, the rent was a known amount based on local land values, and labour provided to the landowner was paid a wage. Thus the exchanges were more or less part of markets for land and labour. Whether the land was obtained through a land market is a moot point. The land was available because the tenants worked for the landowners in many cases. There was, however, a generalized demand for wage labour (which I analyse in the next section). Second, the exchanges were personalized. They were based on patronage (perhaps resulting from a relationship established long ago), good will, and trust largely based on an employer-employee relationship, as well as the different (and unequal) economic advantages to small and large farmers. Even so, these processes involved risk because human relations can be fragile and are prone to disruptions and disagreements as well as being affected by pressures to commoditize and mechanize production. A further look at these relations substantiates this point.

Five of the seven small farmers interviewed in Chichicaste had complex ways of gaining access to land for maize production and faced different types of risk and security. On one hand, four out of the five had the patronage of landowners/large farmers who rented or loaned them land. These landowners/large farmers also employed them as workers. The fifth had been loaned a .7 Ha plot from his father. Paradoxically, his father had access to a considerable amount of *potrero* - or scrub land used for grazing but not fit for cultivation. This farmer could not continue to rely on his father for land,

and was planning to rent land in the future from the largest landowner in the village, for whom he already did wage work.

In all these cases, land could be withdrawn (as could the opportunity for wage work). However, the relationship between small and large maize farmers provided a range of possibilities (for land and labour) which privately-owned small plots did not. If one tenancy fell through, it was often possible to find another under similar conditions. For example, one small bean and pig farmer, who was not included in these data, had had three successive tenancies in which he had not had to pay rent but had worked for the landowner. When each tenancy fell through, which, in his case, seemed to be because of bad relations with the landowner, he sought land with another large maize farmer who could also provide wage work.

By comparison, most of the small farmers interviewed in Jutiapa did not have land tenure relations involving the same complexity. Only in one case did access to land involve an agreement to carry out wage labour. In that case, the farmer provided labour for his brother's farm and used his wages to finance maize production. The exchange was based on rights and obligations within the farmer's family and could be seen as an example of the exploitation of kinship relations for accumulation within petty commodity production, described by Brass (1986).

Although the conditions of access to land combined aspects of security and risk for small maize farmers, the quantity of land held affected farmers' capacities to produce maize, especially if the land had to support a large number of people. As well as the continual redistribution and fragmentation of land implied by farmers' obtaining plots from their families, several farmers also had to provide for a considerable number of dependants. For example, one small farmer in Jutiapa, who rented a plot of land as well as having inherited plots from his grandmother and father, had to provide for his

parents and grandparents as well as wife and children. Another example is the Chichicaste farmer mentioned above who borrowed land from his father. He was one of a household of seventeen and had to contribute to their upkeep from his farm output and his waged work. In both Chichicaste and Jutiapa, the small amounts of land available for cultivation meant that financial margins among small farmers were narrow, as will be seen in Chapter 6.

As well as amount, the quality of land available to medium as well as small farmers also affected maize production. The case of the small farmer in Chichicaste whose father had *potrero* but little agricultural land was an example. Another example is a medium farmer in Chichicaste who had inherited 14 Has of *potrero*, but had obtained access to about three and a half hectares of *ejidal* land for growing maize. Without the *potrero*, this farmer would have been classified as a small maize farmer. By contrast, other medium farmers in both villages had access to sufficiently good land which they could use for maize and other crop production, as well as land which they used for a few cattle.

For some medium farmers, owning land for maize production was only part of their livelihood possibilities. Apart from those who had cattle, some had non-farm livelihoods based on trade. Two medium farmers - one in each village - had a village store. Maize production was just one means of earning a living. For these farmers, land could act as a security against the fluctuations of trade, and trade could help finance farm activities. Large farmers also engaged in trade, primarily directed to the marketing of farm products, particularly maize and beans. The relationship between farming and trading will be discussed in Chapter 9: ownership of land and the social position and relations with others that are associated with it had important effects for maize markets as well as maize production.

That maize production had more or less importance for small, medium and large maize farmers is also demonstrated by patterns of land use. My data parallel the patterns shown by census data: the smaller the farm, the greater the proportion of land used for maize, and *vice versa*. Thus, as Table 5.7 shows, a high percentage of land in small farms was used for maize, less than half of land in medium farms was cultivated with maize, and less than 20% for the large farmers interviewed. However, these averages should be treated with some caution because within each farm size group there was a range of land types and access to labour, as well as amounts of land and strategies for land use. Thus, for example, one medium farmer in Chichicaste, according to this stratification, used 100% of his land for maize, while another who had mainly *potrero* used only 20%. The data for large farms in Chichicaste are certainly skewed because the largest farm was estimated at having about 600 Has. This again shows some of the dangers in making assumptions about maize production based on farm size alone.

Table 5.7 *Estimated proportion of land used for maize among farmers interviewed in Chichicaste and Jutiapa, primera 1986-87*

Type of farm	Chichicaste				Jutiapa			
	Farm size group (Has)	Ave. farm size (Has)	Ave. maize area (Has)	Proportion of land used for maize	Farm size group (Has)	Ave. farm size (Has)	Ave. maize area (Has)	Proportion of land used for maize
Small	<1-5	2.2	2.1	97%	<1-5	2.6	1.8	70%
Medium	5-50	13.9	4.4	32%	5-50	14.5	3.8	27%
Large	50+	317	23	7%	50+	130	23	18%

Noting these considerations, there were, however, some differences in land use between the two villages. Only 70% of land in small maize farms was apparently used for maize in Jutiapa compared with 97% in Chichicaste. These data suggest that access to markets for other products may have been greater in Jutiapa than Chichicaste at that time. Certainly, there was greater prevalence of growing fruit trees among Jutiapa small farmers (see Appendix 7.1). However there was a relatively greater proportion

(although similar average area) of land used for maize among large farmers interviewed in Jutiapa than in Chichicasté. Again, the possibilities for commercial maize farming might have been greater in the heart of the Jamastrán Valley than in Chichicasté and some Jutiapa farmers might have been prepared to dedicate a substantial part of their farms to it.

5.1.6 Conclusions

This analysis provides an initial and critical contribution to the debates in Honduras about whether secure land tenure would promote increased output, productivity and improve livelihoods. Security of tenure was usually used synonymously with private ownership in the 1980s debates. However, for the small farmers I interviewed, security lay not only in ownership but in the ability to rent or borrow land, generally in conjunction with an exchange of other favours and obligations. In other words, security of access to land was based on personalized as well as market exchange relations. That this security also involved the risk that the personalized relations could be disrupted is evident. However, the margins of financial risk in maize production were high for these farmers, and it was not *necessarily* more secure to own a small plot than to rent or borrow it. Furthermore, establishing personalized relations with large farmers also offered small farmers wage employment which they could use to supplement their income from maize, pay debts and continue producing maize. As will be seen in Chapter 7, debt is a serious problem in maize production. Among some small and medium farmers who were being encouraged to take loans through the DRI and invest further in their production (including the possibility of buying land), incurring debts could be a threat to the supposed incentive of private ownership. For these farmers, incentives to improve plots of land and invest in production could not just rely on private ownership of land alone.

5.2 *The use of labour in maize production*

In Sen's terminology, labour is an entitlement with dual characteristics. It has the character of an ownership entitlement: in a capitalist economy, 'one is entitled to one's own labour power, and thus to the trade-based and production-based entitlements related to one's labour-power' (1981, 2). It also acts as an exchange entitlement: labour power can be exchanged for a wage (or goods and services). If the rights to one's own labour power, or the ability to exchange labour power for wages are undermined, food security may also be undermined. Thus understanding how maize farmers gain access to labour and the nature of exchanges involved are essential to understanding farmers' capacities to produce and reproduce maize.

I have already indicated that labour can act as part of the means of exchange for land between small and large maize farmers. As well as developing an understanding of this relationship, there are other aspects of access to and use of labour which need analysing. For example, how land⁹ and labour are combined within farms also helps to explain how maize is produced and reproduced as well as providing a means to characterize different types of production (see Chapter 1, Sections 1.4 and 1.5). Thus there are two sets of relations that require analysis: (i) the relations within farms in terms of labour use; (ii) the relations between farms in providing and exerting command over labour.

⁹ *In capitalist farming, land is capital. I hesitate to use the concept capital to encompass all forms of access to land here, given the rather precarious basis on which that access is achieved by some farmers. The definition of capital in this context is thus a debating point.*

5.2.1 Large farmers

In Chapter 4, Section 4.2.2, it was noted from survey data that there was a positive relationship between farm size and use of permanent wage labour in maize production, and an inverse relationship between farm size and off-farm income (Table 4.10). I suggested that small maize farmers were most probably providing labour for large (and possibly medium) maize farmers. Was this in fact the case? If so, how did medium and large maize farmers ensure access to this labour? And how did small maize farmers work their own plots if they were providing labour for others?

Comparing my own findings with the earlier survey data, evidence in both villages confirms an inverse relationship between farm size and use of *permanent* labour in maize production (Table 5.8). Only the large farmers interviewed employed permanent labour. However, these farmers also employed a certain amount of *seasonal* labour, particularly at harvest time, but also during sowing. There were differences between Chichicaste and Jutiapa in this respect: I estimate that about¹⁰ 32% of labour employed by large farmers in Chichicaste was seasonal, compared with about 16% for Jutiapa (Table 5.9). This difference reflected different strategies for obtaining workers, although it would also have been affected by the composition of the farming household and who else was available to work in maize production.

¹⁰ The proportions of seasonal labour in this and subsequent tables should be taken as a guide rather than exact figures. The average seasonal labour days per hectare are calculated from fieldwork data; I use the CONSUPLANE estimate of 73 days/hectare for the total labour required (CONSUPLANE, 1978). Although total labour needs will vary according to techniques of production used, there was sufficient similarity in techniques across the farms, as well as differences which would have required both more or less labour, that I have stayed with this blanket estimate.

Table 5.8 Type of labour used in maize production among small, medium and large farmers interviewed in Chichicaste and Jutiapa, 1987

Farm size group (Has)	No. of farms in group	Number of farms in group using this type of labour			
		Own labour	Family labour	Permant. wage labour	Seasonal wage labour
Chichicaste	16	12	7	3	14
<1-5	7	6	3	0	5
5-50	6	6	3	0	5
50+	3	(3)*	1	3	3
Jutiapa	12	8	8	3	11
<1-5	5	5	5	0	4
5-50	4	3	2	0	4
50+	3	(3)*	1	3	3

* These large farmers contributed labour to maize production but it was not always clear in what capacity; they were all farmers in that they did not leave the supervision of the farm in the hands of a foreman; thus part of their role would have been supervisory.

Table 5.9 Estimated proportion of seasonal labour in total labour required in maize production for small, medium and large farmers in Chichicaste and Jutiapa, primera 1986-87

Farm size group (Has)	Estimated proportion of seasonal labour days in total labour days needed per hectare of maize (averages by farm size group)	
	Chichicaste	Jutiapa
<1-5	30%	16%
5-50	38%	37%
50+	32%	16%

For example, the largest farmer in Chichicaste had a substantial workforce of 15 permanent workers - but he also planted 49 Has of maize, as well as growing beans and keeping a large cattle herd. He was also opening up new lands for pasture. Thus one can see that this farmer used different types of access to labour, some of which were employed in all farm activities and others of which were employed during peak times of crop production. However, to secure access to a fixed amount of labour, he rented out small plots of land to his 15 workers. Seasonal labourers did not have plots, but one small farmer who did temporary work for this large maize farmer was hoping to rent land from him in the future and become more securely attached to the farm. Another example of a rather different but related strategy was the largest farmer I interviewed in Jutiapa who had 6 permanent workers. This farmer also used other, casual labour, at harvest time who were very small maize farmers with less than a hectare of land.

Furthermore, large farmers in both Chichicaste and Jutiapa combined labour in different kinds of farming activities as well as combining different types of labour. In addition, at least one farmer had other businesses on the side which his permanent workers may have helped¹¹ with.

The land-labour relationship which appears to be *within* the farm, notable particularly in the case of the largest Chichicaste farmer, cannot be seen as the same as the category of *colonato* or as labour service in the pre-capitalist sense. The workers did not live within the farm as *colonos* did - they only had access to a plot of land for which they paid a rent (in either cash or kind, according to one interviewee). The workers were also paid the standard rural wages. However, while this relationship was commoditized, it also had a personalized quality because the small producers would also receive other favours such as assistance with seed or fertilizer. In other cases of small farmers renting land from large farmers they worked for, their attitude was of assisting the large farmer rather than just being his labourer. In addition, with respect to rent, one or two said the equivalent of 'well, the rent is this much, but he doesn't actually charge it'.

5.2.2 *Small farmers*

While these arrangements enabled large maize farmers to tap into sources of labour, those who provided labour often needed to procure labour outside the family to help do

¹¹ After writing this part of the chapter, I realized I had used the work 'help' several times during discussions of labour use. Although in English, this may not be the most appropriate term to use, it is often used in the Spanish: '*me ayuda en la casalla finca*', literally, 'he or she helps me in the house on the farm' but meaning 'he or she works for me in the house on the farm'. However, the phrase indicates more than an employer/employee relationship and implies personal loyalty and obligation. The same phrase would not be used to encapsulate the work relationship in, for example, a public institution. As many of the interviewees used the phrase to indicate something about their relationships with others, I have decided to keep it in the text where appropriate.

the work on their own farms. Thus, it is notable from the data in Table 5.8 that seasonal labour was used by small farmers as well as by medium and large farmers, although this phenomenon was more pronounced for Chichicaste than Jutiapa. Although it is not easy to explain this difference, it provides evidence of the uneven and non-linear characteristics of commoditization. Some small farmers might have been cultivating more land than their own and their family labour could cope with (a problem mainly arising with very young farmers with small children, or those farmers whose children had left home). However, the data suggest that small farmers had often to substitute for their own labour which was being employed in wage work. A third possibility is that maize farming was only a secondary concern. Disaggregating the data for small farmers can help to illuminate some of these issues.

Of the Chichicaste small farmers, 5 out of 7 employed seasonal labour, while 6 out of 7 carried out wage work for others for at least part of the time during the agricultural year (Table 5.10). The amounts of wage labour varied from 'sometimes' to being a regular worker for the owner of rented plots. For all of them, the proportion of total labour on their maize plots which came from seasonal workers was estimated at between about 30 and 50% (Table 5.11). The two farmers in the group who did not use seasonal labour had family members¹² to help in maize production. A third who probably had family help borrowed land from his brother; although this farmer is included in the group because of his farm size, in fact his main source of work and income was a village store - another reason why types of maize production cannot be classified simply by farm size. There was also some relationship between use of seasonal labour and maize area planted - in general, the larger the area, the more seasonal labour was used, except when family labour was available (see Table 5.11).

¹² *In other words, sons or other male relatives.*

Among Jutiapa small farmers, by contrast, although 4 out of 5 farmers employed seasonal workers, all five farmers had help from family labour with maize production (Table 5.10). Given that only one of these farmers carried out wage work, nearly all were able to dedicate their labour to their own maize plots, thus the amount of seasonal labour required was much less. I estimate that the proportion of total labour that was seasonal ranged from only 4% to the biggest user of 39% (Table 5.11). It can be seen from the table that the biggest user of seasonal labour also had access to family labour and actually planted about twice as much maize as the others.

Table 5.10 Access to labour and use of own labour for maize production among small farmers interviewed in Chichicasté and Jutiapa, 1987

	<i>Number in group</i>	<i>Number of farmers who</i>				
		<i>Used own labour</i>	<i>Used family labour</i>	<i>Employed seasonal labour</i>	<i>Did wage work</i>	<i>Had other major income source</i>
<i>Chichicasté</i>	7	6	3	5	6	1
<i>Jutiapa</i>	5	5	5	4	1	0

Table 5.11 Area planted with maize and access to labour of small farmers interviewed in Chichicasté and Jutiapa, primera 1986-87

<i>Small farmer</i>	<i>Area planted with maize (Has)</i>	<i>Had access to family labour</i>	<i>Sold own labour</i>	<i>Estimated percentage of farm labour that was seasonal</i>
<i>Chichicasté</i>				
<i>AM</i>	.7	No	Yes	33
<i>RG</i>	1	No	Yes	34
<i>JAC</i>	1.4	Yes	Yes	0
<i>JC</i>	2.1	No	Yes	51
<i>JS</i>	2.1	Yes	Yes	0
<i>GF</i>	3.5	No	Yes	42
<i>AC</i>	4.2	Yes	No	51
<i>Jutiapa</i>				
<i>RZ</i>	1.4	Yes	Yes	12
<i>RR</i>	1.4	Yes	No	4
<i>RM</i>	1.75	Yes	No	22
<i>DU</i>	3.5	Yes	No	39
<i>FC</i>	1.05	Yes	No	0

5.2.3 *Medium farmers*

The relationships of land and labour analysed for small farmers have characteristics that might be ascribed to semi-proletarian farming. However, there was no clear example of the ideal-typical petty commodity production discussed in Chapter 1 in which capital (land) and own or family labour are combined. Although some of the small farmers in Jutiapa approximated this description, wage labour was nearly always used, albeit on a seasonal basis. Thus the medium farmers interviewed in both villages fairly consistently used seasonal labour, which supplied an estimated average of 37-38% of their labour needs (Table 5.9 above). Even so, there was one anomaly among medium farmers in Chichicaste, which again shows how grouping farmers by farm size can be deceptive. Not only did this farmer not employ seasonal labour in maize production, but he (and his sons) systematically did wage work for large maize farmers in the area. This suggests that the farmer's landholdings were either not as secure as he gave to believe, or that the land was not very suitable for maize cultivation (the farmer sowed only 2 Has with maize compared with 3-6 Has for the other medium farmers).

Given that the average use of seasonal labour is similar for medium farmers in both villages, combining the two sets of data and ordering them by area of planted maize shows some limited association between increased use of seasonal labour and increasing area planted, except when family labour was available (Table 5.12). However, there are several cases among those planting larger areas which show different patterns. For example, the first farmer who planted 4.9 Has, used considerable seasonal labour as well as family labour. This farmer worked in conjunction with his brothers and overall they had a considerable amount of land, part of which was used for cattle grazing as well as other crops and animals, all of which may explain the high demand for seasonal labour. The second farmer who planted 4.9 Has was in debt and may have tried to reduce his expenditure on wages, in spite of

apparently having no family help on the farm. The farmer who planted 5.6 Has had one son to help him, but also had bank credit which would have assisted him with the hire of seasonal labour. The first of the farmers planting 6.3 Has had no assistance from his very young family. The position of this farmer is more difficult to explain: he had a reputation for being hard-working and ambitious and may therefore have worked longer hours than other farmers. It is also probable that the seasonal labour used on his farm was underestimated.

Table 5.12 Use of family and seasonal labour by area of planted maize among medium farmers in Chicicaste and Jutiapa, primera 1986-87

<i>Area planted with maize (Has)</i>	<i>Farmer used family labour</i>	<i>Estimated proportion of farm labour that was seasonal (percent)</i>
1.4	Yes	35
2.1	Yes	0
2.8	No	52
3.5	No	40
4.2	No	40
4.9	Yes	60
4.9	No	27
5.6	Yes	53
6.3	No	34
6.3	Yes	33

5.2.4 Conclusions

Some conclusions from this analysis are as follows.

(i) Relations within farms

Patterns of labour use indicate that non-commoditized as well as personalized and commoditized processes were involved in producing maize, especially among small and medium farmers. There were combined strategies for labour use within most farms, whether small, medium or large. Very few farms among those investigated used only the farmer's labour, and most used seasonal wage labour as well as family labour, while large farms also had permanent workers. However, the use of seasonal labour for

maize production in small farms was associated with farmers' own wage employment elsewhere, as well as some instances of no family labour being available.

(ii) Relations between farms

The means of securing labour by some large farmers, notably, but not only, in Chichicaste were closely linked to the means of securing land by small farmers. Further evidence of these exchange relations is shown in Table 5.13: five of the seven farmers listed did wage work for those who provided them with at least part, if not all, of their land for maize production, and one was planning to establish this arrangement. Although this land-labour exchange generally occurred as forms of patronage and mutual, but hierarchical, assistance between employers and employees, it could occur within families as in the case of one small farmer in Jutiapa. These phenomena suggest that (a) kin relations might become commoditized (Brass, 1986), (b) personalized relations might depend on commoditization for their existence, and (c) commoditization might take place within a personalized context.

Table 5.13 Evidence of land and labour exchanges between small and large maize farmers, Chichicaste and Jutiapa, 1987

<i>Small farmer</i>	<i>Source of land</i>	<i>Source of wage employment</i>
<i>AM</i>	Father (Future: Landowner 1)	Landowner 1
<i>RG</i>	Landowner 2	Landowner 2
<i>JAC</i>	Landowner 2	Landowner 2 Landowner 3
<i>JC</i>	Landowner 4	Landowner 4
<i>JS</i>	Landowner 1	Landowner 1
<i>GF</i>	Landowner 5	Other
<i>RZ (Jutiapa)</i>	Brother	Brother

(iii) Implications for maize production

My analysis suggests that land-labour exchanges were more important in Chichicaste than in Jutiapa, and, although hierarchical, served both small and large farmers. However, this type of security for small farmers would easily be undermined if large

farmers decided to reallocate land to pasture rather than maize (thereby requiring less labour and needing the small farmers less), or if pressures from commoditization and competition with other farmers led to the replacement of labour by machines. Furthermore, the hierarchical nature of these social relations acted as a means of appropriating the labour of small farmers and procuring rents. Although such exchanges provided a certain amount of security for small farmers, they also made it difficult for such farmers to improve or expand maize production.

5.3 Financing production

How maize production was financed is another area in which relations between farmers played a significant role. Financial relations can be a means for appropriating surplus. Depending on how they operate, they can also act as an obstacle to reproducing maize for some farmers. However, as explained in Chapter 2, rural credit has been a focus of government policy and relations with banks and state institutions have influenced the productive capacities of maize farmers.

With respect to maize, the National Agricultural Development Bank, BANADESA, has generally provided credit to large as well as some medium farmers. Integrated rural development projects (DRIs) provided credit at somewhat lower interest rates (11 rather than 13%) to those small and medium farmers who could not obtain bank credit (Chapter 2, Section 2.3.2). Beneficiaries¹³ of this programme fell into the following four main categories¹⁴:

¹³ *Women's and youth groups, as well as local artisans who could provide production inputs, were also to be integrated into the programme.*

¹⁴ *The terminology is that of the DRI. Unfortunately, the documentation seems to conflate farm size with area cultivated (see MRN/DARCO, 1984, 72). If categorized by area cultivated, the small farmers being considered in the project proposal would have been cultivating larger areas of maize*

- * small farmers (3 Has) using basic technologies
- * medium farmers (7 Has) using basic technologies
- * medium farmers (14 Has) using more advanced technologies
- * agrarian reform groups (60 Has) and cooperatives (MRN/DARCO, 1984, 44-45).

Although the credit programme was designed to meet the needs of farmers who did not have sufficient collateral to obtain credit from BANADESA, extensionists suggested that assessment of farmers' collateral was implicitly taken into account. Decisions about loans were apparently made in Danlí, not by village extensionists who knew the farmers, thus it was suggested that credit recipients were often those who looked best on paper. There was concern from some extensionists that credit was going to farmers who had more land than indicated in the criteria, or who had other sources of income. From the documents, the programme was to be located in the main valleys, not the mountainous zones, and was to exclude one valley because of its isolation and lack of infrastructure. In practice, it seemed that the project was likely to intensify the production of established small and medium farmers, as well as reinforce the potential of collective groups.

Credit often involves a social relation of a hierarchical kind with the lender - whether the lender is an institution or a person. With institutional credit, the hierarchy is based on the payment of interest to the lender (which in economic terms would at least cover the opportunity cost of investing that money elsewhere). With informal loans, the hierarchical relationship may reside in rights and obligations agreed between creditor and debtor, and which may be as subtle as 'returning favours'. In addition, the social

than most of the small farmers I interviewed. The census data for 1974 indicated that farms of up to 5 Has only had a cultivated area of maize averaging 1.5 Has. In practice, 3 Has of maize might have been grown on a farm of up to 30 Has in size. Thus it was unclear from the DRI criteria what actually constituted a small farmer. Similar points might be made about the other farm size groups.

relations of credit and debt may also lock those who are subordinate in the hierarchy into forms of exchange which undermine rather than assist the reproduction of crops.

In practice, for most small as well as some medium farmers, financing production involved a variety of sources. For example, Cuevas and Graham, who surveyed credit recipients in rural cooperatives in Honduras, found that 44% of cooperative members who did not receive institutional credit, borrowed informally. Moreover, 41% of those who received some kind of institutional credit, *also* borrowed informally (1981, 32). Typical sources of informal credit came from suppliers of agricultural inputs and equipment, those who provided transport or loaned machinery, truckers and traders, friends, relatives and money-lenders.

I anticipated that the main source of informal credit among maize farmers would be from truckers and traders¹⁵. I was surprised to find that large and some medium farmers lent money (to be repaid in sacks of maize¹⁶), or provided agricultural inputs to be reimbursed later. To those sources of informal credit identified by Cuevas and Graham, I would also add landowners, especially those who rented out land and provided services to other maize farmers.

As one might expect from the foregoing, Table 5.14 shows the majority of medium farmers I interviewed receiving credit from the DRI, and all the large farmers obtaining credit from BANADESA. Although four out of 12 small farmers received DRI credit, the remainder either received no credit at all or made pre-harvest sales to finance

¹⁵ *Informal opinion has it that small maize producers often borrow from traders at exorbitant interest rates: stories are told of traders turning up in their lorries and negotiating pre-paid fixed prices at sowing times or when the maize is still young. This type of extortion was also carried out by maize farmers involved in trade.*

¹⁶ *Pre-harvest sales - explained below.*

production. More detailed analysis of these data shows that there were two small farmers in each village who received credit from the DRI. In Chichicaste, they were the two largest farmers in my small farmer category, one being the farmer who also had a village store. In Jutiapa, the apparent relationship between farm size and obtaining credit was not so obvious, although among my small farmer interviewees, the two who had credit with the DRI seemed the most dynamic and hard-working.

Table 5.14 Sources of credit among small, medium and large maize farmers interviewed in Chichicaste and Jutiapa, primera 1986-87

<i>Farm size group (Has)</i>	<i>No. of farmers in group</i>	<i>No. of farmers with institutional credit</i>	<i>Received credit from BANADESA</i>	<i>Received credit from the DRI</i>	<i>Had credit from pre-harvest sales</i>	<i>Said received no credit</i>
<1-5	12	4	0	4	3	5
5-50	10	9	1	8	0	1
50+	6	6	6	0	0	0
<i>Total</i>	28	19	7	12	3	6

How did the small farmers with no institutional credit obtain finance? Was receiving credit from the DRI potentially a good alternative? I focus on those small farmers who apparently received no credit at all or who made pre-harvest sales to obtain finance, and some of the problems faced by those farmers who did receive loans from the DRI.

Among the Chichicaste small farmers, there were three who stated that they did not receive any credit. However, they did in fact borrow on a personalized basis. One related that he bought all his agricultural inputs from the large landowner for whom he worked and from whom he planned to rent land in the future. He implied that the inputs (seeds, fertilizer etc) were held on credit and were repaid at harvest. The large farmer, meanwhile, obtained access to agricultural inputs using his credit from BANADESA. Another small farmer who rented land as well as working for this same large farmer had a similar arrangement, as did a third with the large maize farmer for whom he worked and from whom he rented land in a nearby hamlet.

In Jutiapa, there were two small farmers who did not appear to receive any credit. One had a large family with some adult children, two of whom worked on the farm. A brother also 'helped' - in other words, maize production was financed through family labour and joint income. The story of the other, however, eloquently demonstrates the diverse means of financing small-scale maize production:

This farmer came to the agricultural extension office to see me because he had heard I wanted to interview him and thought it was because he was to receive credit in the programme [the DRI]. He had applied before to the programme but had not been successful. It was unlikely he was going to receive credit this year either. He currently works for his brother to earn money to finance his maize production. He had received bank credit some years before. The first year, he had had a bad harvest and had had to sell a bullock to repay the loan. The second year, he was drafted into the military after which it was difficult to obtain bank credit again (he did not specify why). Before this, he had made pre-harvest sales to finance maize production. Now he would like to have an independent source of credit rather than having to work for his brother, but he would also rather work for family than borrow money at high rates of interest from someone else in the locality.

Thus this farmer used his wage income to finance his maize production. The implication of not doing so was that he would have to return to making pre-harvest sales.

Pre-harvest sales worked in the following way. Farmers could obtain a loan from someone else - in these cases, a larger, but not necessarily large, farmer - on the basis of repayment in sacks of maize at harvest time. However, the repayment effectively amounted to a 100% interest rate because the farmer was loaned half the expected value of the sacks. The most minimal reason a small farmer did this was to purchase fertilizer. Extensionists claimed that, at one time, the cash value of two sacks of maize in this type of exchange was equivalent to one sack of fertilizer. However, the terms of trade had moved against maize with proportionately greater increases in the price of fertilizer, and this arrangement was no longer as 'beneficial' to the small farmer as it

used to be. Whatever the price ratios, the lenders were taking advantage of the poverty of the borrowers.

Among those interviewed, there were three small farmers who were forced into this position. In Chichicaste, one small farmer had a diversified strategy for financing his maize production. First, he had assistance with ploughing from the large maize farmer who rented out land to him and charged him a cheaper than market rate because of the land-labour relationship. Second, he sold four sacks of maize at the pre-harvest rate to finance his fertilizer. This deal was made with a medium farmer who was receiving credit from the DRI. Thus, this case is an instance of a farmer receiving institutional credit, and then making further loans with the money, also found by Cuevas and Graham (1981). Another small farmer sold 12 sacks of maize on a pre-harvest basis to an unknown purchaser to finance production costs, but also hinted that he had 'help' from the landowner for whom he worked. A third small farmer in Jutiapa made pre-harvest sales to finance ploughing and seed, and indicated that his arrangement was with a well-known, large landowner in the Jutiapa locality who was known both to trade in maize as well as hiring out his machines to other farmers.

Reproducing the means of access to finance was a key part of reproducing maize production for all farmers interviewed in Chichicaste and Jutiapa. However, for small farmers this process involved sets of exchange relations, often, but not always with large maize farmers. Thus adding a column on credit to the data in Table 5.13 above shows that exchanges over land and labour also included help with finance in several cases (Table 5.15). While these exchanges were set in the context of commoditized production (including large farmers' access to bank credit), they frequently involved forms of patronage and ties based on mutual, if unequal, benefit. Small farmers might also take steps to diversify their financial arrangements because they could not or did

not want to rely on a single source. Taking small loans from different people meant that even if harvests were bad, one creditor at least would probably be satisfied.

Table 5.15 Sources of finance among small farmers involved in land and labour exchanges with large maize farmers, Chichicaste and Jutiapa, primera 1986-87

<i>Farmer</i>	<i>Source of land</i>	<i>Source of wage employment</i>	<i>Source of finance</i>
<i>AM</i>	Father (Future: Landowner 1)	Landowner 1	Had loan of inputs from Landowner 1
<i>RG</i>	Landowner 2	Landowner 2	Had loan of inputs from Landowner 2
<i>JAC</i>	Landowner 2	Landowner 2 Landowner 3	Made pre-harvest sales to a medium farmer
<i>JC</i>	Landowner 4	Landowner 4	Made pre-harvest sales but also had 'help' from Landowner 4
<i>JS</i>	Landowner 1	Landowner 1	Had loan of inputs from Landowner 1
<i>GF</i>	Landowner 5	Other	DRI
<i>RZ</i>	Brother	Brother	Financed production from wage work

Although many farmers wanted to participate in the project, obtaining credit from the DRI was not necessarily an advantageous alternative. Institutional credit of this kind - which was directed towards increasing output - involved a process of fairly detailed costing, perhaps including the use of agricultural inputs or processes farmers would not have contemplated previously (such as mechanized ploughing, using biological inputs, or increasing the use of wage labour), or would not necessarily have purchased in the quantities assumed in the costing. Extensionists in Chichicaste and Jutiapa estimated the cash costs of production for farms using '*técnica básica*' at about Lps430-500/Ha, while for '*producción tecnificada*' they might be over Lps1,000/Ha. However, as the next section shows, although use of machines and biochemical inputs varied with farm size, nearly all farmers used some mechanization, weedkiller and fertilizers, which made the extensionists' distinctions rather vague. Furthermore, the cost of labour was usually included in loans, suggesting that there was an element (implicit or otherwise) which

contributed to the consumption needs of the farmer and family labour, given that hired labour only provided part of the total labour requirements (see, for example, Table 5.12).

Thus the amounts lent to farmers could be quite high, as indicated by the estimates from interviews and data in agricultural extensionists' records shown in Table 5.16. All amounts over Lps200/Ha came from institutional credit sources, and all the loans to large farmers came from BANADESA. The remainder were from the DRI. The data in the table show that those receiving credit from the DRI were estimated generally to have higher loans per hectare than farmers being financed by BANADESA. Although the latter might have been able to finance part of their production costs from their own capital, medium and some small farmers could well have been encouraged to take out greater loans than they might have wished, and that in practice were difficult to repay. Small farmers in particular could easily be landed with a large debt to a single source of finance if their returns to maize production were lower than expected. For all farmers, the size of these loans, in repayment terms, was considerably higher than indicated in the table when interest was taken into account.

Table 5.16 Estimated amounts of credit (all types, excluding interest) received per hectare by small, medium and large farmers interviewed in Chichicaste and Jutiapa, primera 1986-87 (Lps/Ha)

<i>Farm size grp. (Ha)</i>	<i>No. receiving a loan</i>	<i><100</i>	<i>100-200</i>	<i>200-300</i>	<i>300-400</i>	<i>400-500</i>	<i>500-600</i>	<i>600-700</i>	<i>700-800</i>	<i>800+</i>
<i><1-5</i>	7	2	1	0	0	0	0	0	2	2
<i>5-50</i>	9	0	0	0	1	1	2	0	4	1
<i>50+</i>	6*	0	0	0	0	2	1	0	1	0

* There were two large farmers for whom these data were unclear and are not included.

5.3.1 Conclusions

Interviewing farmers in Jamastrán suggests that there was a tension for small farmers between the social relations of survival (through access to informal finance and loans of

agricultural inputs, usually based on patronage) and the social relations of intensification (based on the exigencies of and problems associated with access to institutional credit). By this I mean that to engage in simple reproduction at existing levels of consumption and sales, small farmers relied on their relations with those who had land, relative wealth and access to institutional finance. If, however, such farmers wished to break from those relations, they would be required to apply more cash, agricultural inputs and labour to their existing land and would be dependent on finance from an institutional source. As explained in Chapters 6 and 7, in practice, small farmers' (and some medium farmers') strategies to ensure different forms of security and guard against insecurity often left them in situations where they would have to make sales of maize needed for consumption to pay debts. These sales applied as much to those who had loans from institutional sources as to those who had informal credit. Although indebtedness was not just a small farmer problem, the margins of survival for small farmers were much narrower than for medium and large farmers. For this reason, it is also understandable that farmers tried to diversify risk if they could, a possibility which was not necessarily open to those receiving institutional credit.

5.4 Access to technologies

As well as being an issue of policy concern (Chapter 2), access to technologies in maize production is a point of differentiation between types of farmer. Thus analysis of their use can help explain social relations in the countryside. Lenin's classic study of the development of capitalism in Russia (1956, 1977) showed how important it was to take instruments of labour and techniques of production into account, as well as land and labour, to understand different types of production. My analysis here serves to show the relations linking farmers as well as the differences between them. Thus, on one hand, farmers were in fact differentiated by farm size in their access to technology. On

the other hand, small as well as medium farmers used a surprising amount of purchased inputs in maize production. These findings question assumptions made in some analyses of technology use in Honduras¹⁷. The striking feature about technology use by small farmers in Chichicaste and Jutiapa is that technologies were frequently made available through their relations to large farmers, as well as, in a few cases, access to institutional credit.

Since one of the aims of the DRI was to improve output and productivity by increasing the use of new technologies and machinery in production, one might expect to see differences in technology use between those who received credit in the DRI and small and medium farmers who were neither part of this programme nor received bank credit. However, although there were some differences, they were not as great as I anticipated. I argue that this phenomenon can be, at least partly, explained by relations of patronage between small and large farmers, and, in some cases, between members of families.

Although there is variation in techniques of production between farmers (as well as between regions of the country, depending on resources, climate and terrain) cultivation practices have some identifiable similarities. I briefly describe the basic elements of maize cultivation for the Jamastrán area and then analyse the technologies used in practice by Chichicaste and Jutiapa farmers.

Land preparation can involve several processes. Some farmers cut down the weeds and stalks from the previous season using a machete, and then burn them, or they may

¹⁷ For example, Aguirre and Tablada (1989) thought that the adverse terms of trade between maize and new technologies which they analysed in the 1980s affected only medium and large farmers because it was assumed that only they had widespread use of such commodities in production (see Chapter 2, Section 2.3.3(ii)).

apply weedkiller. Extensionists encourage farmers either to put animals in the fields to keep unwanted plants down as well as fertilize the land with dung, and/or to plough in last year's growth. Some farmers were doing the latter in Chichicaste and Jutiapa. Ploughing and furrowing is done with oxen or tractor on relatively level ground; on hillsides, the ground is broken and furrowed with a hoe. Equally, sowing is usually carried out using oxen, although large farmers may use tractors. On hilly ground, (or if the farmer cannot afford to hire oxen), a hoe and *chuzo*¹⁸ might be used. A month after sowing, the maize plants are banked up and urea is applied. Weedkiller might be used or weeds might be removed with a hoe. At this time, insecticides would be applied if necessary. If the farmer plans to sow beans to grow up against the maize plants, he might also put down slug pellets. Usually, when the maize cobs are grown, the stalks are bent and the leaves removed with a machete or by burning so that the bean plants can use the maize stalks as supports. If beans are not going to be sown, the stalks might still be bent and the cobs left on for some time. Others who want to harvest early might not do this. If beans are planted against the maize, the maize is not harvested (by hand) until the bean plants have been pulled up to dry. Thus a maize crop sown in May/June might not be harvested until December/January. The maize cobs are then shelled, often by machine as well as by hand.

Technologies used in these cultivation practices in Chichicaste and Jutiapa varied by farm size, particularly between small and medium farmers, on one hand, and large farmers on the other. There were also some differences between the two villages. This differentiation between farmers and villages is immediately more noticeable in the degree of mechanization than in the use of biochemical inputs. For example, from

¹⁸ *Chuzo*: a hollow piece of wood about 1.5m long and 5cms wide with a mechanism to open the hole at one end and deposit the seed in the ground (OEA, 1982, 18).

Table 5.17, it can be seen that in Chichicaste, only 3 out of 7 small farmers and only half of the medium farmers interviewed hired the use of tractors to plough the land, whereas the large farmers all used tractors, whether their own or hired. (Very few farmers actually owned tractors, and those who did hired them out to other farmers.) The remaining small and medium farmers used a combination of oxen (often hired) and tractor or only oxen (with one small farmer using a hoe). However these data contrast with those from the Jutiapa interviewees, who all used a tractor to plough the land, regardless of farm size. Sowing was mostly done by oxen across all farms in both villages, although again, all the large farmers in Chichicaste used a tractor, as did the largest farmer interviewed in Jutiapa. Mechanized shelling was carried out by 15 out of 16 farmers in Chichicaste and 8 out of 10 in Jutiapa. Again, few farmers had mechanized shellers and those who did hire them out. Among my interviewees, only one large farmer in each village had both a tractor and a sheller. In both villages, there seemed to be only one or two tractors that were readily available for others to hire.

Table 5.17 Use of mechanized inputs by small, medium and large maize farmers interviewed in Chichicaste and Jutiapa, primera 1986-87

		Number of farmers preparing land with the use of				Number of farmers sowing maize with the use of			No. using
Farm size group (Has)	No. in group	Hoe	Oxen only	Oxen + tractor	Tractor only	Chuzo	Oxen	Tractor	Mechd sheller
Chichicaste									
<1-5	7	1	2	1	3	2	5	0	6
5-50	6	0	0	3	3	0	6	0	5
50+	3	0	0	0	3	0	0	3	3
Total	16	1	2	4	9	2	10	3	15
Jutiapa									
<1-5	5	0	0	0	5	0	5	0	2
5-50	4	0	0	0	4	0	4	0	3
50+	3	0	0	0	3	0	2	1	3
Total	12	0	0	0	12	0	11	1	8

Use of biochemical inputs shows some similar patterns of differentiation between farmers, although there were fewer observable differences between the two villages.

For example, urea was universally used by all farmers in both villages (Table 5.18), although in slightly varying amounts as we shall see. By contrast, chemical fertilizers were used rarely by small and medium farmers, although applied by all the rich farmers. All the large farmers interviewed also used weedkiller and purchased improved seed. In Chichicaste, very few small farmers bought improved seed, although more than half were known to use weedkiller. Most medium farmers used both. In Jutiapa, most small as well as medium farmers used both. However, inferences from the seed data should be treated with caution, as it was common practice to buy seed every other year and several farmers interviewed had selected seed from last season's crop, while others might not have been planning to buy seed the following year.

Table 5.18 Use of biochemical inputs by small, medium and large maize farmers interviewed in Chichicaste and Jutiapa, primera 1986-87

<i>Farm size group</i>	<i>Number in group</i>	<i>Used weedkiller</i>	<i>Used improved seed</i>	<i>Used urea</i>	<i>Used chemical fertilizer</i>
<i>Chichicaste</i>					
<1-5	7	4*	1	7	2
5-50	6	5	4**	6	4
50+	3	3	3	3	3
<i>Total</i>	16	12	8	16	9
<i>Jutiapa</i>					
<1-5	5	4	4	5	1
5-50	4	3	3	4	1
50+	3	3	3	3	3
<i>Total</i>	12	10	10	12	5

* Two data sets unknown

** One data set unknown

While these data establish that the patterns of mechanization and type of fertilizer use varied by farm size, were there indications that the *quantities* of agricultural input use, such as seed or weedkiller, also differed between small, medium and large farmers? The data in Table 5.19 confirm that in general, with increases in farm size, there were increases in quantities of biochemical inputs used, although medium farmers appeared to use less weedkiller than small farmers in Chichicaste and less weedkiller and seed than small farmers in Jutiapa. It is however clear from these data that large farmers

used considerably more of *all* biochemical inputs than other farmers. Although not as clear, my interview data indicated that these differences also existed in the use of machines, for example, in the number of ploughings.

Table 5.19 Average quantities of biochemical inputs used by small, medium and large maize farmers interviewed in Chichicaste and Jutiapa, primera 1986-87 (Kgs/Ha)

<i>Farm size group (Has)</i>	<i>Weedkiller</i>	<i>Seed</i>	<i>Urea</i>	<i>Chemical fertilizer</i>
<i>Chichicaste</i>				
<i><1-5</i>	1.98	2.1	123	19
<i>5-50</i>	1.84	9.7	127	43
<i>50+</i>	2.2	17	130	108
<i>Jutiapa</i>				
<i><1-5</i>	1.56	13.3	130	13
<i>5-50</i>	1.13	10.7	130	16
<i>50+</i>	1.78	19.8	152	87

As stated at the beginning of this section, access to credit could enable maize farmers to purchase technological inputs and potentially use greater quantities than other farmers. As all the large farmers received credit, and as it has been established that their use of inputs was greater than for other farmers, it is more instructive to compare small and medium farmers who either did not receive credit, or who obtained it through the DRI (Table 5.20).

As one might expect from previous data, there was greater use of chemical fertilizers among both small and medium farmers obtaining institutional credit than those without. In Chichicaste, there was also apparently greater use of urea among credit-receiving small farmers, although less so among the medium farmers. The data for medium farmers are, however, idiosyncratic because they include one indebted farmer among DRI credit-recipients who was trying to keep his costs of production as low as possible, and the 'non-credit' group consisted of only one farmer who in fact had obtained credit from BANADESA. The seed data are inconclusive, although, again, these data were affected by the common practice of only buying new seed every other

season. Rather more weedkiller was used by credit-recipients among both small and medium farmers in Jutiapa than among those who had no institutional finance. The data are more inconclusive for Chichicasté which may be explained by strategies to substitute labour with using weedkiller in some cases, either because farmers themselves had to do wage work, or because using weedkiller was cheaper than the amount of working hours required to hoe the weeds on a particular farm.

Table 5.20 Relationship between access to credit from the DRI and average amount of biochemical inputs used among small and medium maize farmers, primera 1986-87 (Kgs/Ha)

<i>Farm size group (Has)</i>	<i>Credit status</i>	<i>Weedkiller</i>	<i>Seed</i>	<i>Urea</i>	<i>Chemical fertilizer</i>
<i>Chichicasté</i>					
<i><1-5</i>	<i>Non-DRI</i>	1.98	14.6	106	0
	<i>DRI</i>	1.95	0	166	65
<i>5-50</i>	<i>Non-DRI</i>	2.15	0	130	0
	<i>DRI</i>	1.78	19.6	126	51
<i>Jutiapa</i>					
<i><1-5</i>	<i>Non-DRI</i>	1.3	16.67	130	0
	<i>DRI</i>	2.6	8.1	130	33
<i>5-50</i>	<i>Non-DRI</i>	.7	0	130	0
	<i>DRI</i>	1.3	14.3	130	22

I do not present the data on access to credit, farm size and mechanization because clear patterns cannot be found, although a number of conclusions can be drawn. The fact that all Jutiapa farmers interviewed used (hired) tractors for ploughing irrespective of farm size or whether they received institutional credit showed that, even if tractors were used more intensively by large than small farmers, tractor use as such was not a source of differentiation. However, information from interviews in Chichicasté also indicates that tractors were used by some small non-DRI farmers although a greater range of techniques of preparing the land and sowing were evident among small farmers as a whole. Some practices were related to the type of land held (for example using hoes or oxen for breaking up the soil on hilly ground), others to the lack of resources of the farmer (using oxen rather than tractor). However, the apparently

diverse patterns in these data suggest that there were different strategies among some small farmers to gain access to different types of technology even though they did not usually have institutional credit.

Although small farmers without institutional credit came off worst in securing access to purchased technological inputs, use of such inputs was still generalized. Thus, the critical issue for small farmers without institutional credit was how to secure access to them. One mechanism was to use their networks with (and the patronage of) large maize farmers, and borrow inputs until they could be repaid at harvest time. Adding the data on exchanges over technological inputs among small farmers not receiving any institutional credit to those already documented in Table 5.15 in the previous section clearly demonstrates this point (Table 5.21). Some farmers were dependent almost exclusively on a single landowner/maize farmer for their land, technical inputs as well as a source of wage work. Others had diversified their networks, although there were a limited number of farmers from whom tractors could be hired. For example, Landowners 1 and 4 had tractors, but Landowners 2 and 3 did not. Thus RG hired a tractor from Landowner 4 (who also had a mechanized sheller), although he obtained land and some inputs from Landowner 2, as well as doing wage work for him. It should be noted that a crucial component of these exchanges was that the large farmers themselves obtained considerable credit and were able to buy supplies in bulk, as well as, in some cases, being able to buy machines which could then be hired out.

A second mechanism was that one or two farmers were able to use their relationship with other family members to obtain some inputs (see also Table 5.21). One Jutiapa farmer in particular was dependent on his brother for land, finance and animal traction, but went to one of the main sources of tractor hire - a local landowner and maize farmer - to hire a tractor to plough his maize field. Although not shown in the table, it was also notable from interviews that relations between brothers, fathers and other

relatives played a role in gaining access to land and inputs, as well as labour, for medium and large farmers too.

Table 5.21 Exchange networks of small maize farmers not receiving institutional credit in Chichicaste and Jutiapa, *primera* 1986-87

Farmer	Source of							
	Land	Wage work	Oxen	Tractor	Mechd. shelling	Weed-killer	Seed	Urea
<i>Chichicaste</i>								
AM	L1 (1987)	L1	L1	L1	L1	Other	L1	L1
RG	L2	L2	L2	L4	L4	L2	None	L2
JAC	L2	L2 L3	L3	None	None	Other	None	Pre-harv sales
JC	L4	L4	None	None	L4	Other	None	L4
JS	L1	L1	L1	None	L1	Other	Other	Other
<i>Jutiapa</i>								
RZ	Broth.	Broth.	Broth.	L6	None	Other	Other	Other
RM	N/A	N/A	Broth.	L6	None	Other	Other	Other
FC	N/A	N/A	L6?*	L6?*	None	Other	L6?*	Other

Note: L = Landowner; Broth. = Brother; N/A = Not Applicable

* FC implied he made pre-harvest sales to this landowner to pay for these inputs.

Finally, several small farmers resorted to pre-harvest sales. Not all the pre-harvest sales show up in Table 5.21 because farmers were not always precise about how they had used the money from these sales (see however the footnote to the table). A notable absence here is that JC in Chichicaste had claimed to have sold 12 sacks of maize on a pre-harvest basis to pay for inputs. Although this money may well have gone towards paying wage labour on his own farm, almost all his other inputs came from Landowner 4 with whom he may therefore have had an extensive debt¹⁹.

Overall, these different strategies meant that the interlinkages between the activities of small and large farmers were also based on small farmers' need to buy commodities to try and maintain output and productivity (especially if part of the farmers' labour was

¹⁹ Farmers were often cautious about specifying from whom they had received a loan or to whom they had made pre-harvest sales.

being used elsewhere). Thus small farmers were in considerable social and economic debt to the large farmers to whom they were so linked.

In general, large farmers had a key position in the technical conditions of maize production and their social and economic position was not only important for small farmers. Those who had access to tractors and shellers, for example, were able to hire out their services to many different types of farmer, including other large farmers, enhancing the economic status of particular large farmers in the villages (Table 5.22). Table 5.22 indicates how many times each landowner who possessed oxen, tractors or shellers hired them out to interviewees. Given that the number of interviewees is a relatively small sample from both villages, the data cannot indicate the extent to which an oligopsony existed, although in Chichicaste, it was well-known that Landowner 1 and Landowner 2 were the main sources of tractor hire. In Jutiapa, Landowner 6 was cited as someone who was a key source of machine hire. One of the large maize farmers I interviewed (Landowner 8) also hired out his tractor regularly. However, although many other farmers used large maize farmers as sources of machine hire, and personal links with them would have been important to procure the services, the relationship was fundamentally a cash transaction and qualitatively different from that between the small and large farmers where other types of exchange occurred.

Table 5.22 Sources of machine or animal hire among small, medium and large farmers interviewed in Chichicaste and Jutiapa, *primera* 1986-87

		Chichicaste					Jutiapa				
		Number of farmers hiring oxen or machines from these sources					Number of farmers hiring oxen or machines from these sources				
Farm size gtp	No. in grp	L1	L2	L3	L4	Fam-ily	No in grp	L6	L7	L8	Fam-ily
<1-5	7	2	1	1	4	1	5	3	1		2
5-50	6				4		4	1			
50+	3	1			1	1	3	1		1	1

Note: L = Landowner; not all farmers are accounted for in these data; in addition, some farmers used more than one source.

5.4.1 Conclusions

Maize production in Chichicaste and Jutiapa in the mid- to late 1980s required cash to purchase inputs and hire machines (as well as to pay for labour), among all farmers. How finance for technological inputs was obtained and how it could be repaid were critical issues. For small farmers, loaning or obtaining inputs from their employers and patrons to be repaid at harvest was key to maintaining their production, whereas access to institutional credit played an important role for medium and large farmers. While the quantity of biochemical inputs used among small and medium farmers seemed to have some association with access to rural credit, differences in mechanization seemed to vary more with farm size and type of land rather than access to credit.

5.5 The social relations of maize production: summary and conclusions

I now summarize the main findings of this chapter and draw some preliminary conclusions about analysing class relations in maize production. With respect to land, it is evident that private forms of land tenure, including renting land, predominated among the farmers I interviewed. However, the privatization of land tenure did not preclude other forms of access to land, whether through occupation of national land or obtaining land through family links. It also included transactions over rented land which were based on personalized as well as commoditized relations, particularly between small and large farmers.

This combination of personalized and commoditized relations between small and large farmers also characterized exchanges between them over access to labour, finance and agricultural inputs. Moreover both personalized and commoditized elements were often evident in the same transaction. Thus, landowners who loaned or rented out land would frequently employ the tenants as workers, would loan them agricultural inputs to

be repaid at harvest and might even take payment from them in the form of pre-harvest sales. Large maize farmers in fact had an important role in the villages with respect to their control over machines and their access to bank credit which enabled them to purchase agricultural inputs in bulk. Their patronage could be very useful for both small and medium farmers in securing the means of producing maize.

The processes of maize production were highly commoditized even though they included personalized exchanges. Even among small farmers, as well as the existence of private property in land, rents were paid; labour was hired; farmers sold their own labour; seed, fertilizer, weedkiller, and insecticides were purchased; machines were hired; and, as Chapter 6 shows, a considerable proportion of the maize produced was sold. This commoditization was reinforced by rural credit, both that supplied by banks to large (and some medium) maize farmers, and that supplied by rural credit schemes such as those operated by the DRIs. Credit was made available for the purchase or hiring of agricultural inputs and the hiring of labour. However the amounts estimated could put farmers in difficult situations when it came to repayment. Therefore a corollary of commoditization was debt. Chapter 7 shows that many farmers' capacities (and strategies) to repay debts were limited and involved selling maize they needed for personal consumption.

My analysis thus shows that commoditized, personalized and non-commoditized processes of exchange were not mutually exclusive. On the contrary, they worked hand in hand as part of farmers' strategies for survival and accumulation. That there was space for these processes to co-exist resulted from the unequal access to resources and maize farmers and the hierarchical nature of social relations.

Analysing the social relations of access to land, labour, finance and inputs also shows how processes were interlinked in maize production. However, I do not claim that

these relations were identical to or had the prevalence and complexity of interlinkages analysed in other parts of the world such as India (Chapter 1, Section 1.7). Furthermore, the outward nature of the ties I have analysed often had the appearance of commoditized relations, and the personalized elements of the transactions were often implicit and not superficially observable.

Obtaining (and sustaining) access to resources for maize production thus involved a complex and contradictory set of processes. For many farmers, some of them involved structural obstacles to obtaining the resources for production, such as unequal land distribution and control over land, or institutional difficulties in obtaining credit. Other processes concerned strategies for survival which had contradictory effects. For example, the high rates of interest paid in pre-harvest sales meant that farmers would either have less maize to eat after harvest or less cash income than if they had been able to keep that maize for consumption or sell it in the market (see Chapter 6). The strategies to produce maize also involved different kinds of risk, whether in personal relations with other farmers, or the risk of taking too high a loan to intensify production. Among small farmers, whose margins of survival were relatively narrow compared with other farmers, risk was often spread in different directions - combining own and rented land, and using different landowners as sources of loans, employment or inputs. In some respects, the highest risks were experienced by medium farmers with institutional credit as large debts could seriously undermine their capacities to continue producing maize.

This analysis provides new insights into understanding social relations in the Honduran countryside. I have shown, for example, that class cannot be defined merely on the basis of farm size. Key in analysing class relations (and how they change) is an understanding of how producers obtain access to resources and labour, and the nature of the exchanges they engage in with each other to do so. Furthermore, although the

market is an important and generalized mechanism of exchange, personalized relations are used to protect class positions as well as acting as a means of survival. Some of the relations I have analysed in this chapter may have involved exploitation (Chapter 1, Section 1.5). However the line between exploitation and mutual, but unequal, assistance can be difficult to disentangle. Finally, this analysis has also demonstrated that using the categories 'capitalist' and 'peasant' would not have been appropriate to delineating the social relations in maize production, nor particularly useful in understanding its dynamics.

CHAPTER 6

REPRODUCING MAIZE IN EL PARAÍSO: VULNERABILITY, SURVIVAL AND ACCUMULATION

Introduction

In this and the next chapter, I argue that different types of indebtedness are one of the most important processes in undermining farmers' abilities to keep enough maize for their own consumption and to reproduce and expand maize production. As well as illuminating the nature of social relations which surround maize production and its reproduction, this argument, and the findings that substantiate it, question policies which attempt to increase production and productivity in the countryside through rural credit without any other changes to social relations. A much more careful assessment of the dynamics (and difficulties) of reproducing maize is required, as well as the potential effects of financing the commoditization of production.

Debt can arise for different reasons and in different ways. Certain types of debt are based on exchanges between farmers (including within families) over access to resources for production. Others arise from difficulties in paying back institutional loans. One consequence is that some farmers have to sell maize needed for household consumption, which increases their financial hardship when they have to buy maize before the next harvest. Another is that many farmers are unable to obtain net cash incomes from maize sales after covering cash costs and loans. Furthermore, debt can potentially pile up over time, threatening farmers' access to further credit as well as their endowments in means of production and entitlements in consumption and income. However, my data suggest that many of the farmers I interviewed required finance

from other economic activities or loans from informal or institutional sources to sustain maize production.

In these circumstances, personalized, as well as non-commoditized, relations can actually assist the reproduction of maize production for many farmers, even though increasing output might be impeded. Such farmers face what I call 'secure stagnation'. Secure stagnation means that farmers continue to produce maize even if they make little money from it, are often unable to keep sufficient maize for their own needs, and may only be able to sustain their production by permanent debt relations and obligations with a patron, as well as by doing wage work. Thus, although 'secure stagnation' involves ways for such farmers to continue producing maize, supplying their own maize needs from production is precarious. Those who try to increase their output and productivity for their own needs and for the market through access to institutional loans are involved in what I term 'insecure transformation'. Insecure transformation characterizes the production of the more individualised farmers who may often face difficulties in repaying loans, either because of severe harvest losses or because their loans were higher than their capacity to meet payments. Insecure transformation occurred among some small and medium farmers but large farmers could also face indebtedness. Large farmers did, however, have a wider range of options and greater resources for covering debts.

Chapter 6 analyses the problems faced by farmers in obtaining access to adequate maize for household consumption, and in making a cash income from maize. Chapter 7 takes a closer look at indebtedness and social relations affecting the prices received for maize by different types of farmer. In drawing some conclusions about farmers' strategies for sustaining production, I also suggest how understanding problems in reproduction enriches our understanding of the social positions of maize farmers.

A methodological note: farmers often gave vague answers to questions about costs of production, output and prices because this information could pinpoint their economic position in ways which might have felt threatening - whether they were doing well or in debt. Hence the discussion in this and the next chapter assumes that there are margins of error. When there is serious doubt about data, it is explained. In addition, as characterizes the methodology of this thesis, weight is given to subjective data as well as objective measurement, in particular to farmers' own perceptions of their situations and the difficulties that beset them. This is particularly important when apparently objective data are misleading or uncertain.

Finally, as in Chapter 5, when it is important to do so, I distinguish between the data from the two villages, and when not, I combine them.

6.1 Access to maize for consumption

This section argues that keeping enough maize from harvested output for direct consumption could be particularly problematic for small farmers, but could also be difficult for some medium farmers. The problem of retaining adequate quantities of maize lay in the debt relations into which most small farmers entered as well as the tight margins of these farmers when faced with crop failure. Sales entered into to cover debts from cash costs of production left farmers with shortages for their own consumption.

Maize farmers in Honduras have often been characterized by whether they produce maize primarily for their own consumption or for the market. For example, a USAID study which analysed the characteristics of small farms (in this case, those under 35 Has) producing predominantly maize and beans stated that 'The destination of output is probably the most useful measure of the extent of orientation towards subsistence

production' (1978c, 15; my translation). This study found regional variation in how much maize was sold (in the El Paraíso area, it was estimated at an average of 25%). There were also differences by farm size. Global estimates suggested that farms with more than 5 Has of land tended to sell about half their output, whereas the smallest farms in the study (less than 3 Has) sold less than 20%. A later study by Aguirre and Tablada (1988) characterized farmers with under 5 Has as those who produced to eat, those with 5-100 Has as those who produced to eat and sell, and farmers with more than 100 Has as those who only produced maize for commercial reasons. While this broad characterization may have some relationship to farmers' intentions, my data below show that different practices come into play within farm size groups and should be taken into account in understanding farmers' consumption and sales strategies. For example, my interviews found no farmers who produced maize only for direct consumption. Many small farmers might have liked to keep most of their harvest for domestic consumption but were unable to because they had to repay loans. Furthermore, even the smallest farmers were integrated into the cash economy and needed cash income from maize to pay for other consumables as well as production inputs.

Thus, even though they are based on small samples, my data indicate that the destination of maize output is both more complex and more commoditized than often thought. For example, looking at data on sales, in Chichicaste, all but one of the interviewees sold more than 60% of his maize (see Table 6.1). In Jutiapa, the range was more dispersed, but only two sold less than 50% of output. These two small farmers sold only 31% of their maize, approximating the USAID findings.

The data show some variation between farm size groups in the two villages. Thus, calculating the average proportion of maize sold at harvest by farmers in each farm size group, I found that 78% of the maize produced by small farmers was marketed in

Chichicaste while 70% was sold in Jutiapa (final column of Table 6.1). For medium farmers, post-harvest sales averaged 83% of output in Chichicaste and 63% in Jutiapa. For large farmers, the figures were 66% and 81% respectively. These averages are high compared with the data sources cited above. However, they also indicate that large maize farmers also kept maize for their own use as well as producing commercially¹.

Table 6.1 Maize sales at harvest as a proportion of harvested output among farmers interviewed in Chichicaste and Jutiapa, *primera* 1986-87

		Percentage of output sold before and at harvest*						
Farm size group (Has)	Number in group	<50	50-60	60-70	70-80	80-90	90-100	Propn. of output sold by farm size group (%)
Chichicaste								
<1-5	7	1		1	1	2	2	78
5-50	6			1	1	3	1	83
50+	3			1		2		66
Jutiapa								
<1-5	5	2	1		1		1	70
5-50	4		2		2			63
50+	3				2		1	81

* Includes pre-harvest sales and any rent payments in maize

Did this apparently high level of sales mean that many farmers had considerably more output than they needed for their own requirements or, on the contrary, that they did not have enough maize to meet consumption needs? Data on consumption needs were collected by asking farmers to estimate what they needed for their 'gasto'. The phrase *gasto* was used by farmers to describe the food needed for household members, any maize required for animal fodder, and might also include a store of maize for small

¹ In fact, the relatively low average proportion of maize sold for large farmers in Chichicaste resulted from the considerable quantity of maize retained by one farmer in particular. Some of this would have been sold at a later date, however.

sales throughout the year when cash might be needed. Many producers also kept seed grain from their harvests, although with the use of new grain varieties, seed was only retained in alternate years. In addition, the *gasto* could include maize to feed workers, especially where permanent labour was employed, but there seemed to be no hard rule regarding the provision of food to permanent employees or temporary workers.

Comparing the *gasto* with what farmers had stored rather than sold after harvest gave an estimate of the extent to which consumption needs were being covered from own production. The results showed that 9 farmers out of 28 had consumption deficits in all - 6 small farmers and 3 medium farmers (Table 6.2). Seven of the 9 were in Chichicaste, reinforcing the impression of relative poverty among maize farmers in this village compared with Jutiapa. However, the reasons for these differences lie partly in the rate of pre-harvest losses and lower output among small farmers in Chichicaste than in Jutiapa, as well as other factors which I shall come to.

Table 6.2 Maize available for household consumption after harvest sales, Chichicaste and Jutiapa, *primera* 1986-87

Farm size group (Has) (1)	Number in group (2)	Maize deficit to stated needs after harvest sales (3)	Enough maize for stated needs after harvest sales (4)	Maize surplus to stated needs after harvest sales (5)
<i>Chichicaste</i>				
<1-5	7	5	1	1
5-50	6	2	3	1
50+	3			3*
<i>Jutiapa</i>				
<1-5	5	1	4	
5-50	4	1	1	2
50+	3		1	2*
<i>Total</i>	<i>28</i>	<i>9</i>	<i>10</i>	<i>9</i>

* These farmers stated that they had left the exact amount they needed for their 'gasto'; however, after calculating their likely needs, it was clear that they had surplus maize for further sale - see text.

6.1.1 The problems of consumption deficit farmers

There were several pressures on retaining adequate quantities of maize for consumption. As mentioned, one arose because many farmers experienced pre-harvest

losses, some of them heavy (see Appendix 6.1). These losses resulted from a disease known locally as *maíz muerto*, a type of fungus which attacks the cobs. Extensionists reported that the disease had been common for several years in the area and was associated with the use of improved seeds. Although I found a range of improved seeds being used by farmers, the new varieties and hybrids had introduced a degree of homogeneity in seed type, making crops more susceptible to the spread of such a fungus. Locally produced and selected seeds (*maíz criollo*) which were more disease resistant (but gave lower yields) were increasingly uncommon.

Thus almost all the farmers in both villages with consumption deficits after harvest sales were known to have lost considerable quantities of maize because of *maíz muerto* (Table 6.3, Column 3). Two small farmers in Chichicaste had lost half their potential harvests, as had one medium farmer. A further medium farmer in Chichicaste also admitted to high, but unquantified, losses. For one of the small farmers, losses apparently amounted to about half the stated household needs.

Table 6.3 Characteristics of consumption deficit farmers in Chichicaste and Jutiapa, post-*primera* 1986-87

Farmer (1)	Total output deficit (output minus food needs) (2)	Propn. of maize crop lost through disease (%) (3)	Would still have had food deficit with no losses (4)	Had to make pre-harvest sales (5)	Other maize farmers in or related to house-hold (6)
<i><1-5 Has farm size group (small farmers)</i>					
AM	Yes	40	Yes	No	Father
JAC	Yes	50	Yes	Yes	Sons?*
JC	No	29	No	Yes	None
JS	No	50	No	No	None
GF	No	n.d.	n.d.	No	None
FC	No	31	No	Yes	Sons?*
<i>5-50 Has farm size group (medium farmers)</i>					
FR	No	50	No	No	Sons?*
MA	No	High	n.d.	No	None
CU	No	33	No	No	None

n.d. = no data

* These sons (and sons-in-law) had their own means of maize production or separate farms but may have contributed to the father's household

Had these maize losses not occurred (or been low), the proportions of harvest retained for consumption might have been higher for many farmers interviewed. However, it would be wrong to conclude from this that the problem of retaining maize for consumption was simply a technical one. The precariousness of the technical conditions of crop production was combined with the difficult social conditions under which many farmers tried to make a living and provide their consumption needs from maize.

Thus, another problem for deficit farmers was how maize was distributed and used rather than the absolute quantities produced. On one hand, interviews revealed that only two small farmers among those with maize consumption deficits (both in Chichicaste) were found actually to have *produced* less than their stated needs (Table 6.3, Column 2), and would still not have met their requirements even if they had not lost maize (Column 4). On the other hand, for the three farmers who made pre-harvest sales (Column 5), data from interviews indicate that two would not have had a consumption shortfall if they had not had to hand over sacks of maize to their creditors at harvest-time.

That consumption deficit farmers experienced pressures from different sources (affecting how much maize they could keep for direct consumption, as well as their ability to purchase maize when their own supplies were finished) is illustrated by the following accounts:

- (i) AM was not the only maize producer in the household but his total output constituted just over 50% of household maize needs. AM's father also rented land and did wage work and may have been able to produce the remainder of the maize needs (Table 6.3, Column 6). However, AM had had high losses from *maíz muerto* and his father may have had the same problem. He had also sold a high proportion of his maize because he had been provided with inputs for farming from the large farmer he worked for and would have had to repay them at harvest. The household comprised 17 people and it was stated by

women in the family that there was an overall consumption shortfall. How was this deficit going to be paid for? Although AM's sales were calculated to cover his costs of production, he would have had difficulty contributing to maize purchases from this source of cash income.

(ii) JAC had a maize consumption deficit before he made any maize sales. Having received pre-harvest credit, he also had to pay his debts in maize. Although this farmer may have been exaggerating his situation, it was clear that other sources of income were going to have to finance maize purchases. It was however possible that adult sons who had moved out of the parental household and had their own maize production might have contributed to the welfare of their parents (Table 6.3, Column 6).

(iii) JC was JAC's son. His case provides a paradoxical position of a farmer who apparently seemed to sell more than he needed to to cover any debts arising from production costs and was left with a deficit of maize for household consumption. JC also had a pre-harvest debt to repay, but this does not account for the logic of this strategy. The only explanation was that he urgently needed cash for other things at the time of harvest. In any event, at the time of interviewing, he had used up the maize he had kept for household consumption, perhaps because he was using his maize to assist his father, JAC.

(iv) The case of JS presents a classic picture. In spite of losing half his maize crop, he produced more than enough maize for household consumption but was not actually able to retain it. The maize sold would have been little more than enough to pay rent on his land (which according to JS was three sacks of maize [roughly, 270 kgs] or the cash equivalent). He would also have had to pay for mechanized inputs loaned from the farmer from whom he rented land. Thus he would have had to finance maize purchases from other income sources such as his wage work.

On one hand, consumption deficit farmers were not necessarily the smallest farmers or those with least resources. Thus one small and one medium farmer with consumption deficits (GF and MA in Table 6.3), who were receiving also credit from the DRI, had insufficient maize to carry them through to the next harvest, as well as being in debt to the project. On the other hand, some farmers would have been able to alleviate their consumption deficits from other consumption or income sources. So, for example, one of the deficit small farmers (FC in Table 6.3) was the elderly head of an extended family

household where survival depended on a combination of farming and wage work and other people would have contributed to maize consumption needs. A deficit medium farmer (CU) had outstanding loans to the DRI but also had several sources of income which he could resort to and would have been able to buy maize.

These deficit stories show the vulnerability of some maize farmers. However, different conditions of production and strategies adopted were combined to try and make up consumption shortfalls. Thus among deficit farmers, there were (a) farmers who had access to very small amounts of land not just for maize but for farming in general and combined their efforts with wage work and close social ties with local landlords; (b) those who were able to combine their production with that of extended family members and were therefore less dependent on the fruits of their individual labour; and (c) farmers who were trying to increase their output by participating in rural credit schemes.

The deficit stories and production strategies are also illustrative of the different exchange relations which the farmers were engaged in and the resulting pressures they were under. Many of the small deficit farmers rented all or part of their land. Fulfilling their obligations to landowners was key to maintaining access to land for future production, even if this resulted in not having enough maize for household consumption. Likewise, paying back institutional and personalized loans was also a means of ensuring access to finance in the future. Thus acquiring maize for household consumption and further cash income - both to pay for maize as well as other needs, including investing in the new crop cycle - was going to have to come from other sources and would depend on these farmers' abilities to make money from other crops and/or wage work, as well as maintaining relations which provided them with access to services and inputs.

What is apparent from these data is that many farmers worked with tight margins. Those who had an ongoing source of land and/or wage work with a landowner could make this unequal relationship part of their reproduction strategy even in times of adversity. But those 'going it alone' with project credit - becoming increasingly individualized and commoditized - could be extremely vulnerable. Thus MA in Table 6.3, who had a young family and insufficient resources to take advantage of his inherited wood and grazing land, had pursued the rural credit option with disastrous consequences because of his severe harvest losses. Possibly JAC, an older man who had a small amount of rented land, did wage work, and had a landlord-patron and sons to bail him out, was in a more secure position, even though his poverty had forced him to sell maize at pre-harvest prices during the sowing period to finance part of his production.

6.1.2 Farmers who met their consumption needs

What characterized the *non*-consumption deficit farmers? They fell into two main categories: medium farmers receiving credit from the DRI, and large farmers receiving bank credit who combined maize production with cattle. The group that fell outside these categories is that of small farmers in Jutiapa who, with one exception, did not seem to have had consumption deficits (Table 6.2). Why should this be so? Why did they seem to be less vulnerable than those in Chichicasté?

Having to sell maize at harvest time seemed to be the biggest obstacle to small farmers being able to retain enough maize for household consumption. There is a considerable range of data on sales for both villages within each farm size group and individual decisions would require specific explanation. However, *on average*, small farmers in Chichicasté sold 78% of their harvests compared with 70% in Jutiapa (Table 6.1). This difference is not remarkable. However the absolute amount of maize actually available

for consumption was affected by the higher output and average yields among small farmers in Jutiapa than in Chichicasté (see Table 6.4). The higher output and yields might have resulted from differences in technical conditions outlined in Chapter 5: better (and flatter) land, different farming techniques using greater mechanization (see Table 5.17), and greater use of improved seed and urea (Tables 5.19 and 5.20). Social conditions for small farmers were also different between the two villages. As discussed in Chapter 5, small farmers in Jutiapa were not generally engaged in exchange relations with landowners which might have impeded their productive capacities (even if they did provide a degree of security for some Chichicasté farmers). Thus small farmers in Jutiapa might have been able to invest more time and attention - and money if they had credit from the DRI - in maize production. In other words, they might not have been subject to the stagnatory influences of being tied into debts and obligations that affected many of the small farmers interviewed in Chichicasté.

Table 6.4 Area sown, output and yields of small maize farmers interviewed in Chichicasté and Jutiapa, primera 1986-87

<i>Small farmers (<1-5 Has)</i>	<i>Average area sown (Has)</i>	<i>Average output (Kgs)</i>	<i>Average yields (Kgs/Ha)</i>
<i>Chichicasté</i>	2.1	3896	1843
<i>Jutiapa</i>	1.9	5055	2727

What about medium and large non-deficit farmers? Although there were some harvest losses among almost all farmers interviewed, irrespective of size, most medium and large farmers in both villages were able to retain enough maize for household needs (see Table 6.2). It is difficult to measure how much of the maize held for the *gasto* was actually surplus to stated needs after sales and repayment of debts, since maize would also be kept for emergencies and small sales to pay for medicines, children's education, and other consumer items during the year. However, there is evidence of real maize surpluses among the large farmers in both villages. In Chichicasté, the large farmers stated that the maize they kept was what they needed for their *gasto*. For all of them,

the amounts are far higher than any basic consumption needs (even taking into account food for permanent workers). In all cases, some maize would have been used for fodder (part of the *gasto*), but it is evident that maize was being stored for future sales. Basically, the large farmers sold enough maize to cover costs and meet immediate cash needs at harvest time, but would then hold on to maize to benefit from price rises later.

6.1.3 Conclusions

The following generalizations can be drawn from the data on the capacities of farmers to produce and retain adequate maize for household consumption:

- (i) small farmers in Chichicaste had difficulties in retaining sufficient maize for household consumption needs;
- (ii) some small/medium farmers in both villages who were trying to increase their output through rural credit also had difficulties; the reasons for this will be explored further in the next chapter;
- (iii) most medium and all large farmers in both villages were able to retain adequate maize for household needs;
- (iv) large farmers appeared to have maize surplus to their overall needs after initial harvest sales.

Analysing maize consumption deficits and unravelling some of the individual stories behind the aggregate data has raised some important methodological issues for understanding the capacities of different types of farmer to provide their own maize needs. Behind the generalizations are complex sets of relations and decisions which the quantitative data alone do not reveal and which affect farmers' real capacities to reproduce maize production. However, it is also often difficult to distinguish the

idiosyncratic factors in data from cases which hide specific but revealing relations and problems. Apparently exceptional cases of individual farmers or differences between the same farm size groups in different locations can also be difficult to interpret. As in my comparison of Chichicaste and Jutiapa small farmers, behind these figures are individual 'stories' as well as (often subtle) differences in technical and social relations which help to explain them. Issues such as the demographic structures of particular households, the extent to which there were other sources of maize or other sources of income to help pay off debts, whether farmers had contracts to sell specific quantities of maize at harvest irrespective of their losses, whether the producer was simply a 'bad' farmer or manager, and so on, also play a part. I now look further at how some of these relations played a role in the extent to which producers were able to make a net cash income from maize.

6.2 Making cash income from maize production

Whether farmers make cash income from maize production affects their capacities to finance other aspects of daily life. It also affects the extent to which farmers can purchase inputs for maize production in the next season without resorting to loans, or can reduce the proportion of costs that is covered by loans. This section argues that, for many farmers, cash income from maize was extremely variable, and for many it was a low or negative return to cash costs of production as well as to farmers' labour.

This argument is based on analysis of interview data on costs of production and income received from maize sales.² Cash and non-cash costs of production are complex to measure when there are non-commoditized relations involved and when family labour

² References to costs of production and to income in this section refer only cash costs and cash income.

plays an important role in production. In this analysis, I have included all purchased inputs (including the cost of cash loans) but have not put a cash value on the farmer's or family labour. Thus the difference between total costs of production and total money received from sales is farmers' net cash income from maize production, which may or may not have been shared with other members of the household or relatives who provided labour in maize production. For most farmers, I have thus also taken this as an estimate of their returns to labour. In the case of large farmers who hired permanent labour and who themselves might have played a supervisory role, the difference between costs and sales could be regarded as profit. I have, however, used the term net income for all farmers, with the rider that this may comprise an unmeasured component of profit for some farmers.

Farmers were often vague about the quantities of inputs they purchased and how much they cost. Not only would many farmers have difficulty in remembering what they spent, but some costs might also have been exaggerated if farmers had financial problems and thought that help could be obtained through my presence. The situation was further complicated by the fact that some farmers received credit from the DRI and that records differed on how much was made available to them. In general I have taken the farmers' word over the data in the files, as farmers did not always take out all the credit that they had been offered. Data on prices were also difficult to record accurately, particularly if farmers made sales at different times to different traders. Nevertheless, the relationship between costs of production and prices received fit in general with the farmers' own accounts of their financial situations and demonstrate some of the problems they faced. In general, my data should be regarded as estimates based on what farmers told me, which I cross-checked with official records when available or against data provided by other informants.

As stated, net income is the difference between the total cash value of costs and sales. In calculating total cash costs, I have included estimates for maize purchases for the consumption deficit farmers based on official data on market prices. In calculating the total value of sales, I include the cash received from harvest sales and that estimated from further maize sales during the year where possible, also based on official price data.³ I first look at farmers with negative net incomes from maize, then those who obtained positive net incomes. I then compare some of the assumptions made about maize production by the DRI with my analysis, and take a closer look at the implications for returns to labour for small and medium farmers. Finally, I comment on the position of large maize farmers.

6.2.1 Negative net income farmers

Calculations from my data show that 9 out of 27 farmers actually had negative net incomes from maize farming (Table 6.5). These farmers were not identical to the 9 who had consumption deficits, however - clearly some farmers had made decisions to keep enough maize for domestic consumption at the expense of their cash incomes from maize. In other words, either other activities were helping to pay for maize production, or these farmers were in debt.

As with consumption deficits, the data on negative net incomes are complex. Negative net incomes were not just confined to small farmers, and positive net incomes did not characterize all medium and large farmers. There were also some apparent differences between the two villages (as there were on consumption deficits). As might be expected, those with negative net incomes in Chichicaste were small as well as some

³ However, it was not always possible to make estimates for further maize sales even if it was evident that farmers had real surpluses over their *gasto* needs.

medium farmers. In Jutiapa, although I only have complete data for 4 out of the 5 small farmers, only one had a negative net income while 2 out of 4 medium farmers did so, as well as one large farmer. Moreover, as stated, these data include estimates of money received from further maize sales, not just those made at harvest.

Table 6.5 Number of farmers with positive and negative net incomes from maize farming by farm size group, Chichicasté and Jutiapa, primavera 1986-87

Farm size group (Has)	Chichicasté			Jutiapa		
	No. of farmers in group	No. with positive net incomes	No. with negative net incomes	No. of farmers in group	No. with positive net incomes	No. with negative net incomes
<1-5	7	4	3	4	3	1
5-50	6	4	2	4	2	2
50+	3	3	0	3	2	1
Total	16	11	5	11	7	4

However, a further qualification is needed. The negative net incomes in Jutiapa were relatively low as a return to cash costs compared with those in Chichicasté (Table 6.6). Among small farmers, negative returns ranged from 12-89% of costs for Chichicasté whereas for the one small farmer in Jutiapa, the deficit was 6% of costs. The two medium farmers with negative net incomes in Jutiapa had negative returns of only 1 and 5% of costs from my calculations, whereas the two in Chichicasté had deficits amounting to more than 12 and 20% of their cash costs. Paradoxically, the Jutiapa farmer who fared worst was the large negative net income farmer whose deficit amounted to 14% of his costs.

Table 6.6 Negative net cash incomes as percentage of estimated cash costs of production among maize farmers interviewed in Chichicasté and Jutiapa, primavera 1986-87

Farm size group (Has)	Chichicasté		Jutiapa	
	Farmers	Percent	Farmers	Percent
<1-5	JAC	89	RR	6
	JS	81		
	GF	12		
5-50	FR	12	NL	1
	MA	20	CU	5
50+			VM	14

Thus, in general, although there were negative net incomes in Jutiapa, the combined data on income and maize consumption support the case for small (and probably medium) farmers being relatively better off from maize production than those in Chichicaste. However, it is apparent from the data that just breaking even, let alone making a positive net income from harvest maize sales, was not necessarily easy for many farmers. Taking the two villages together, the data show that there were generally more cases of consumption and/or income deficits among small farmers (Table 6.7). Even so, individual social and technical conditions and strategies affected medium as well as small farmers' capacities to make a net income from maize.

Table 6.7 Farmers experiencing a negative net income and/or a maize consumption deficit, Chichicaste and Jutiapa, primera 1986-87

<i>Farm size group (Has)</i>	<i>Farmer</i>	<i>Negative net income from maize</i>	<i>Maize consumption deficit after sales</i>
<i><1-5</i>	AM		X
	JAC	X	X
	JC		X
	JS	X	X
	GF	X	X
	RR	X	
	FC	n.d.	X
<i>5-50</i>	FR	X	X
	MA	X	X
	NL	X	
	CU	X	X
<i>50+</i>	VM	X	
<i>(Total)</i>	(12)	(9)	(9)

Thus, on one hand, although small farmer AM had a consumption deficit, he apparently had a positive net income from harvest sales for a number of reasons: he had relatively low costs of production and no interest to pay on a cash loan because he had been 'helped' by his employer; he had however sold a high proportion of his maize to repay the costs of his inputs to his employer, even though he had also lost maize because of *maíz muerto*; he belonged to a household which was not dependent on his maize alone

to meet consumption needs and might therefore have sold maize for other cash requirements. However, in practice, the household had insufficient maize for consumption and his and/or other people's income would be needed to purchase maize. On the other hand, 3 of the 6 farmers who had both a consumption deficit and a negative net income from maize (see shaded rows of Table 6.7) were medium farmers, and 4 had received institutional loans from the DRI. In all 4 cases, the loans were higher than their estimated cash costs of production. It would be wrong, however, to assume that the medium farmers were all as vulnerable as the small farmers. Medium farmers often had a wider range of income sources to draw on, although we shall also see that this was not invariably the case.

6.2.2 Positive net income farmers

Further analysis of interview data suggests that making a positive, as opposed to a negative, net income from maize depended on a number of conditions, although not all of them needed to be present simultaneously for the farmer to make money. These conditions included: a) high yields (implying low pre-harvest losses in many cases); b) the quantity of maize sold (which in turn depended on the area sown and output) including the ability to put aside maize for further sales. I look first at maize yields, and second at the relationship between area sown, output and income from sales.

(i) Yields

I compared the yields of farmers with positive net incomes from harvest sales with (a) those expected from farmers using what the DRI documents called 'basic technologies' and (b) the anticipated yields from farmers using improved technologies and techniques of production (see footnote to Table 6.8). The majority of positive net income farmers (16 out of 18) had higher yields than those expected from basic technologies and half obtained yields equivalent to those anticipated from improved techniques (Table 6.8).

Table 6.8 Yield characteristics of maize farmers obtaining positive net incomes (including potential income from further, post-harvest sales), Chicicastle and Jutiapa, primera 1986-87

Farm size group (Has)	Number in group	No. with yields equivalent to or higher than anticipated from using basic technologies*	No. with yields equivalent to those anticipated from using improved technologies*
<1-5	7	7	5
5-50	6	5	2
50+	5	4	2
Total	18	16	9

* These are based on yield figures used by the DRI. Estimated yields for different farm sizes before the project started (i.e. using basic technologies) were: 3 Ha farm: 1,000 Kgs/Ha; 7 Ha farm: 2,000 Kgs/Ha; 14+ Ha farm: 2,600 Kgs/Ha. Yields from improved technologies were estimated as: 3 Ha farm: 2,500 Kgs/Ha; 7 Ha farm: 3,000 Kgs/Ha; 14+ Ha farm: 3,600 Kgs/Ha (MRN/DARCO/CEE/BOOM, 1984, 168).

As analysed in Chapter 5, Section 5.4, most farmers interviewed had already incorporated the use of improved seeds, urea, weedkiller, and some degree of mechanization, whether they had received institutional credit or not. Although my data are patchy, for some farmers these relatively high yields were combined with low pre-harvest losses, but even farmers who had experienced quite high losses generally obtained higher yields than those estimated for production using more basic levels of technology. The high yields obtained by many of the small farmers were notable and suggest that this was an important element in achieving positive net incomes.

The obverse is generally true for the 9 negative net income farmers discussed in Section 6.2.1. Most of them (6) had low yields (Table 6.9). Furthermore, their production data revealed high pre-harvest losses for 6 of the 9 farmers. These data confirm the fragility of making income from maize if there are high pre-harvest losses and support the arguments for the need to increase farmers' output and productivity made by those working in the DRI, as well as by such analysts as Aguirre and Tablada (1989). However, as will be seen below, the assumed increases in costs of production to

achieve increased output could also undermine farmers' capacities to make money from maize.

Table 6.9 Yield characteristics of maize farmers obtaining negative net incomes, Chichicaste and Jutiapa, primera 1986-87

<i>Farm size group (Has)</i>	<i>Number in group</i>	<i>No. with yields lower than anticipated from using basic technologies*</i>
<i><1-5</i>	4	3
<i>5-50</i>	4	2
<i>50+</i>	1	1
<i>Total</i>	9	6

* Yields lower than those cited in the equivalent footnote to Table 6.8

(ii) Area, output and income from sales

Farmers might be expected to invest more in maize production if they obtain increased returns, enabling them to satisfy maize consumption needs as well as make a net income. These were general policy concerns in the 1980s as outlined in Chapter 2, as well as being an immediate goal of the DRIs. However the evidence for actually being able to make money from maize is patchy in reality: several of the farmers who had positive net incomes did not in fact earn very much from maize.

Figures 6.1-6.4 show data for 16 of the 18 positive net income farmers, organized by maize area sown (a range of less than 1 Ha to nearly 14 Has). The two largest farmers, who each sowed 35 and 49 Has, are not included as their data provide a distorted picture when presented graphically.

As one might expect, absolute maize sales increased with the area sown (Figure 6.1) - farmers' output was generally greater and they were able to sell more maize. However the overall *proportion* of maize sold at harvest did not have a close relationship to area sown (Figure 6.2), even including the sales made after, rather than at, harvest. Although the total range of sales is between 60 and 100% of output, there is a

bunching around the 80% mark for most farmers. The lowest and highest values (see arrows) were both small farmers. In the case of the one who sold 100% of his output, household maize needs were provided by another farmer in the consumption unit. The other who sold only 56% was a Jutiapa farmer who had the lowest cash costs of production of the small farmers in the village and partly financed his maize production by wage work for his brother. He thus would not have had high debts to repay at harvest.

Looking at the evidence on total net income earned from maize, there was a general increase with area sown, as one might expect because of the greater output (Figure 6.3), but the dispersion of values shows that an increase in income from maize with area farmed was not automatic. The outliers at the lowest and highest income levels are particularly illustrative of this. This view is corroborated by Figure 6.4 which shows positive net income per hectare. Again, there is considerable dispersion of values, and the figure may even suggest a decline in income per hectare with area sown. Up to 5 Ha sown with maize, net income levels were bunched around the Lps2-400/Ha mark with some outliers. Thereafter, net income per hectare was erratic.

Figure 6.1 Maize sales for positive net income farmers by area sown, Chichicaste and Jutiapa, primera 1986-87

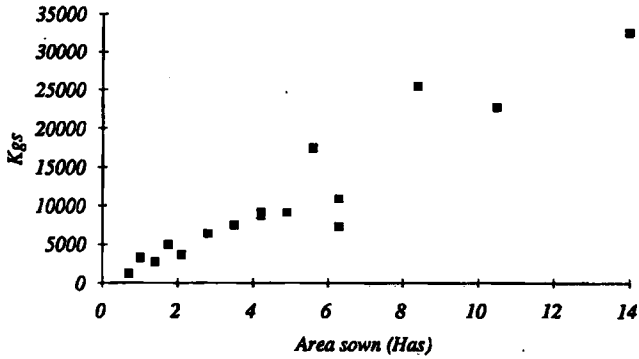


Figure 6.2 Percentage of output sold by positive net income farmers by maize area sown, Chichicaste and Jutiapa, primera 1986-87

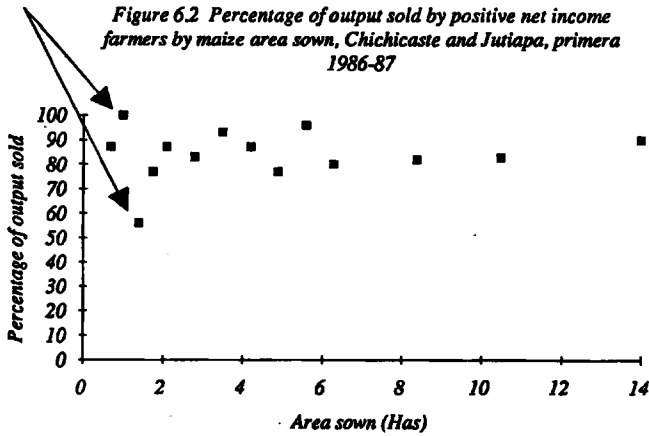


Figure 6.3 Positive net income by maize area sown,
Chichicaste and Jutiapa, primera 1986-87

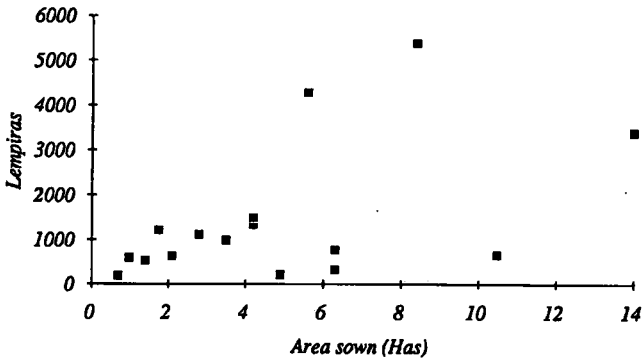
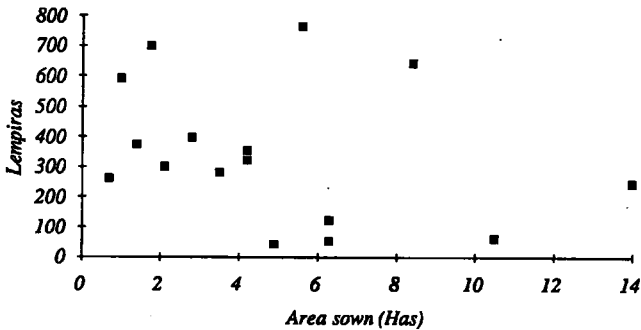


Figure 6.4 Positive net income/Ha by maize area sown,
Chichicaste and Jutiapa, primera 1986-87



The abilities of farmers to make money from maize were affected by pre-harvest losses and overall yields, as we have seen, and will account for some of the outliers showing very low incomes, even among farmers who sowed larger areas, in the figures. There are however other paradoxes in the economics of maize production which are not easily resolved given the unequal nature of social relations analysed in Chapter 5. On

one hand, small farmers might be able to obtain relatively high positive net incomes per hectare, but low absolute incomes compared with larger farmers because of the small size of the farms and area sown. On the other hand, medium and large farmers might expect to earn absolutely higher incomes from maize (if not necessarily higher incomes per hectare) than small farmers, but social and technical conditions of production might also affect them, especially with pressures to use more purchased inputs to improve yields.

6.2.3 Models and realities of making a net income from maize production

Sections 6.2.1 and 6.2.2 have shown some of the social and technical difficulties in making a net cash income from maize production. Paradoxically, this analysis was confirmed by the models used by the DRI to promote increases in maize output and productivity by technical change and commoditization of production processes. Comparing my data with those used by the DRI is thus both interesting and revealing.

The documentation for the DRI estimated costs of production for different size farms and different cropping systems before and after any changes in techniques of production to be introduced by the rural credit project. These data, which I have summarized in Table 6.10, were based on models. Nevertheless, when I carried out my interviews, many of the proposals made by the DRI to increase output were already being used.

The improvements proposed by the rural credit project involved the following processes:

- (i) for a farm sowing up to 3 Has of maize - animal and mechanical traction; moderate use of chemical inputs and insecticides;

- (ii) for farm sowing up to 7 Has of maize - animal and mechanical traction; improved technical inputs (seeds, fertilizers, chemical pest and weed controls);
- (iii) for a farm sowing up to 14 Has of maize - mechanical traction; high level of technical inputs; storage and maize drying capacity.

These changes required purchased inputs and the likely use of hired labour. Thus costs of production would be higher than previously (also pointed out in the project document). For example, the small 3 Ha farms would purchase more inputs and would have to hire more labour 'to maximize the marginal product of all the factors of production which previously were under-used or not used at all' (MRN *et al*, 1984, 122; my translation).

However such changes would not necessarily bring about increased net income from maize (although yields and output would grow) as is evident from Table 6.10. The changes in the farm models assume a somewhat smaller area sown with maize. In fact, the net income for small farms sowing 2.5 Has after changes in technology and increased use of hired labour proved negative in the model. The proposals were, however, dependent on the growth of diversified farming in which farm income as a whole would improve, even if maize were not especially lucrative. Thus, on such a farm, beans would make about Lps140/Ha (net) and further income would be made from vegetables and fruit trees according to the model. Even so, net income would still only total about Lps8-900 per annum for the whole farm according to the documents (*ibid*, 122-123) - whereas an permanent agricultural labourer earning the minimum rural wage of Lps5/day might expect to earn up to Lps1,350 per annum⁴.

⁴ This figure is calculated from a standard measure of 270 annual working days, often used in Honduras for rural labour. Of course, much rural labour is seasonal or temporary and would not

Table 6.10 Comparison of expected costs and net cash income from maize before and after technological change through rural credit for different maize farm models (1984)

Old farm model (area sown)	BEFORE			New farm model (area sown)	AFTER		
	Costs* of productn Lps/Ha	Value** of maize sales Lps/Ha	Net income per hectare Lps		Costs* of productn Lps/Ha	Value** of maize sales Lps/Ha	Net income per hectare Lps
<3 Has	210	286	76	<2.5 Has	795	715	-80
3-7 Has	484	572	88	2.5-6 Has	895	858	-37
7-14 Has	690	744	54	6-12 Has	895	1030	135

* Includes interest on loans except for 3 Hectare model before project implementation

** The value of sales in this table assumes a fixed price of Lps286/MT or Lps.29/kg. This is somewhat below the prices received by farmers I interviewed. However, prices of inputs had also increased since the document was written in 1984, so these income figures can be taken as a guide.

Source: calculated from MRN/DARCO/CEE/BOOM, 1984, Section 4.3

Furthermore, the calculations for net income cited in Table 6.10 were based on the assumption that the total crop would be sold. Thus if maize (or beans) were retained for household consumption, net cash income would be less than the total possible net income of Lps8-900. Although most food needs might be expected to be met by the diversified farm model, in practice, as we have seen, farmers often had maize food deficits because they had to sell considerable quantities to repay debts. If everything were sold, food purchases would quickly use up income, even before other expenditures were taken into account.

Data for the 6-7 hectare farms also show a decline in net income from maize, while those for 12-14 hectare farms were the only data to show an increase in net income. The amount of net income was very small for such farmers however. Again, it was implied that the survival of maize production was based on the existence of a diversified farm and credit to finance production.

earn the yearly wage quoted from this type of work. Nevertheless the comparison puts a perspective on the value of farm income in these models.

For all these farm models, and for many of the farmers I interviewed, institutional credit was key to sustaining this type of production. But as I have shown in Chapter 5 and analyse further in Chapter 7, rural credit can bring its own problems and risks for producers, including increasing dependence on commodities in production and as well as dependence on the commoditization of output to repay loans.

The realities of many maize farms were also rather different from these models and had more varied outcomes. First, all the farmers I interviewed were using some purchased inputs in production, although there was variation in use and quantity both by farm size and whether a farmer was in the credit programme or not (Chapter 5, Section 5.4). Thus farmers experienced a range of technological strategies (and means of obtaining inputs).

Second, comparison of the model with my own estimates of mean and median costs, sales and net incomes for similar farm groups across the two villages reveals some interesting differences (see Tables 6.11-6.13). Although costs were as high as, or higher than, those in the model before technological change, they were not as high as after implementation (Table 6.11), suggesting that farmers used fewer technical inputs or less paid temporary or permanent labour than calculated in the model. However, the cost data are only partially comparable because the DRI data include a putative cost for all labour required even if part were supplied by the farmer, whereas my data include only the cost of wage labour. This difference also partly explains why the DRI costs were so high⁵ and the net incomes so low. Even so, even if part of the labour were supplied by the farmer, this consumption fund supplied from credit during production would still have to be repaid at harvest.

⁵ Except for 3 Ha farms for which labour cannot have been costed, and for which no credit (and therefore no interest) was assumed.

Table 6.11 Comparison of cash costs of production/Ha before and after technological change through rural credit with mean and median cash costs* of production for maize among farmers interviewed in Chicicasté and Jutiapa, primavera 1986-87 (Lps/Ha)*

<i>DRI model</i>			<i>Chicicasté and Jutiapa</i>		
<i>Farm model (maize area sown)</i>	<i>Before</i>	<i>After</i>	<i>Maize area sown</i>	<i>Mean</i>	<i>Median</i>
<i>2.5-3 Has</i>	210	795	<i>< 3 Has</i>	366	351
<i>3-7 Has</i>	484	895	<i>3-7 Has</i>	508	500
<i>7-14 Has</i>	690	895	<i>7-14+ Has</i>	621	650

* Includes interest on loans

A similar observation can be made about sales (Table 6.12). The value of sales by farmers was higher than those expected before project implementation but lower than expected with technical change. Given that prices for maize in the year of interview were higher than when the model was conceived, average output and yields were clearly not as high as might have been expected in the project. In practice, there was a range of yields among farmers, as well as prices received for maize⁶. These differences were affected by the social as well as technical conditions in which different types of farmer produced maize, and which I analysed in Chapter 5.

Table 6.12 Comparison of value of maize sales/Ha before and after technological change through rural credit with mean and median values of maize sales among farmers interviewed in Chicicasté and Jutiapa, primavera 1986-87 (Lps/Ha)

<i>DRI model</i>			<i>Chicicasté and Jutiapa</i>		
<i>Farm model (maize area sown)</i>	<i>Before</i>	<i>After</i>	<i>Maize area sown</i>	<i>Mean</i>	<i>Median</i>
<i>3 Has</i>	286	715	<i>< 3 Has</i>	576	614
<i>7 Has</i>	572	858	<i>3-7 Has</i>	655	630
<i>14 Has</i>	744	1030	<i>7-14+ Has</i>	880	781

The result is that net incomes from maize (Table 6.13) were generally somewhat higher for the farmers I interviewed than in the model, basically because of the lower cash

⁶ Prices are analysed in Chapter 7.

costs of production. However, some qualifications are necessary. The mean and median net incomes for my 3 Ha farmers are deceptively high. This is because I followed the method in the model of subtracting cash costs of production from sales. However, my own calculations of total net income include the cost to deficit farmers of having to buy maize. In this group there were several farmers who were in this position. The 'real' mean and median incomes of this group are thus estimated at Lps114/Ha and Lps61/Ha respectively. The much lower median net income for this group also shows that there was a spread of values for these farmers, including negative net incomes. This observation also applies to the 3-7 hectare group where there were also some negative as well as positive net incomes among the farmers I interviewed. Thus the real estimated mean income for the farmers I interviewed was only Lps147/Ha.

Table 6.13 Comparison of net incomes/Ha before and after technological change through rural credit with mean and median net incomes from maize among farmers interviewed in Chichicaste and Jutiapa, primera 1986-87 (Lps/Ha)

DRI model			Chichicaste and Jutiapa		
Farm model (maize area sown)	Before	After	Maize area sown	Mean	Median
3 Has	76	-80	< 3 Has	210*	213*
7 Has	88	-37	3-7 Has	158	87*
14 Has	54	135	7-14+ Has	259	262

* See text for comments on these figures

Unpacking these data shows how varied individual incomes could be and therefore how risky maize production was for many farmers in trying to obtain positive returns to costs of production. Even allowing for some margin of error in data collection and interpretation, there was a considerable range in actual net incomes from maize, including net income deficits among farmers who received project credit and were using improved technologies.

Finally, there were no built-in pre-harvest maize losses in the models. With the increase of *maíz muerto*, supposedly from using improved seeds, pre-harvest losses were a serious threat to income as well as consumption, particularly among small farmers. Moreover, the models did not take into account how the debts incurred in commoditizing production and output might affect farmers' capacities to sustain this type of production.

6.2.4 Returns to labour

Evaluating the net income (positive and negative) received by maize farmers interviewed in Chichicaste and Jutiapa provides a picture of what kinds of return to farmers' labour were possible or common. In the following calculations, I have only included small and medium farmers as none of them hired permanent labour on their farms. To do this I first estimated the absolute labour days that they, as farmers, put into maize production. This was done by taking the CONSUPLANE blanket figure of 73 person days/Ha for maize (CONSUPLANE, 1978, 37) and subtracting the amount of labour provided by temporary workers based on interview data. Thus again, I am using estimates and the patterns below should be taken as a guide.

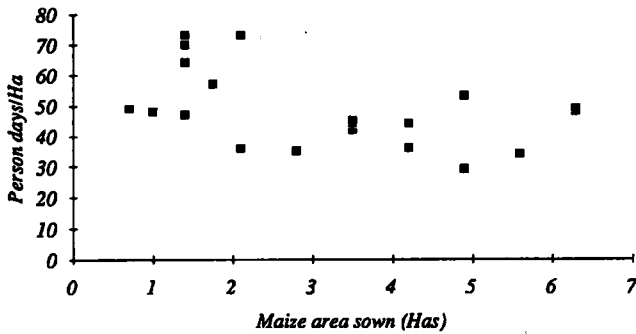
Looking only at farmers' own labour time, Figure 6.5 shows a gradual but not consistent tendency for days worked per hectare by small and medium farmers to decline with increasing area sown (or in other words, an increased use of temporary hired labour, as was indicated in Chapter 5, Section 5.2). The relatively low values for own labour use among some of the smallest farmers is a reminder that they also carried out wage work and hired temporary labour. A noticeable outlier is the final value which indicated a high number of own labour days/Ha. This was an ambitious and hard-working medium farmer who was determined to try and expand his output with project

credit. Overall, the variation reflects individual circumstances and strategies for producing maize.

Did the reduced labour time for positive net income farmers mean that there were higher returns to the farmer's own labour with increasing area in maize production? In practice there was considerable variation, as indicated by Figure 6.6. It was possible to obtain relatively high returns to farmers' labour on small plots and low returns on large plots. At the time of interviewing, the wage rate for day labourers was Lps5, so the figures suggest that most small and medium maize farmers with positive net incomes obtained a return to labour that was better than doing wage work. However, these returns did not make maize farmers necessarily better off if they did not earn equivalent returns when not growing maize, nor on a year in year out basis, as returns would fluctuate with losses and yields and changes in relative prices.

However, if the negative net income farmers are included in the picture (Figure 6.7), returns to labour in maize production look much less secure. Furthermore, if the amount of farmers' own labour time per hectare is plotted against returns to labour (Figure 6.8), daily net incomes from maize look decidedly vulnerable. Although the range of values shows that it was possible to put in considerable labour time in maize production for high as well as low or negative returns, there was also a gradual tendency for returns to labour to decline with increases in own labour time.

Figure 6.5 Relationship between maize area sown and use of own labour by all small and medium farmers interviewed in Chichicaste and Jutiapa, primera 1986-87



Note to Figure 6.5: 17 values are present here; there are in fact 18, but two are identical (2 farmers with 2.1 Has who worked 73 days on their farms).

Figure 6.6 Returns to own labour by maize area sown among small and medium positive net income farmers in Chichicaste and Jutiapa, primera 1986-87

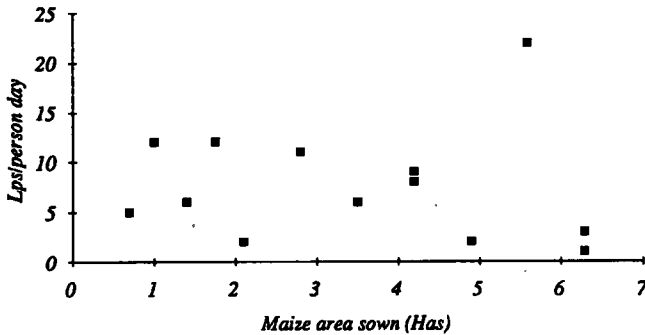
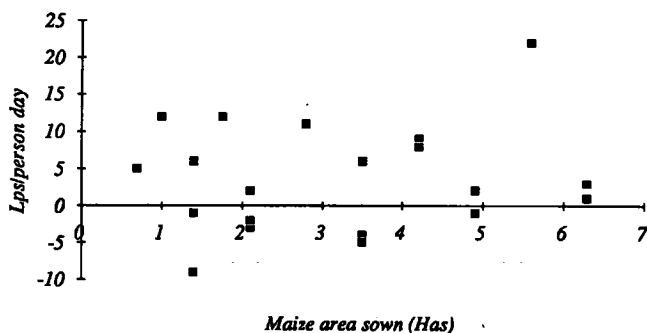
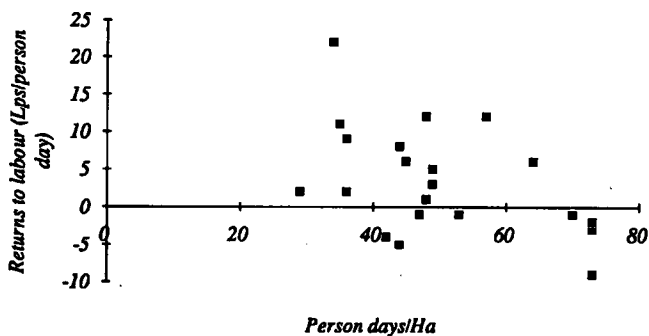


Figure 6.7 Returns to own labour by maize area sown among all small and medium farmers, Chichicaste and Jutiapa, primera 1986-87



Note to Figure 6.7: there were two farmers with a negative return to labour of Lps-1/day, both sowing 1.4 Has of maize, so they show up as a single value on the graph; there were in fact 8 negative net incomes among small and medium farmers, not 7 as appear here.

Figure 6.8 Relationship between labour time and returns to own labour for all small and medium maize farmers interviewed in Chichicaste and Jutiapa, primera 1986-87



6.2.5 Large maize farmers

Large farmers have not been scrutinized so far in this analysis. How did they fare? I have not attempted to calculate returns to labour among these farmers because of the prevalent use of permanent farm workers. However, with the rider added earlier that profit is an unquantified component of income for large farmers, interviews showed that although large farmers generally received total net incomes which far exceeded those of small and medium farmers because of their greater scale of production (Table 6.14), income per hectare was equally variable - from a negative net income per hectare in one case to one of the highest incomes per hectare overall in another. However, although one large farmer made a loss, the average net income per hectare of these large farmers was still greater than that of the small and medium farmers (see Table 6.13 above; the 7-14+ Ha maize area category comprised the same farmers).

Table 6.14. Average net incomes from maize (means and medians) of farmers interviewed in Chiclicaste and Jutiapa, primavera 1986-87

<i>Farm size group (both villages)</i>	<i>Mean net income (Lps)</i>	<i>Median net income (Lps)</i>
<1-5	260	182
5-50	673*	268*
50+	5,613	4,850

** The disparity between the mean and median for medium farmers in particular reflects the effects of a few high incomes on the mean, although several farmers had negative or low net incomes as reflected in the median - confirming the risk and vulnerability analysed above.*

Also important in evaluating the position of large maize farmers was that they all had several other major sources of income. Large cattle herds were notable in all cases, and some had small businesses as well as engaging in trade. They were thus able to move their resources around, as well as make substantial changes in crop and cattle production. Thus the farmer with the negative net income from maize was planning to reduce maize production and invest more in cattle. Two other farmers were also expanding their cattle herds. Although making a positive net income from maize, one of these farmers had already reduced his maize area from 21 to 8.4 Has because he was

not satisfied with the returns. By contrast, a fourth was planning to rent some land to increase his maize output.

6.2.6 Conclusions

My analysis has shown that obtaining cash income from maize was relatively risky and potentially marginal for many small and medium farmers, including occasionally for large farmers who could also incur cash losses. Although some small and medium farmers obtained a return to labour more than the agricultural wage, for several farmers with positive net incomes, returns were considerably lower. Furthermore, there were 8 small and medium farmers who had negative net incomes. That some small and medium farmers obtained high yields and returns to labour did not mean that all such farmers could regularly earn positive or adequate incomes from maize.

Although making income from maize was possible but risky, it did not however follow that the smallest farmers were always those most at risk. Much depended on their individual circumstances, especially whether they could obtain some measure of security against harvest and financial losses through their relationships with wealthier farmers. However, the absolute amount of money such producers could make from maize was obviously limited by their small scale of production. Furthermore, several medium farmers were also unable to make a cash income from maize because of their debts to the credit programme (analysed in Chapter 7), making them particularly vulnerable if their harvests failed. Finally, large maize farmers also had variable experiences. Money could be made from maize, but maize production could also render returns which farmers perceived as unsatisfactory compared with earnings from cattle. The difference for this group of farmers was that they had other options: with land and ready access to credit, they could invest in other crops or livestock as well as non-farm businesses.

6.3 Conclusions

What further conclusions can be drawn from this analysis for the nature of food insecurity among maize farmers? Putting together information on apparent consumption deficits and negative net incomes, reveals that 12 out of the 28 farmers interviewed were known to have suffered one or the other, and half suffered both (Table 6.7 above). Although the sample cannot be said to be representative of farmers in Chichicaste and Jutiapa, it is an indication of the problems and risks and how they occurred.

Combining this information with that on loans which farmers had made to produce maize, other sources of finance for maize production, and other maize and income sources, puts an added perspective on the relative food security and insecurity of these deficit farmers (Table 6.15). Thus at least 9 of the 12 had some form of debt relations: institutional loans, pre-harvest sales, or loans of inputs from a landowner. While all these farmers grew other crops for consumption or cash income, half also carried out wage work for other farmers. In some cases (5), there were other members of the family or household who may have helped to provide maize for consumption. Thus, overall the picture indicates the points of vulnerability (income and/or consumption deficits and dependence on loans) as well as the means by which farmers helped to pay for maize production or make up their shortfalls in consumption or income. While this picture confirms the perspectives of the DRI - that maize farming was not particularly lucrative - it also points to some of the social relations which made it so, in particular the means of access to sources of finance and resources for production which were analysed in Chapter 5. The next chapter analyses the problems of indebtedness further, and whether and how social relations might have affected the prices farmers received for maize.

Table 6.15 Perspectives on the food security and insecurity of consumption and/or income deficit farmers interviewed in Chichicaste and Jutiapa, *primera* 1986-87

Farmer (1)	Consumption deficit (2)	Net income deficit after harvest sales (3)	Made pre-harvest sales (4)	Recvd institt. credit (5)	Other loans (eg of inputs) (6)	Other sources of maize (7)	Other sources of farm income (8)	Sources of off-farm income (9)
<1-5								
AM	Yes				Yes	Father	Beans	Wage work
JAC	Yes	Yes	Yes		Yes	Sons?	Beans, veg	Wage work
JC	Yes		Yes		Yes		Veg	Wage work
JS	Yes	Yes			Yes		Beans, veg	Wage work
GF	Yes	Yes		Yes			Beans, veg	Wage work
RR		Yes		Yes			Beans, fruit	Petty trading
FC	Yes	n.d.	Yes		i.d.	Sons?	Beans, toms	
5-50 Has								
FR	Yes	Yes		Yes		Sons?	Beans, cattle	Wage work
MA	Yes	Yes		Yes			Beans	
NL		Yes				Sons?	Beans, cattle	Store
CU	Yes	Yes		Yes			Beans, fruit, cattle	Store
50+ Has **								
VM		Yes		Yes			Beans, cattle	
Total (12)	9	9	3	5	4	5	12	10

APPENDIX 6.1

Maize losses incurred by farmers interviewed in Chichicaste and Jutiapa, primera 1986-87 (percent of harvested maize)

<i>Farm size group (Has)</i>	<i>Number in group</i>	<i><10</i>	<i>10-20</i>	<i>20-30</i>	<i>30-40</i>	<i>40-50</i>	<i>No data *</i>
<i>Chichicaste</i>							
<i><1-5</i>	7			1		3	3
<i>5-50</i>	6	2				1	3
<i>50+</i>	3						3
<i>Jutiapa</i>							
<i><1-5</i>	5				1		4
<i>5-50</i>	4	1	1		1	1	
<i>50+</i>	3		1			1	1

** Six of the farmers for whom there are no quantitative data indicated that their losses were low, moderate or high. In Chichicaste, one small farmer indicated low losses and a medium farmer had very high losses, while two of the large farmers said their losses were very low. In Jutiapa, one small farmer said he had moderate losses while a large farmer reported that his losses were low.*

CHAPTER 7***REPRODUCING MAIZE IN EL PARAÍSO: DEALING WITH DEBT AND OUTPUT MARKETS******Introduction***

Sustaining maize production depended on farmers' capacities to continue financing themselves as well as providing maize for consumption. Even if farmers earned positive net incomes from maize, in practice, many farmers would have spent at least part of their cash income on consumption needs, and thus further loans would be needed to cover farmers' cash costs of production in the future unless they were paid for by other income sources. Reproducing maize was therefore a complex and often precarious process. As Chapter 6 showed, maintaining consumption and income entitlements from maize was difficult for many farmers, particularly small ones. The need to sell maize, and the need to buy commodities to produce maize, put pressure on many farmers' limited resources and capacities for meeting consumption needs and making a net income, especially if crops were affected by pre-harvest losses.

This chapter argues that some of these pressures arose from the personalized debt relations established with other farmers who provided loans. Others stemmed from being incorporated into commodity circuits involving the use of institutional credit. Thus, there were different ways in which farmers could be squeezed in terms of simple reproduction (Bernstein, 1977). In addition, prices received for maize affected farmers' cash incomes. However, the relationship between the social and economic status of farmers and prices received is also complex: time of sale was a particularly important aspect but this in turn was affected by farmers' social positions.

I first analyse how maize farmers were affected by their means of financing production and the perspectives for sustaining access to finance. I then look at whether social differentiation affected the prices received for maize and what significance this might have for different types of maize farmer. Finally, I draw some conclusions about the relationship between food insecurity and class relations among maize farmers.

7.1 Debt relations and reproducing access to finance for maize production

At the beginning of the last chapter, I stated that different types of indebtedness were one of the most important processes in undermining farmers' abilities to keep enough maize for their own consumption and to reproduce and expand maize production. The question, then, is how and why did maize farmers with consumption deficits or negative net incomes continue in production?

Different types of credit - and hence debt relations - played a key role in reproducing maize production in Chichicaste and Jutiapa in the 1980s. Sustaining access to loans of different types was therefore important for farmers' livelihoods in maize. However, these debt relations could also have contradictory effects on farmers' productive capacities. The burden of repayment could be difficult to meet for some small and medium farmers. First, pre-harvest sales put pressures on consumption and income as we have seen in Sections 6.1 and 6.2. Second, small and medium farmers who had institutional credit often had substantial loans to repay, meaning that they would have to make maize sales whether they wished to or not to try and cover their debts.

I would argue that both these groups of farmers experienced a type of forced sales or forced commerce (Bhaduri, 1983; Bhadwaj, 1985). The former were similar in nature to those described in the literature, that is, they were based on ties and debts to other farmers and landowners. However, I also suggest that debt relations resulting

from the modernizing attempts of rural credit schemes implicitly acted to force some farmers to sell maize needed for their own consumption. This could even be regarded as a form of 'institutionalized forced commerce'.¹ As shown in Chapter 6, recipients of rural credit were encouraged to commoditize their production processes as well as commoditizing their output. A number of farmers were left in difficult and contradictory situations because, on one hand, they needed credit to continue to purchase inputs and hire machines, while, on the other hand, repaying the amount of loan received was not always possible from maize sales and debt relations could jeopardize future access to credit.

Summarizing data from Chapter 5, finance for maize production came from pre-harvest sales, rural credit schemes such as the DRI, BANADESA, and the gift or loan of inputs. Looked at by farm size group, only 4 out of 12 small farmers received institutional credit (one of whom who also had a grocery store), while 9 out of 10 of the medium farmers interviewed and 100% of the large farmers had institutional loans (Table 7.1).

Given the Honduran government policy concerns (as well as those of *campesino* organizations - see Chapter 2, Section 2.3.2) relating to the importance of rural credit for financing small as well as medium and large farmer maize production, I analyse the effects of receiving institutional credit and compare the outcomes with those of farmers receiving personalized loans. How did the different types of institutional credit actually

¹ I am aware that this is an unusual way of characterising the term 'forced commerce'. It could be validly stated that the transaction involved in an institutionalized loan is based on a freely agreed contract involving specified repayment by a particular time, and moreover does not involve exchange relations of an interlocking nature. However the relationship of small farmers to credit schemes involves an implicit power relation with the creditors and agreements about the use of resources which might be against farmers' better judgements. This is elaborated further in the text. Moreover, inclusion and exclusion from credit schemes can also involve other issues than financial need and credit-worthiness (see Chapter 5, Section 5.3).

help farmers during the productive period? Did they fare better in terms of consumption and cash income than those making personalized loans and or pre-harvest sales? To what extent were they in a better position to continue producing maize or not?

Table 7.1 Ways of financing maize production among farmers interviewed in Chichicaste and Jutiapa, primera 1986-87

<i>Farm size group (Has)</i>	<i>Total</i>	<i>BANADESA</i>	<i>DRI</i>	<i>Pre-harvest sales</i>	<i>Loan of inputs</i>	<i>Wages</i>	<i>Other income sources</i>
<i><1-5</i>	12		4	3	3	1	1
<i>5-50</i>	10	1	8				1
<i>50+</i>	6	6					
<i>Total</i>	28	7	12	3	3	1	2

An important aspect of receiving institutional credit was that many farmers among those interviewed in both villages seemed to receive more money than they apparently needed to cover their estimated costs of production (see Table 7.2). Given that labour costs were included in extensionists' estimates for DRI participants, part of the intention might have been to ensure that small and medium farmers had a consumption fund. However, it also imposed a considerable repayment burden on these farmers. A number mentioned the need to limit their debts in the future. By contrast, at least half of the large farmers interviewed took out less credit than they needed to cover costs. Thus those with greater resources to invest in production were those most able to take out proportionately smaller loans.

Table 7.2 Extent of coverage of costs of production by institutional credit among maize farmers interviewed in Chichicaste and Jutiapa, primera 1986-87

<i>Farm size group (Has)</i>	<i>Number of farmers with this percentage of costs covered by institutional credit</i>					
	<i>Number receiving instittl. credit</i>	<i>25-50%</i>	<i>50-75%</i>	<i>75-100%</i>	<i>100+%</i>	<i>No data</i>
<i><1-5</i>	4				4	
<i>5-50</i>	9		1	2	6	
<i>50+</i>	6	1	2	1		2
<i>Total</i>	19	1	3	3	10	2

Loans may have been high for other reasons than the inclusion of a cash value on all labour costs. Although credit needs were in part directed to the specific circumstances of particular farmers, the perspectives of the project assumed that there would be increased use of chemical and mechanical inputs (as well as that the technical changes would require more paid labour). This led to further assumptions about how much it would cost to produce a given area of maize at a given technology use.

That assumptions about costs did not always match farmers' own perceptions is indicated by the fact that some farmers only withdrew part of the loans that they had been offered, either because the amount of money was not actually needed or because they did not want to accrue a debt that they could not repay. In fact, 5 out of the 12 farmers who received credit from the DRI, took out lower loans than their files indicated. This conforms to the findings of Cuevas and Graham (1984) who analysed different types of institutional credit and suggested that 'the client follows the advice of the official when filling out the loan forms, but requests payments according to his/her own idea about the level of debt desired' (*ibid*, 14; my translation). Farmers who had other resources to help finance production, such as a business, also tended to be cautious about withdrawing too much credit. One such farmer stated that he only withdrew enough to buy his inputs and to invest in a knapsack spray. All other costs were covered by his other income sources, in this case a grocery store.

Farmers receiving credit from BANADESA did not in general receive much more than their costs of production, and in several cases, less. Although they were generally large farmers, they may have been subject to more stringent accounting. Large farmers accounted for most of the credit given to maize by BANADESA. Such farmers were expected to have relatively high costs of production and, although they may not have

been seen as a security risk in the way that highly vulnerable small farmers might, loan recuperation was a problem for a national bank with limited funds. Thus one large farmer complained that he had to put up collateral of Lps 40,000 to borrow Lps 20,000. Furthermore, BANADESA charged higher interest rates than the DRI. Farmers might thus have been more careful about how much they withdrew.

In what sense did credit provided by the DRI assist or create problems for small and medium maize farmers? Analysing farmers' abilities to repay their loans when interest is included suggests that only 5 out of the 12 who had borrowed from the DRI were able to make repayments from maize sales alone (Table 7.3). Of the remainder, 3 farmers could have repaid their loans if they had saved the difference between what they borrowed and their apparent cash costs of production. However, one of these farmers had a maize consumption deficit and would have had to buy maize as well. His total payments would have left him with a negative income. In practice, it was more likely that credit was used as a consumption fund before harvest.

Table 7.3 Ability of small and medium farmers receiving DRI credit to repay loans from maize sales, Chichicaste and Jutiapa, primera 1986-87

<i>Farm size group (Has)</i>	<i>Number interviewed in group</i>	<i>Could repay loan plus interest from total maize sales</i>	<i>Could repay loan plus interest if saved difference between loan and cash costs</i>	<i>Could not repay loan by these means</i>
<i><1-5</i>	4	1	1	2
<i>5-50</i>	8	4	2	2
<i>Total</i>	12	5	3	4

There were also 4 farmers who could not repay their loans either from maize sales or by saving their excess credit. Among these four, there were two in Chichicaste and two in Jutiapa, each including a small and medium farmer. Interview data revealed that the cash debts of the two Chichicaste farmers were far more acute than those in Jutiapa. Both the Chichicaste farmers were known by the DRI extensionists to be in

difficulty about repaying their loans. If their loans were to be repaid, they would have had to use income from other crops (beans, and vegetables in one case) and, for the small farmer, from wage work. However, it was unclear that they were able to do this and the project was still in the process of deciding what how to handle their debts when I was doing my fieldwork. The farmers' own perspectives on their situation were as follows:

GF had had a poor maize harvest. He had attempted to raise extra money to repay debts by buying beans when they were cheap [with some of his loan?] and adding them to his own to sell at a high price to the IHMA. It was unclear how much money he had been able to make because of the transport costs he had had to pay. GF was doubtful about trying to obtain further credit from the DRI.

MA had also had a poor harvest and had had to sell all his maize to repay at least part of his loan. He said that normally [in other words, before taking out an institutional loan] he could expect to harvest sufficient maize to cover costs and household consumption leaving small amounts of maize to pay for other basic consumption items.

The response of the DRI to indebted farmers, or those who had experienced serious pre-harvest losses or been unable to cover their loans from sales, was ambivalent. On one hand, extensionists stated that small farmers with loans often did everything they could to repay debts, even if it meant having a consumption shortfall of maize or other food crops. It was suggested that such farmers were prepared to experience poverty and food insecurity now to ensure access to resources (or finance) later. Extensionists implied those farmers deserved support but in practice it was difficult to do so because of their relative vulnerability. Extensionists were less sympathetic to farmers who had other resources for example, in the case of a Jutiapa medium farmer who had considerable land, some cattle and a store. The same applied to another medium farmer in Chichicasté who had not repaid his loan at the time of interviewing:

This farmer was rather reluctant to talk about all the details of his indebtedness. He said that he had suffered severe pre-harvest losses. He was vague about how he was planning to repay his debts.

However the DRI policy on indebted farmers was unclear. The programme was only in its second year when I interviewed farmers and decisions on loans seemed to be made on a case by case basis. However, the politics of rural credit are sensitive. Integrated rural development projects were being given considerable publicity at the time and they were supported by foreign aid. It was important to try and make them succeed (and make them look as though they were succeeding) as well as not let farmers down. Nevertheless, it was also apparent that there were problems with how the programmes were run and the assumptions behind them. That one or two farmers receiving loans in the programme had decided not to take out all their credit, (and, in one case, a small farmer had decided to reduce the area of land that he rented for sowing maize to keep his financial commitments at a more manageable level), indicated that several farmers had burned their fingers the previous year:

RR was an active, ambitious and hard-working small farmer. However, because of his debts, he was going to ask for a smaller loan in 1987-88. Although his debts were much lower than some of the other indebted farmers, it was unclear whether this farmer would be able to repay his loans completely. However, he had adopted some of the diversification targets proposed by the DRI and was growing fruit trees - relatively high value crops compared with maize but with a much longer gestation period. He also engaged in petty trading.

Some farmers who had other sources of income deliberately did not take out credit or reduced their dependence on credit. For example, one medium farmer in Jutiapa would sell a cow to help finance production. In the past he had sold land. He also had a grocery store but he claimed it did not finance maize. Another medium farmer in Chichicasté who received credit from the DRI, as well as one of the Jutiapa large

farmers who had credit from BANADESA, both said that other economic activities helped to finance maize so that they did not have to rely so heavily on loans.

The extent of indebtedness among farmers receiving institutional credit and the frequently low levels of positive net income from maize (which would also be needed for other expenditures) meant that it was critically important to be able to maintain access to some sort of finance for future maize production. However, it was not necessarily possible or easy for an indebted farmer to continue to obtain institutional credit. The commoditization of agricultural inputs and outputs generally required by institutional credit (even if farmers in practice made choices about how much they decided to spend on commodities) created an insecure environment for reproducing maize among many of the small and medium maize producers interviewed, which is why I would characterize their position as one of 'insecure transformation' (see the introduction to Chapter 6). Such farmers thought they had (or were being persuaded that they had) possibilities of increased output by using credit, but for some, the process was a high risk strategy.

The position of small farmers who received no institutional credit was however no less complex, especially for those whose access to resources was circumscribed by exchanges based on personalized relations. For the latter, farmers would be able to maintain access to land as long as they were able to pay rents (where required) and provide labour for the landowner. There was interest on both sides in maintaining the relationship. In cases where the small farmer had been able to take advantage of the large farmer's access to credit by obtaining inputs from him, the tie was reinforced and a series of obligations established which the small farmer would have to meet. The danger, then, was when or if that personalized relationship broke down - either because the small farmer could not meet debts or because of some other disagreement. (I cited one such case in Chapter 5, Section 5.1.5.) However, as long as it could be

maintained, the relationship created an element of security for the small farmer to be able to continue producing maize, even though it might have imposed limits on the farmer's productive capacities. In other words, such farmers were suspended in what I have called 'secure stagnation' (Chapter 6).

What about the one medium and 6 large maize farmers who all received credit from BANADESA? Six out of the 7 were known to be able to repay their credit from maize sales. However, unlike most of the farmers who had credit from the DRI, for three of the large farmers, at least, loans did not cover their costs of production which were partly financed by other on- and off-farm activities. However, all but one the farmers was able even so to make a positive net income from maize. However, if maize farming resulted in a loss or insufficiently satisfactory returns as far as the farmer was concerned, resources could be invested in other activities. For these maize farmers, growing maize was part of their whole farm strategy to expand income (or profits). If they experienced 'insecure transformation', they had the option of changing their strategy.

Nevertheless, even for these farmers, access to credit was key to sustaining production. Although all the farmers had substantial resources in land, cattle and other economic activities, all of them required credit to purchase agricultural inputs and they also used it to mechanize their farms in some cases. However, their attitudes towards continuing to invest in maize were variable. One complained about the amount of collateral he had to put up to obtain his loan. Two others thought that maize was not a good investment. One of them said: 'I generally sow maize, but not because it is profitable'. A fourth was careful to limit the amount of money he loaned for maize. This farmer probably summed up the large farmers' concerns when he said that 'the main problems [with maize production] are the costs of inputs, machinery, spare parts, and grain prices.'

7.1.1 Conclusions

This section has shown the vulnerability of many of the small and some of the medium farmers to indebtedness, whether to institutions or through personalized relations with other farmers. However, small, medium and large farmers were in very different resource positions with respect to the kinds of decisions they could make about maize production. What characterized the small and some of the medium producers was the relatively limited margins of choice and the inherent risks they faced in using formal credit to finance production. For example, one medium farmer stated 'Maize and beans are not profitable but I don't want to invest in other things because of the risks'. For these farmers, there were several key problems: how to retain adequate maize for consumption; how to earn adequate cash income from maize; how to repay debts; how to continue financing maize production; how to manage a debt cycle which might be induced or reinforced by unequal relations with landowners or by entering into credit relations with banks and other institutions.

Finally, although it has not been my purpose in this thesis to analyse the overall household economies of the farmers interviewed, the data analysed in Chapters 5-7 suggest that maize production and consumption were of necessity supported by other economic activities for many farmers (including large ones). Appendix 7.1 indicates the extent to which farmers engaged in other farm and off-farm activities in both villages. For all farmers, other staple crops such as beans were key sources of food while vegetable production was often regarded as a source of cash income (see also Column 8 in Table 6.15 on maize consumption and/or income deficit farmers in Chapter 6). As well as being able to sustain their cycles of informal loans and sources of assistance, wage work was an important source cash income (and therefore food) for small farmers. In addition, different members of the farmers' households were often engaged in a variety of productive activities which provided labour, food and income.

For example, several farmers mentioned sons who would return periodically to help on the farm; others had daughters working as domestic servants in urban areas who were a source of remittances to the countryside; the wives of small farmers interviewed often engaged in small-scale vegetable production or food processing and trading.

I am unable to comment on the extent to which different cash income streams, including remittances, helped to sustain access to land and other resources for maize production as opposed to reinforcing the dependence of such households on markets for purchasing food and other needs. Certainly, for small farmers in particular, for whom maize was their main food staple, reproducing the conditions for maize production and consumption was even more important than being able to cover all consumption requirements from farming, or to make a positive net income. Such farmers did not operate with a different rationale from other farmers. Their productive capacities were considerably constrained by social relations and they adopted strategies (including depending on loans and favours) to keep producing at least part of their maize needs.

To summarize:

- (i) Most farmers need continued access to credit and loans to finance maize production; loans could be reduced by a few medium and most large farmers because they had alternative sources of income.
- (ii) Small and medium farmers, unable to repay debts to financial institutions because of harvest losses or too high loans, were at risk of not being able to maintain access to finance on a systematic basis; such farmers experienced what I have termed 'insecure transformation'; some tried to reduce their risks by not withdrawing all their loans.

(iii) Large farmers could also experience indebtedness but had the possibility of changing their farming strategies by investing capital in other crops, livestock or business.

(iv) Small farmers who were dependent on their relations with large farmers and wealthier relatives to help finance their production could find themselves in a continued cycle of obligations and indebtedness. However, as long as the relationship with the patron could be sustained, such farmers would survive and reproduce their maize in conditions of 'secure stagnation'.

(v) The conditions of indebtedness which affected many small and some medium farmers were also associated in some cases with the need to sell maize they needed for consumption. Although for some this was the result of tied transactions - such as pre-harvest sales or the need to repay loans from landowners - in other cases the institutional debts forced farmers into this position.

7.2 The social relations of maize prices²

In principle, prices received for maize could have an effect on indebtedness. When production involves considerable use of purchased inputs (and when policies to promote increased output encourage the use of purchased inputs), the relative movement of prices for inputs and outputs will affect farmers' abilities to make an income from maize³. However, the overall effect of prices on farmers' abilities to repay debts or make an income from maize is affected by the quantities of maize produced

² Discussion on maize prices in this section and Chapters 7 and 8 generally refer to Lempiras/Kg which makes comparison between wholesale and retail prices easier, although in some instances I use the wholesale measurement of metric tonnes rather than kilogrammes.

³ This is the basis of the study by Aguirre and Tablada (1989).

and sold. Large farmers selling substantial quantities of maize could benefit considerably from higher prices whereas the benefit to a small farmer may be quite marginal. Thus, because of the differentiated nature and outcomes of maize farming, prices for maize can have differential effects on farmers' incomes and their abilities to repay loans.

There have been several attempts to analyse the potential or actual effects of maize prices on maize farmers at a macro-economic level, including the effects of state intervention, and which I have referred to in Chapter 2 (for example, Aguirre and Tablada, 1989; Economic Perspectives, 1986; Hanrahan, 1983; Larson, 1982; Pollard et al, 1984; USAID, 1978b). There have also been other studies which have looked at market organization (for example, IRI, 1985; Loria and Cuevas, 1984). I shall return to some of the issues raised in Chapter 9. My concern here is an issue on which less empirical work has been done in Honduras and which does not appear in this literature, namely, whether the social differentiation of maize farmers was reflected in their receiving different prices for maize, and, if this did occur, why. I argue that although there is evidence that different farm size groups in Chichicaste and Jutiapa received different average prices, the relatively lower prices received by small farmers seemed to be a function of their need to sell their maize as soon as possible after harvest when prices were lowest⁴, to repay debts and/or to provide cash income for other consumption items. I look first at some of the perceptions farmers had of how prices affected them and then analyse the prices they actually received.

⁴ The *primera* harvest period starts in September. However, because of cultivation practices which often leave maize standing in the fields until the beans have matured, maize is often not sold until December/January/February.

7.2.1 *How maize farmers saw prices*

Among problems mentioned by maize farmers, prices were often one. Several interviewees in Chichicaste and Jutiapa, especially large farmers who were particularly concerned to run profitable enterprises (and also had the choice of investing their capital in other products), complained about prices of inputs and the cost of producing maize. Others complained about the prices received for their output. In Jutiapa, where at least two medium farmers and one large farmer had difficulties making a positive net income from maize, farmers were asked to say what they thought the main problems with maize production were, and typical comments were as follows:

'It is not profitable to sow maize because the selling price does not respond to costs' (large farmer)

'The main problem is grain prices' (small, medium and large farmers)

'Traders take advantage of the poverty of producers' (small farmer)

'The main problem is having to sell maize at harvest time to pay back debts [in other words, instead of being able to wait until prices rise]' (medium farmer)

'The government should not import grain but increase prices to producers' (medium farmer).

While there was concern about maize prices right across the spectrum, grouping the comments by type of farmer as in Table 7.4 below reflects the particular conditions they faced. For large farmers, the costs of production were an important issue, particularly the cost of inputs. One large farmer in Jutiapa said that, although he had three permanent workers, he spent more on technical inputs than labour. The problem was exacerbated when crops were affected by pests or diseases. This farmer's complaint was his main reason for deciding to increase his cattle herd rather than investing further in maize production. The relatively high absolute investment incurred by large farmers as well as the costs per hectare were clearly a concern. As Chapter 6,

Section 6.2 indicated, large farmers' net incomes per hectare were not automatically more favourable than those for small or medium farmers even if their absolute net income was much higher. However, for these farmers, the critical issue was how maize fared in relation to other crops or livestock.

Table 7.4 Some perceived problems with reproducing maize production by type of farmer (Jutiapa), 1987

<i>Small farmers</i>	<i>Medium farmers</i>	<i>Large farmers</i>
Maize prices	Maize prices	Maize prices
Traders take advantage of farmers' poverty	Post-harvest debts	Relationship between maize prices and costs of inputs
	Government maize imports undermine prices	

For medium farmers, prices received for output were also a concern, but the problem of repaying loans at harvest time generally forced such farmers to sell when prices were relatively low.⁵ As indicated in Table 7.4, attempts to increase and commoditize output were perceived by some as being undermined by government import policies. Although I do not discuss government import policies, farmer perceptions of the effects of government imports on prices (accurate or not) might well have influenced the extent to which medium farmers in particular (who were also able to produce marketed surpluses) would have been prepared to invest more in, and increase their output of, maize.

A small farmer comment in the table was that traders take advantage of small farmers' poverty (*'los comerciantes aprovechan de la necesidad'*). That traders took advantage of their poverty was such a commonly held belief among poor farmers and *campesino*

⁵ It was an irony that the DRI intended to provide and improve farmers' storage while many project participants would not have been able to take advantage of it because they needed to sell most of their harvest to meet debts.

organizations that it cannot be simply dismissed. Analysing whether and why small, medium and large farmers actually received different prices for maize provides some insights into this belief even if it does not offer a complete explanation.

7.2.2 Differentiated farmers: differentiated prices?

Collecting adequate and meaningful price data was not easy. One problem was what farmers were prepared to say, because it revealed information about their incomes. A second problem was accuracy in reporting prices received or time of sale. However, using the data available, it is possible to identify anomalies and interpret data more meaningfully by asking different questions and presenting the data in different ways. I have done this with nine graphs which I now discuss.

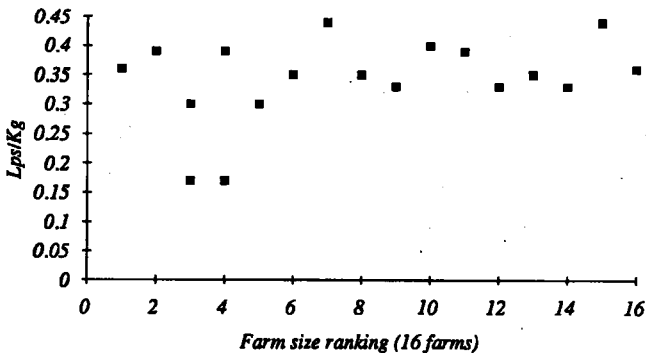
Taking farm size as a proxy for wealth, one might expect to see an increase in prices with farm size if the belief that traders paid lower prices to poor farmers were true. I have plotted these data in Figures 7.1 and 7.2⁶. I initially present the data separately for each village because there was a slight difference in overall price levels: for Chicicasté, the average price including pre-harvest sales was Lps.34/Kg and Lps.36/Kg without (Lps340 and 360/MT respectively); in Jutiapa, the average price including pre-harvest sales was slightly higher: Lps.35/Kg, and Lps.37/Kg excluding pre-harvest sales (Lps350 and 370/MT). These differences can probably be explained by the fact that there were more sales among interviewees in Jutiapa made to traders coming from main market centres such as Choluteca and Tegucigalpa than in

⁶ The data in these and subsequent figures include pre-harvest and harvest prices, except where specified; they do not include the estimated prices for further sales used in Chapter 6 to calculate total income from sales. I comment on later sales at the end of this sub-section.

Chichicaste where wholesale prices were higher than in Danlí that year⁷. In addition, more sales in Jutiapa than in Chichicaste extended into February and March when prices had increased.

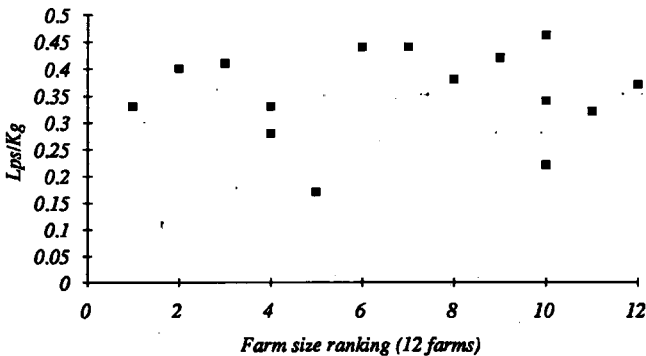
In Figures 7.1 and 7.2 prices are plotted by farm size ranking for each village. Both scattergrams show an inconclusive relationship between farm size and prices received. Among the outliers, the noticeably lower prices received at the smaller farm end of the spectrum in both villages were for pre-harvest sales. The relatively low price at the larger farm end for Jutiapa represents a quantity of damaged maize sold by a large farmer who made three sales in all. For one of his other sales, he received the highest price of all farmers.

Figure 7.1 Chichicaste: prices received for maize by farm size ranking, primera 1986-87



⁷ One medium farmer in Jutiapa stated that traders from the South (Choluteca) gave a better deal than local traders, acting fairly about weights and not quibbling over the quality of the grain.

Figure 7.2 Jutiapa: prices received for maize by farm size ranking, primera 1986-87



Note to Figures 7.1 and 7.2: the number of price values is higher than the number of farms because some farmers made more than one sale.

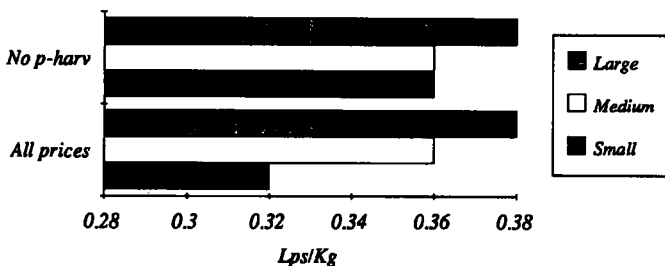
These data neither support nor refute the argument that larger farmers received higher prices than smaller ones. However, if the data are averaged by farm size group we begin to see some patterns emerging. I again take the two villages separately. Figures 7.3-7.5 show grouped data for farmers interviewed in Chichicaste. In Figure 7.3, price data for farm size groups have been averaged and are compared. In the bottom set of bars, all prices are included and the bars show a clear price difference for small, medium and large farmers, with small farmers receiving the lowest prices. But when pre-harvest sales are excluded, as in the top set of bars, the average price for small farmers increases and becomes identical to that received by medium farmers. Traders (or other farmers) might take advantage of poor farmers through pre-harvest transactions, but the relationship between harvest maize prices and wealth is not so clear from these data.

In Figure 7.4, the farm size groups have been changed slightly. I have incorporated one small farmer, who had a grocery store and whose farm size did not adequately

reflect his relative wealth, into the medium farmer group. Looking at the lower set of bars, this leaves the small farmers with a lower average price than the medium or large farmers (who begin to approximate each other). However, removing the data for pre-harvest sales again (in the top set of bars), the differences between small farmers and the others are not so great.

Figure 7.5 makes a further regrouping. This time, the small farmer group comprises only those with no institutional credit in the bottom set of bars on the assumption that credit might have enhanced their wealth and bargaining status (or conversely, that those with no institutional credit might be the poorer farmers surviving through personalized relations to landowners, and possibly traders). In the top set of bars, pre-harvest sales are again excluded. The results approximate those for Figure 7.4, again showing that small farmers in Chichicaste seemed to receive lower average prices than medium and large farmers, but that the difference was not so great when pre-harvest sales were excluded.

Figure 7.3 Chichicaste: average prices received for maize by farm size group, primera 1986-87

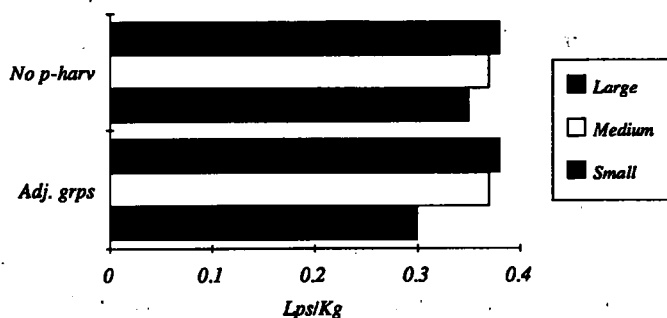


Note to Figure 7.3 (see also Figure 7.6):

All prices = average prices received for maize for all farmers in farm size group.

No p-harv = no pre-harvest prices, i.e. average prices for farm size group excluding those received for pre-harvest sales.

Figure 7.4 Chichicaste: average prices received for maize by adjusted farm size groups, primera 1986-87

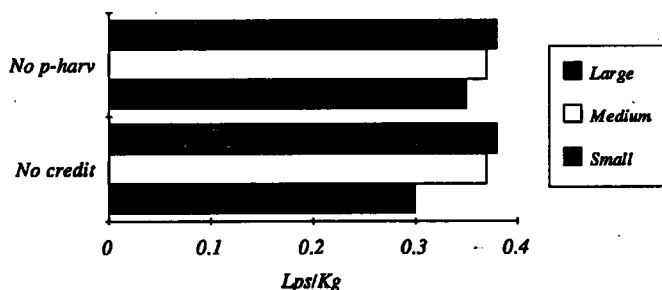


Note to Figure 7.4:

Adj. grps = adjusted groups, i.e. prices received by one 'small' farmer moved to medium farmer group; average prices for small and medium farm size groups are therefore different from the 'all prices' category in Figure 7.3.

No p-harv - as for Figure 7.3, but with adjusted groups.

Figure 7.5 Chichicaste: average prices received for maize by farm size group (small farmers with no credit), primera, 1986-87



Note to Figure 7.5 (see also Figure 7.7):

No credit = small farmer group includes only those who receive no institutional credit; medium farmer group as for Figure 7.4.

P-harv - as for Figures 7.3 and 7.4 but excluding small farmers with institutional credit.

Significance tests were carried out to confirm that pre-harvest sales were the key problem for small farmer prices in Chichicaste. A One-tailed t-Test comparing all small

farmer with combined medium and large farmer prices proved significant when the small farmer group was adjusted (in other words, when the wealthier farmer/storekeeper was removed) and all prices, including pre-harvest prices, were taken into account (Figure 7.4)⁸. This was also found to be the case when only small farmers without credit were considered and, again, all prices were taken into account (Figure 7.5)⁹. As soon as pre-harvest sales were removed from the data, there was no significance in the relationship between small farmer prices and those of other farmers.

Was the pattern similar in Jutiapa? The Jutiapa data do not lend themselves to the same degree of regrouping. However, it is possible to do some permutations. Figure 7.6 shows average prices by farm size group. Again, small farmers received lower average prices than medium and large farmers (bottom set of bars). However, medium, not large, farmers actually had the highest average prices, and when pre-harvest sales data are removed (top set of bars), small and large producers actually received the same average price¹⁰. If the small farmers are regrouped as in the Chichicasté data to include only those with no institutional credit (Figure 7.7), price differences between the small and the other farmers were more marked (lower bars) but the small farmers' average price was actually slightly *higher* than the large farmers' average price when pre-harvest sales are excluded (top bars). However, the average price data are on the basis of only two small farmer sales in this last comparison and are therefore a very limited data set.

⁸ Results: $t = 1.98$; $P(T \leq t) = .039$; $t_{\text{Critical}} = 1.83$

⁹ Results: $t = 1.96$; $P(T \leq t) = .046$; $t_{\text{Critical}} = 1.89$

¹⁰ That medium farmers in Jutiapa seemed to obtain the highest average prices may be related to idiosyncracies in the large farmers' data, for example, that one farmer received a very low price for some damaged maize.

Figure 7.6 Jutiapa: average prices received for maize by farm size group, primera 1986-87

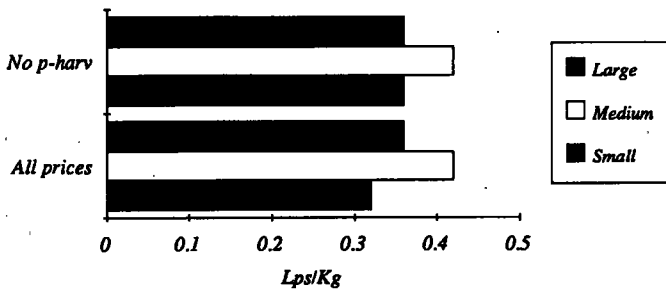
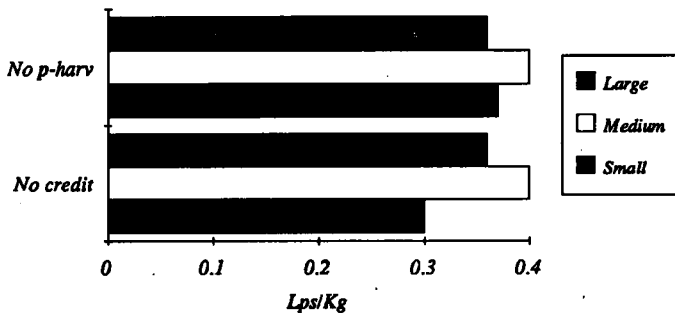


Figure 7.7 Jutiapa: average prices received for maize by farm size group (small farmers with no credit), primera 1986-87



As might be expected from these graphs, when One-tailed t-Tests were done on the raw data, no significance was found in the relationship between farm size and prices received in Jutiapa, especially given that there was only one pre-harvest sale reported. This result also adds to the impression from earlier analysis that the Jutiapa small farmers interviewed were somewhat better off than those interviewed in Chichicaste.

Overall the relationship between farm size and price may seem a weak one when looking at limited data sets. Even so, there is enough evidence in my data to continue

asking the question whether traders take advantage of poor producers at harvest time, although not to substantiate the contention. When pre-harvest trade is taken into account, the association seems clear, indicating that this was when traders (or other farmers) took most advantage of farmers' poverty.

The influence of pre-harvest sales on average prices for small farmers does however suggest that time of sale was a key factor in price. For many small farmers, even apart from pre-harvest sales, there is a desperate need for cash so that maize has to be sold immediately at harvest whatever the price. Richer farmers may be able to stagger their sales, covering debts and then waiting until the price rises. So, the problem for small farmers may not be that they are given lower prices than others at any point in time, but that they have to sell their maize when market prices are low anyway.

Looking again at my data by time of sales, it is possible to show that prices increased during the months that farmers sold maize. The reported sales for Chichicaste interviewees extended from November 1986 to February 1987, and for Jutiapa, from October 1986 to March 1987. In this instance, I have the data for the two villages on the same graph, and have ordered them by month of sale for 19 farmers for which the data were complete. Within each month, prices are plotted in ascending order on the assumption that price increases were actually occurring in the market (see Figure 7.8). Pre-harvest sales were excluded as they took place at a fixed price much earlier in the crop cycle. As one might expect, Figure 7.8 shows a generally positive association between increases in prices received and later sales. There are however some outliers which need explaining. One farmer in Chichicaste appeared to obtain a high price for his maize in November (he made an early sale because he did not plant a bean crop to grow against the maize). However the price was much higher than the apparent wholesale price for Danlí gathered by DRI extensionists for that period and may be inaccurately reported. Another January value recorded in Jutiapa may also be

inaccurately reported as it also far exceeded the wholesale price quoted by the DRI. It also creates an inexplicable jump in the general trend.

The question, then, was whether the time of sale was associated with farm size (still using this as a proxy for wealth). To plot this scattergram, I ranked the 19 farms by farm size, and ranked the months from 1 to 7, 1 being September, which is considered the first harvest month but when little maize is sold, and 7 being the following March, which was the latest reported sale in my data. The resulting Figure 7.9 does show a tendency for later sales to be associated with larger farm sizes, although it does not provide incontrovertible evidence. (The correlation coefficient calculated for these data was only .41.) Again there are outliers. For example, the two smallest farmers did not make the earliest sales, in fact, they were relatively late compared with other small farmers. These were two farmers whom I have mentioned in previous sections, who sold most of their crop and had other maize farmers in their household units. They also had borrowed inputs as well as land, and did wage work. That they were not the sole providers and had these means of financing their maize production probably allowed them not to sell their maize at the earliest opportunity. (In addition, their wage work might have delayed their own harvesting.) Another outlier is the early sale of some maize by one of the larger farmers. This was a sale of damaged maize and has been mentioned above.

Figure 7.8 Chicacaste and Jutiapa: prices received for maize by month of sale, primera 1986-87

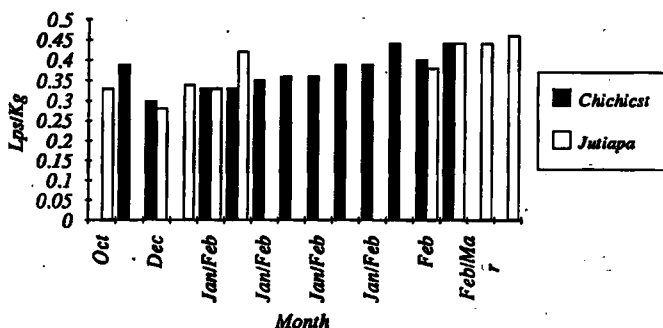
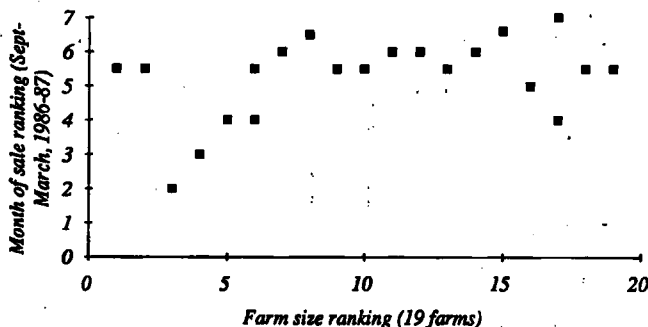


Figure 7.9 Chicacaste and Jutiapa: relationship between month maize was sold and farm size, primera 1986-87



Although plotting time of sale and farm size resulted in a weak positive correlation, the relationship between farm size and time of sale remains as issue. For both villages, the lower values in the early months of harvest were mainly prices received by small or medium farmers who had consumption or income deficits. However, not all farmers in this position in fact sold early, either because they had other sources of maize in the household or other sources of income with which to resolve their debts. Nevertheless,

farmers reporting February sales at higher prices tended to be medium farmers without deficits. Large farmers who may have sold relatively early were able to stagger their sales, covering most of their debts with their first sales. Although estimates for later prices received have not been taken into account for these and one or two medium farmers (see Footnote 5), that some of these farmers were able to make later sales from their surplus maize would have increased the average prices received by medium and large farmer groups. The difference in prices between small and larger farmers was thus even wider than the original comparisons made in Figures 7.3 and 7.6. However this analysis shows that the key factor affecting this difference was time of sale.

Although it would be easy to conclude that the extent to which small farmers received low prices was simply a function of time of sale, I contend that it was actually a function of the overall social relations of production and exchange. For example, one small farmer in Chichicaste made pre-harvest sales to finance production. Another sold his maize in December to finance Christmas/New Year expenditures (his overall net cash income from maize was negative and his situation had been exacerbated by heavy harvest losses; this farmer also did wage work). In Jutiapa, a small farmer who made very early sales in October, sold to a local landowner who was known to make pre-harvest purchases and trade in maize as well as farm. The small farmer had been supplied with some of his inputs from the landowner it is likely that there was an outstanding debt. Another small Jutiapa farmer who sold part of his maize early was involved in the rural credit scheme and was one of the conscientious small farmers often referred to by extensionists who struggled at all costs to repay his debts so as to continue receiving credit for the following season. This farmer stated that his credit did not stretch to paying labour to harvest his beans and so he had sold some maize early to recuperate his costs. Even some medium farmers (notably two in Chichicaste) made early sales to repay institutional loans.

7.2.3 Summary and conclusions

The main points can be summarized as follows:

- (i) There was a tendency for prices received for maize to increase with farm size, but once pre-harvest sales were removed from the data, the relationship between farm size and prices was a weak one; there was however an association between time of sale and higher prices, and a weak association between farm size and time of sale.
- (ii) The pressures to make early sales arose from complex processes in the social relations of production and exchange. These included the different types of indebtedness analysed in Chapter 6 and Section 7.1 of this chapter.
- (iii) Pre-harvest sales to finance production costs were a key point at which small farmers' poverty was linked to low prices received for maize.
- (iv) Farmers selling early after harvest tended to receive the lowest prices and these were often, but not always, small and medium farmers with consumption/income deficits.
- (v) Large farmers had the option of storage and delayed sales at higher prices for part of their crop, not open to many medium and most small farmers.
- (vi) Changes in prices were thus likely to have differential effects on maize farming because of the different social and technical conditions of production and exchange. Large farmers were likely to benefit more from price rises.

There was a series of pressures on small farmers in particular which meant that their relatively early sales (and hence lower prices) in several cases could not be explained as a function of time alone, nor, going back to the original contention that traders take advantage of poor farmers, simply by looking at the relationship between the farmer

and trader. No doubt some traders took advantage of these pressures, and farmers who were tied into debt relations with landowners providing land or other inputs (and also trading locally in maize in some cases - see Chapter 9) might have been particularly vulnerable when it came to time of sale and prices received. Obviously the most vulnerable were those who had to make pre-harvest sales merely to finance production.

7.3 Conclusions: food insecurity and class relations

Chapters 5, 6 and 7 have analysed the social relations of production and reproduction of maize, focusing in particular on processes of exchange and their effects. Throughout, there have been two key focal points of analysis: (i) the social hierarchies, commoditized, personalized and non-commoditized relations which might characterize exchanges over resources for production between small and large farmers, especially in Chichicasté, and which create linkages between their production and reproduction strategies; and (ii) how the reproduction of maize of different types of farmer has been affected by commoditization of production processes and output, and by attempts to finance production and increase output through institutional credit. I have tried to show how non-linear, complex and variable these processes are and what their effects have been for the capacities of maize farmers to stay in production and provide enough maize for household consumption needs.

The chapters have shown that these exchange relations resulted in indebtedness for many small and some medium farmers which undermined their entitlements in consumption and income, and potentially threatened their access to land. The routes to indebtedness were either based on personalized relations with large farmers and landowners, or on the exigencies of institutional loans. The continuing risk and vulnerability faced by these farmers in trying to reproduce maize production and consumption left them potentially or actually food insecure, even though many of them

were under pressure from rural credit programmes to increase output for the market to help meet national maize needs.

Although my arguments are based on small data sets, there are many maize farmers (if not the majority) facing the difficulties analysed among those in Chichicaste and Jutiapa. Hence, it would now be valuable to draw some preliminary conclusions on food insecurity and class relations. These conclusions would undoubtedly apply to analyses of the social relations of production and exchange in other parts of Honduras.

I have so far avoided putting class labels on farmers in Chichicaste and Jutiapa. Yet the farmers I interviewed were in very different social positions both in their access to resources and their capacities to reproduce maize production and gain access to maize.

Putting labels on different types of maize farmer tries to encapsulate a complexity of social relations which may change over time. Furthermore the realities were more complex implied by the labels. However, my labels offer a deeper understanding of the social positions of maize farmers than categories based on access to land and farm size, and those based on techniques of production, because they take into account the processes by which farmers gain access to resources (including labour) for production and how production (and consumption) is reproduced. Thus they offer an inroad into analysing and understanding food insecurity among maize farmers and provide a basis for rethinking policy issues, an issue I return to in the Conclusions to the thesis.

Appendix 7.2 provides a summary of the specific characteristics of different social positions in Honduran maize farming. My first category is that of semi-proletarian producers or farmers. In Chapter 1, I suggested that semi-proletarian producers were 'those peasants using family labour and engaging in simple reproduction ... whose survival depends on doing wage work for others'. I also pointed out that although semi-proletarian farmers could eventually become dispossessed of their mean of

production, wage work could also be a means for sustaining production of farmers' own crops.

I would now define semi-proletarian maize farmers in Honduras as those farmers with small amounts of land, often rented, who depend for their survival on wage work as well as farming. In my view, 6 of the 7 small farmers interviewed in Chichicaste fell into this category as well as one or two other farmers in both Chichicaste and Jutiapa. However semi-proletarian production of maize in Chichicaste also had other characteristics. Although it took place within commoditized relations, it also relied on personalized and as well as non-commoditized relations for its survival. Thus such farmers were often in dependent relations of exchange with landowners who provided them with small plots (sometimes for rent payment and sometimes not), hired them as labour, and might 'help' them with the loan of inputs for farming. The relationship rested on debts and obligations and ensured access to labour for the landowner. Because of the relative wealth of the landowner, and the ongoing cycle of indebtedness, there was an implicit power relation built into the social hierarchy of which both semi-proletarian farmers and landowners were a part. Thus, semi-proletarian farmers frequently depended on the patronage of landowners to be able to reproduce maize (as well as other crops), especially as they often had consumption and/or income deficits after harvest. They might also rely on other forms of indebtedness to continue financing their production, such as pre-harvest sales. These farmers were gripped in a cycle of 'secure' stagnation which could however be threatened if relations with patron landowners and employers broke down. Although they continued to produce maize, they faced underlying threats to their production and exchange entitlements and hence the possibility of actual or worsened food insecurity.

My investigation of semi-proletarian maize farming also explodes one commonly held belief - that such farmers do not themselves use wage labour. The use of temporary

wage workers was common among such farmers, and further research would probably reveal that it was directly related to the farmers' own need to do waged work on a regular basis.

My second category is that of petty commodity producers. In Chapter 1, I pointed out that conceptualizing petty commodity production was an area of ongoing debate and cited, on the one hand, Friedmann (1980) who defined it as fully commoditized production under capitalism except in the use of labour, and on the other, Bernstein (1990) who states that petty commodity producers are 'both capitalists and workers at the same time; they own or have access to means of production which they "put to work" with their own labour...' (*ibid*, 72). While accepting the basic ideas behind these definitions, I added that 'forms of production categorized as PCP are also pursued as active strategies for survival where other employment and income-earning activities are scarce.' Furthermore, the conditions for the survival of petty commodity production can be highly unstable.

Petty commodity production characterized nearly all the medium farmers I interviewed in both villages as well as most of the small farmers interviewed in Jutiapa. (Only one small farmer in Jutiapa carried out wage work on a systematic basis.) However, labour was also partly commoditized because it was hired on a temporary basis. Nevertheless, the general characteristics of petty commodity production in combining capital (or means of production) and family labour to produce commodities were broadly present with their own specific manifestations, as were the different potentials for engaging in simple reproduction or accumulation among the petty commodity producers interviewed. For example, 4 of the 5 small farmers in Jutiapa whom I would call petty commodity producers, were only just surviving at the level of simple reproduction. Even among some medium farmers in both villages, petty commodity production was a precarious existence threatened with debt. However, some petty commodity producers

satisfied their consumption needs and made a net income above wage rates (in one case, substantially so). Furthermore, several petty commodity producers had other on-farm and off-farm resources of food and income.

Thus petty commodity production of maize in Honduras in the 1980s was unstable and varying in its capacity to sustain simple reproduction without falling into debt or resorting to wage work. For these reasons I characterize it as 'insecure transformation'. Many such farmers were being persuaded to try and 'transform' their production using rural credit and adopted new technologies and techniques of production at high risk. The policy pressures to increase and strengthen this form of production, which I mentioned in Chapter 2, certainly pushed some of the petty commodity producers in Chichicaste and Jutiapa into new forms of debt relations. Thus even petty commodity producers could experience entitlement loss, as well as gain, and some could be threatened with food insecurity.

Finally, I come to the category of commercial farmers. All the large farmers I interviewed fell into this category. I did not try to conceptualize such farmers in Chapter 1, and in some respect their social position within maize farming is much clearer in its social relations than semi-proletarian and petty commodity production. On one hand, such farmers had access to large amounts of land (often through inheritance but also through occupation and purchase), their main concern was to make profits from maize which they attempted to do with commoditized and mechanized farming (including the use of permanent wage labour), and their future investment decisions with respect to maize depended on how much money they could make from it compared with other activities. (While commercial farmers were engaged in expanded reproduction, they could also experience indebtedness in maize production. However, their substantially greater access to resources gave them more options for production as well as collateral to cover their debts.) On the other hand, such farmers were also

often engaged in personalized exchanges with their tenants and workers, as well as employing (non-commoditized) family labour, usually in their adult sons who would hope to inherit land. Commercial maize farmers also had implicit and actual power to influence the lives of their workers and tenants as well as other aspects of village life.

How do these class categories relate to my initial classification of small, medium and large farmers, and what are the overall implications for the social positions of the farmers interviewed in the two villages? Reclassifying my original groups only modifies them slightly in the case of Chichicaste - one small farmer is put in the petty commodity producer group and one medium farmer is seen as semi-proletarian - whereas most of the small farmers in Jutiapa would now be seen as petty commodity producers (Table 7.5). This classification does reinforce the view that, among those interviewed, (i) small farmers in Chichicaste tried to sustain their own farming with wage work, while those in Jutiapa were more self-sufficient¹¹; (ii) the relations between small and large farmers in Chichicaste were more personalized than those in Jutiapa. However, such generalizations should also be treated with caution given that my data are based on a limited number of interviewees and may be idiosyncratic. More important from an

Table 7.5 Social positions of maize farmers interviewed in Chichicaste and Jutiapa, 1987

<i>Chichicaste</i>			
<i>Small*</i>	7	7	<i>Semi-proletarian*</i>
<i>Medium*</i>	6	6	<i>Petty commodity*</i>
<i>Large</i>	3	3	<i>Commercial</i>
<i>Jutiapa</i>			
<i>Small</i>	5	2	<i>Semi-proletarian</i>
<i>Medium</i>	4	7	<i>Petty commodity</i>
<i>Large</i>	3	3	<i>Commercial</i>

** Note that although the numbers are the same, the actual farmers in these groups are not identical*

¹¹ It is also possible that there was a clearer division between farming and wage work in the heart of the Jamastrán Valley than in Chichicaste, given that there were some very large farms and that commercial crops such as tobacco were grown.

analytical perspective is that the social positions of farmers and their relations to each other are dynamic: the precariousness of much petty commodity production, especially among those with small areas of land, could easily drive farmers into seeking wage work or alternative sources of income; equally semi-proletarian farmers might be able to change their positions through rural credit or by organizing themselves collectively (see Chapter 8).

These conclusions do not attempt to encapsulate all the dynamics of social relations of production and exchange in maize farming. However, the issues they raise have policy implications. These will be addressed in my concluding chapter.

APPENDIX 7.1

Farm and off-farm activities by farm size among maize farmers interviewed in Chichicasté and Jutiapa, 1987

Farm size group	No. in group	Maize	Beans	Cattle	Fowl and/or pigs	Veg	Fruit	Other crops	Farm-based processing	Craft work	Wage work	Other business
Chichicasté												
<1-5	7	7	7	1	7	3	0	0	0	0	6	2
5-50	6	6	6	2	6	0	0	1	0	1	1	0
50+	3	3	3	3	3	0	0	0	1	0	0	i.d.
Jutiapa												
<1-5	5	5	5	1	5	2	4	0	0	0	2	0
5-50	4	4	4	2/3*	4	0	1	0	0	0	0	2
50+	3	3	3	3	3	1	0	1	0	0	0	1

* Wife of one farmer has a small cattle herd

Notes to table: i.c. = incomplete data; cattle = 1 cow to large herd; veg = tomatoes, cabbage; fruit = water melon, fruit trees; other crops = e.g. cassava, sugar; farm processing = e.g. milk products; craft work = e.g. carpentry; other business = trade (e.g. grocery stores), trading in grains, milling, other (e.g. billiard parlour).

APPENDIX 7.2

The social positions of maize farmers

Type of farmer	Characteristics			Characterization of food security situation
	Means of access to resources for maize production	Technical conditions	Means of reproducing maize production	
Semi-proletarian farmers	Exchanges to obtain resources for production combine personalized and commoditized relations as well as non-commoditized use of family labour; rented or loaned land, often in agreement to do wage work for landowner; possible loan of technical inputs from landowner/patron to be repaid at harvest; possible finance from pre-harvest sales; also temporary wage labour as well as own and family labour.	Largely purchased inputs (weeder, seed, urea, hired oxen/machines) with limits on use of mechanized techniques and chemical fertilizers.	Wage work and relationship with source of rented/loaned land are key, as are abilities to make and repay small cash loans at high interest; farmers also likely to grow other crops such as beans, vegetables and keep some fowl and perhaps pigs.	Often have to make forced sales to cover debts with subsequent shortfalls in consumption; farmers often food insecure because of shortfalls in maize consumption needs and frequent negative net incomes, and therefore have difficulties in reproducing maize from own cash resources; potentially even more food insecure if relations with patrons break down; production characterized by 'secure stagnation' because dependence on patron/land-owners (and relatives) for survival limits improvement of productive capacities.

(Appendix 7.2 contd)

Type of farmer	Means of access to resources for maize production	Technical conditions	Means of reproducing maize production	Characterization of food security situation
Petty commodity producers	May combine own (inherited and purchased) and rented land; access to rented land for payment and not 'tied' to other obligations; production financed by institutional credit and/or other business; use combination of own, family and temporary wage labour (i.e. use both non-commoditized and commoditized labour).	Largely purchased inputs (weedkiller, seed, urea, insecticide) with some mechanized tasks (e.g. use of hired tractors for ploughing) and increasing use of chemical fertilizers; may own draught animals.	Production processes substantially commoditized and dependent on sales of output to repay institutional loans and other costs; some farmers may be forced to sell maize needed for their own consumption because of debts (forced sales); in general aspire to have continued access to credit to finance production but harvest losses can undermine this possibility; may have other means of on-farm and off-farm income.	These farmers combine a range of experiences from high levels of debt and precariousness to possibilities for expanding production; maize is also one of several economic activities; this type of maize farming is characterized by 'insecure transformation' and some farmers may even experience reductions in their ownership and exchange entitlements, and food insecurity.

(Appendix 7.2 contd)

<i>Type of farmer</i>	<i>Means of access to resources for maize production</i>	<i>Technical conditions</i>	<i>Means of reproducing maize production</i>	<i>Characterisation of food security situation</i>
<i>Commercial farmers</i>	Access to inherited, purchased and occupied land, although may rent land on commercial basis; may rent out or loan land to others, usually on personalized basis to workers; finance production with bank credit - can also use this to make loans of inputs to semi-proletarian farmers; use own and maybe some family labour, but production largely carried out by permanent and some temporary wage workers.	Use of purchased inputs including chemical fertilizer as well as urea; use of machines (own or hired) for ploughing; may combine oxen and machines for sowing; have storage facilities for maize.	Maize usually one of several farming (and non-farming) activities; farmers usually have large cattle herds and may grow other crops; continued maize production depends on continued access to bank credit; if maize fails, farmers have possibility of investing in other activities.	Farmers are food secure whether maize fails or not because of general wealth and possibilities of making money from farming as well as trade and business; may lose exchange entitlements if maize crop fails but will not jeopardize overall situation; maize production might sometimes be affected by 'insecure transformation' if taken alone but not in context of whole farm.

CHAPTER 8

REPRODUCING MAIZE IN COLLECTIVE GROUPS: EL PARAÍSO AND SANTA BÁRBARA

Introduction

This chapter departs from focusing on individual maize farmers and looks at production by collectively-organized *campesino*¹ groups. Although the activities of organized groups were not the main focus of my research, their experiences raise a number of pertinent questions for this thesis. For example, did organized groups, which were often formed by semi-proletarian farmers, break with the reproduction patterns found among such farmers? To what extent did maize production continue to depend on a similar combination of non-commoditized, personalized and commoditized relations to those of semi-proletarian farmers? To what extent were collectively-organized farmers better able to produce adequate maize and make an income from it than, say, semi-proletarian farmers or even petty commodity producers? Was debt as serious a problem for them as for semi-proletarian and some petty commodity producers? Were collectively organized farmers in a better position to reproduce or expand their maize production?

In this chapter, I argue that obtaining land through collective struggle cut through the land-labour exchange relations found between semi-proletarian and commercial maize farmers. However, there were differences between the groups in their capacities to

¹ As pointed out in Chapter 1, *campesino* is roughly translated as peasant. However, the issue of *campesino* identity is complex: as mentioned in Chapter 5, the largest landowner in Chichicaste considered himself a *campesino* because of his humble origins.

produce and reproduce maize, and the extent to which their new endowments in land were accompanied by changes in other ownership and exchange entitlements benefiting food security. The disengagement from previous social relations could leave some groups vulnerable to debt and unable to produce adequate maize for consumption. Members of such groups no longer had ties with landlords which might have provided some measure of security (although making improvement of productive capacities difficult). Even so, exchange relations with local landlords might still be established to obtain loans. While collective work was often a prerequisite for groups to be given institutional credit, it was often difficult in practice to obtain official loans. However, richer and more established peasant groups seemed to occupy social and economic positions with some similar characteristics to petty commodity maize producers. They also experienced similar advantages and disadvantages in their credit and debt relations with state banks or extension projects.

However, for all groups, the collective solidarity of struggle over land and the subsequent collective nature of the enterprise - no matter how variable this collective element might be - provided a new arena for exchange relations of a less hierarchical nature than those experienced by semi-proletarian farmers. The political or ideological principles which guided internal organization as well as relations with outsiders and the state, gave some internal solidarity and cohesion as well as the possibility of taking joint action in relation to external forces. Even so, there was also potential for differentiation within groups which will be made evident below.

The analysis in this chapter is based on my interviews with collectively-organized groups in Chichicaste and Jutiapa, and Quita Sueño, Santa Bárbara. The chapter first briefly situates my analysis in the context of peasant organization in Honduras and distinguishes three types of production unit. I then analyse land/labour relations in maize production, groups' experiences of income and debt, and how they manage

consumption. Finally, I look at whether collective organization had any effect on prices received for maize.

8.1 Peasant organization and types of production unit

The struggle for land by landless and land-poor peasants and the existence of an agrarian reform programme in Honduras in the 1970s and 1980s provided opportunities to organize production on a collective rather than an individual basis. Thus a key distinction between semi-proletarian maize farmers and *campesino* groups was the different strategies for obtaining land. The former commonly engaged in reciprocal but hierarchical relationships with landowners to obtain it, while organized groups were more often in dispute with landowners over access to land. This struggle was directed to disrupting landlord-tenant-wage worker relations, and had the general aim of alleviating landlessness and providing adequate livelihoods.

The struggle for land by groups was implicitly, and sometimes explicitly, a political as well as an economic project. Although groups organized to obtain land because they were poor and had inadequate means of livelihood, the struggle for land was situated within a broader context of unequal land distribution, land concentration accompanied by the fragmentation of small farms (see Chapter 4), and a growing rural population (in spite of rural-urban migration) among whom at least 40% were technically landless in the 1980s (see Chapter 2). Groups often faced opposition from landowners, who had historically been represented strongly in the state whereas *campesinos* and small farmers had not (Fonck, 1972). Nevertheless, since the 1960s, when rural landless began mobilizing to obtain land, *campesino* organizations have put pressure on the state to implement land reform (see also Chapter 2; Ruhl, 1984a). However, because of the close relationship between land and power, national organizations of *campesino*

groups have often been in confrontation as well as negotiation, with both the state and local landowners.

This thesis cannot provide a potted history of land reform and the role of peasant organizations in Honduras. Much has been written about this already (for example, Bröckett, 1987b; del Cid, 1977; Parsons, 1975; Pearson, 1980; Posas, 1979; Ruhl, 1984a, 1985). For this analysis, the critical aspect is whether the disruption of landlord-tenant-wage worker relations and the group action and solidarity around obtaining land created new forms of producing and reproducing maize which enabled farmers to make a livelihood and meet consumption needs.

For the analysis which follows, it is useful to distinguish between different types of organized groups and situate those I interviewed. It has been common practice in parastatal organizations such as the INA (National Agrarian Institute [for agrarian reform]) to distinguish three types of economic unit resulting from collective organization. These have been the basis of an informative study on such units by Goud (1986), who analysed some of the social and technical conditions of production of (and economic problems facing) (i) *empresas consolidadas* (literally, consolidated enterprises); (ii) *empresas semiconsolidadas* (semi-consolidated enterprises); and (iii) *empresas no consolidadas* (non-consolidated enterprises). For ease of terminology, I shall call them 'commercially established groups', 'commercializing groups' and 'struggling groups'.²

Commercially established groups are basically those producing permanent, export crops such as sugar cane or African palm, although members may produce food crops for

² Unfortunately, neither the word 'enterprise' nor the word 'group' adequately characterizes the range of productive units involved: enterprise creates the idea of a capitalist firm, while group does not in itself indicate the nature of the unit.

their own consumption. They are usually located in fertile areas of the north and south of Honduras, have had considerable financial support from state programmes and have been increasingly integrated into financial, input and output markets. They are often, but not necessarily, large cooperatives. Their members tend to be employed all year round in the activities of the enterprise, and the use of temporary and even permanent wage workers is common (*ibid*, 43). There is usually a specialization of tasks within the production unit and Goud suggests that internal differentiation is evident (*op cit*).

Commercializing groups may also be cooperatives. Goud states that they have a more diversified agriculture, combining the production of tree and citrus fruit crops with the commercial production of basic grains (maize, rice, beans and sorghum) and cattle (*ibid*, 71). These groups have not experienced the same extent of state support and investment as commercially established groups. Some of the fruit crops can also present high risks if markets have not been developed. The reproductive capacities of such groups can be rather fragile (what I would call 'insecure transformation'). Goud suggests that such units can occupy the labour of their members for most of the year, although incomes would not be as high as in commercially established groups. His study indicates that hiring wage workers is exceptional (*op cit*).

Finally, what I call struggling groups are characterized by Goud as follows (*ibid*, 94). He suggests that they primarily engage in production of food staples for direct consumption. In practice, all groups sell part of what they produce, whether collectively or individually, so this characterization by Goud of the type of production must be intended to indicate the prime purpose of farming activities and/or that such enterprises only engage in simple reproduction. Features of struggling groups include probable access to relatively poor or hilly land, lack of institutional credit, inadequate employment possibilities within the production unit and the need for continued wage work for others (*op cit*).

Although there was some variation in the local and migratory nature of group membership, a common characteristic of all types of group was the semi-proletarian origins of those who joined them. Predominantly male, members had generally been tenant farmers who had combined farming with wage work either locally for landowners or migrating seasonally to do tasks such as coffee picking. Some members might also have been sharecroppers or *colonos*.

How do these characterizations (which Goud develops in a series of case studies) help in understanding the dynamics of reproducing maize in the groups I interviewed? Although there were differences between the groups I researched, they did not always fit easily into these models. In the broadest of terms, two groups could possibly have been characterized as 'commercializing' while the remainder were 'struggling'. However, these characterizations do not actually reveal the complexities of the conditions facing the groups, nor their strategies for reproducing maize. For example, I shall argue that the struggling groups divided into two types: those who were closer to conditions of petty commodity production (PCP), and those whose conditions had some similar characteristics to those of semi-proletarian farmers³. These conclusions are summarized in Table 8.1 below. Even so, the collective nature of production (and decisions about use of resources and distribution of output and income) makes it problematic to insert groups easily into particular types of production which may also be carried out by individual farmers, as this chapter will show.

³ *It is even more complicated trying to make these distinctions between groups within a sectorial (such as the Quita Sueño groups - see Chapter 3, Section 3.2 and Section 8.2 below) who had similar conditions of production to each other but among whom some appeared more successful than others.*

Table 8.1 Initial categorization of groups interviewed, 1987 and 1988

	Commercializing	Struggling	
		PCP	Semi-proletarian
Chichicaste		1	1
Jutiapa	2		
Quita Sueño		9	1?

8.2 Reproducing collectively-organized maize production in El Paraíso and Santa Bárbara

I now turn to my own case studies and analyse their capacities to produce and reproduce maize. In 1987 I interviewed two groups in Chichicaste and two in Jutiapa (which I sometimes refer to as 'the groups in Jamastrán'). Three of the four groups were affiliated to national peasant organizations and the fourth was independent. Three had also recently been established at the time of interview (between 1983 and 1985) and the fourth had been in existence since 1969 (Table 8.2). The membership of this group included sons and sons-in-law of the original members. All the groups had fewer members at the time of interview than when they started - the process of establishing a group, obtaining land and setting up collectively-organized production is demanding of participants' commitment and resilience, and many leave⁴. For all the groups, the main crops were maize and beans. Two groups owned or looked after cattle, and other crops such as plantains or vegetables were grown.

In 1988, I interviewed 10 groups in Quita Sueño, Santa Bárbara. They all belonged to the same national federation and formed an organizational unit called a *sectorial*. This

⁴ A report for the World Bank on the agrarian reform programme discussed the problem of desertion of settlements. However, it pointed out that attrition rates were much lower among groups characterized above as commercially established than for other groups. The report also linked desertion to the type and amount of land acquired by the groups: The heaviest rate of desertion took place in the South...This is not surprising inasmuch as the average cultivable land assigned per family was little more than two hectares and this is a very droughty area' (World Bank, 1983, 26).

was significant because they had undertaken joint action to obtain 390 Has of land which was divided equally between the groups (see Table 8.2). They had only been established on their land for 2-3 years when I interviewed them. They also grew maize and beans, and frequently vegetables; one had a small cattle herd; various other income-generating activities were undertaken (for example, one group had a billiard parlour).

Table 8.2 Collectively-organized groups interviewed in Chichicaste, Jutiapa and Quita Sueño, 1987 and 1988

<i>Group</i>	<i>Number of members</i>	<i>Date obtained land</i>	<i>Land area of group (Has)</i>
<i>Chichicaste and Jutiapa</i>			
<i>LC</i>	23	1984/85	196
<i>NC</i>	19	1983	70
<i>CL</i>	13	1984	37
<i>EE</i>	24	1969	141
<i>Quita Sueño</i>			
<i>EM</i>	15	1986	39
<i>LA</i>	21	"	"
<i>FM</i>	16	"	"
<i>F1</i>	18	"	"
<i>F2</i>	16	"	"
<i>BV</i>	13	"	"
<i>EL</i>	15	"	"
<i>LL</i>	12	"	"
<i>AL</i>	11	"	"
<i>LF</i>	14	"	"

8.2.1 Land/labour relations

Here I first compare the extent to which groups had greater security of land tenure than semi-proletarian farmers (from which the groups' members had originated), the relative amounts of land that groups had access to and how land was distributed and used. I then analyse whether new social relations with respect to access to and use of labour had been established compared with the exchange relations of land and labour experienced by many semi-proletarian maize farmers.

(i) Land tenure

The types of security and insecurity of land tenure faced by groups were qualitatively different from those of semi-proletarian farmers. On one hand, land had been collectively occupied and (in these cases) occupation had been recognized by state institutions. On the other hand, access to land by groups had some insecure features. For example, although all the groups interviewed in both regions were legally established on the lands they occupied, they did not necessarily have land titles.

In Jamastrán, the groups had obtained land which had been expropriated from local landowners and three of the four had legal documents to guarantee their occupation of the land. However, one group had reputedly been under threat of expulsion by the Honduras National Cattle Owners Federation (FENAGH). The fourth, and oldest group, which should have had a land title, was then in dispute over compensation payments being made to the former owner of the land which the group now occupied. The group had discovered that the land was national rather than private land. This situation was symptomatic of the type of land colonization and expansion of pasture which took place between the 1950s and 1970s, when considerable national land was brought into farms whether legally or not (see Chapter 4).

Although these groups had some problems in the precise status of their lands, in other ways they had greater security of tenure than semi-proletarian farmers. The fact that these were organized groups who had taken collective action to obtain land, and in three cases had the support of national federations, as well as persuading government bodies and parastatal organizations to acknowledge their claims, all provided a degree of legitimacy. The groups were entities recognized by government agricultural extension offices, the INA, and, in one case, the agricultural development bank, BANADESA. These institutions were prepared to consider them for credit and

incorporate them into technical assistance programmes. Although this recognition did not offer complete protection from possible expulsion, the groups had an acknowledged right to farm the land they had obtained.

Group members were careful to distinguish their relationship to the land and their new, organized, *campesino* identities from those of semi-proletarian farmers. The Quita Sueño groups were particularly clear on this issue. Historically, they identified clearly with a particular class of producers whose social position was defined by their type of access to land and use of labour. They spoke of themselves as having been *campesinos organizados sin tierra*, or organized landless peasants, (as opposed to *campesinos sin tierra no organizados*, unorganized landless peasants, i.e. landless workers or semi-proletarian farmers), and having become *campesinos organizados [con tierra]*, or organized peasants [with land].

As new collective 'owners' of land, the Quita Sueño groups saw themselves as a distinct category from those unorganized semi-proletarian farmers who continued to rent land, as well as from *pequeños parceleros*. A *pequeño parcelero* was described as a farmer who might have had up to 20-25 *manzanas* (14-17.5 Has) of land. Groups said about such farmers: '*es campesino pero con su propia tierra y no organizado*' - he is a *campesino* but with his own land and not organized'. A number of group members stated that they had rented land from *pequeños parceleros* in the mountains and had also worked for them. In my terms, a *pequeño parcelero* was a relatively prosperous petty commodity producer, particularly if the farmer was able to rent out land and/or provide temporary wage work for others.

However, many members of groups had previously rented land from *terratenientes* - landowners who might have had anything from 50 *manzanas* (35 Has) upwards (according to the views of informants). *Terratenientes* were cattle farmers (*ganaderos*)

or they might have combined cattle with other crops (*terratienientes más avanzados*, or 'more advanced'). Some of the latter would have corresponded to my commercial maize farmers who combined maize production with cattle and possibly other commercial crops. The land which the Quita Sueño groups now occupied had belonged to a large *terratieniente* who had owned land in the mountains as well as the valley, and several of the groups' members had been his tenant-workers. The amount of land held by landowners in the valley was substantial: estates of 700-1,400 Has were mentioned. The unequal land distribution in the area was obvious. Given the massive difference between the *pequeños parceleros* and the *terratienientes* in access to resources, it gave the groups some justification in calling the former *campesinos*.

In principle, access to the land occupied by the Quita Sueño groups was secure. The INA had made the allocation to the groups after they had been squatting on the land, and the groups had had the backing of their national organization as well as a local cooperative offering technical services. However, they reported cases of other groups repeatedly occupying land and being thrown off elsewhere in the area, often with their crops burnt. Nevertheless, the settlement of this land and its strong organizational backing gave the groups some security and allowed them to plan their activities. Thus each group made its own decisions about land use and organized its own finances, while there were joint plans between all the groups in the *sectorial* to develop storage and marketing. The fact that they had been involved in collective action to obtain the land, had been allocated equal shares of it and lived in close proximity to each other gave them an important degree of cohesion.

(ii) Access to, distribution and use of land

Did groups actually fare better than semi-proletarian farmers with respect to the amount of land available to them? The groups in Jamastrán had an average land area

per member of between 2.9 to 8.5 Has (see Table 8.3). This was greater than that of farmers I would categorize as semi-proletarian in Chichicaste and Jutiapa, whose average farm size was only 1.8 Has. However, with one exception, groups did not divide up their land to be worked individually by the members. Three of the four groups had collective plots of between 20 and 30 Has, leaving individual families with .7-1.4 Has (1-2 *manzanas*) each (Table 8.3). This division of land within the group assumed that the family plot was adequate to provide personal consumption needs, while the collective plot was considered a source of group income. By contrast, plots of 1-2 Has would have had to provide income as well as consumption needs for semi-proletarian farmers.

Table 8.3 Distribution of land by collective and individual use among groups interviewed in Chichicaste and Jutiapa, 1987

<i>Group</i>	<i>Average land per member (Has)</i>	<i>Land allocated for collective use (Has)</i>	<i>Estimated size of individual plots (Has)</i>
<i>Chichicaste</i>			
<i>LC</i>	8.5	28	.7-1.4
<i>NC</i>	3.7	28	.7**
<i>Jutiapa</i>			
<i>CL</i>	2.9	24	.7
<i>EE</i>	5.9	43*	3.5***

* Rocky woodland used for grazing

** Estimate

*** The group has given individual responsibility for collectively-financed productive activities - see text

Similarly, in Quita Sueño, the amount of land available per head to group members was also more than they would have had access to as semi-proletarian farmers. Although all groups had the same area (39 Has), they had different memberships and thus distribution was not actually uniform. However, the land available would have given members access to about 2 or 3 Has. Again, all these groups worked a collective plot, although with considerable variation in size, and thus, in practice, the land available for individual use was much less.

Although organized groups did not invariably have plots that they worked collectively, and such plots often varied in size, there were several reasons for their existence. Banks and credit institutions generally gave loans for activities for which there was a financial plan and collective responsibility for its execution. However, Goud suggests that groups also preferred to have collective rather than individual responsibility for loans (*ibid*, 113), given the relatively high risk of indebtedness. There were also social as well as economic reasons for growing crops collectively: it was part of the ideology of breaking with notions of private property and individual gain (or loss); and it helped to maintain social cohesion within the group. Nevertheless, both these aspects of social organization had their problems. In practice, it could be hard for members of a group to sustain the break from individualism (and the goal of private ownership of land which many producers aspire to), particularly if the group dynamics were not actually cohesive, or if the group had difficulty administering its collective economy. The leaders of one Chichicasté group said:

'It is difficult to maintain our collective ideas and consciousness when each family has its own, individual problems, for example, differences in the size of families and therefore different economic needs.'

The experience of one Jutiapa group suggests that decisions about collective land use were based on tactical measures to satisfy both individual and collective needs, as well as some sense of collective responsibility. This group did not have a collectively-worked plot (EE in Table 8.3). It was a long-established group which had become a cooperative. It had changed the organization of its productive work because members had been apathetic about working on the group plot. Although the group obtained credit on the basis of a collective initiative, it had decided to divide the responsibilities for farming between the members. Each was obliged to grow at least 5 *manzanas* (3.5 Has) of maize. The inputs were bought collectively using the credit, but the land was worked individually until the harvest, which was carried out together. Fifty per cent of

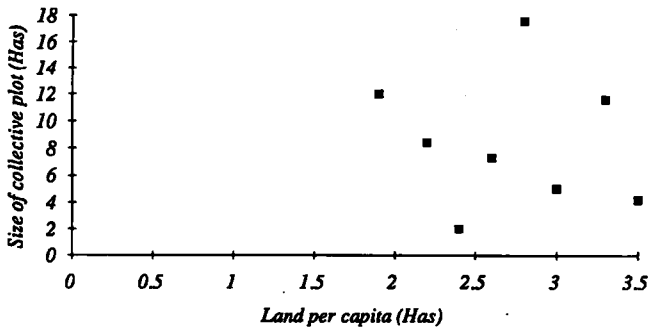
the maize produced on the plots would go to the members responsible for cultivating them and 50% would be used to pay back the loan and cover other group expenditures. In effect, each member or maize producer would meet personal income and consumption needs from a minimum of 1.75 Has of land (about the average amount of land available to the semi-proletarian farmers I interviewed). However, loans and costs of production were covered from the output of the other 1.75 Has. Furthermore, that the group could obtain credit collectively and take collective responsibility for repayment made each member's economic position stronger than if they had operated as individuals.

Different decisions about land allocation for collective use were also evident among the Quita Sueño groups. My data for 8 of the groups⁵, plotted in Figure 8.1, suggest that the size of collective plots declined with increasing availability of land per member, although this association was not very strong as indicated by the outliers. There might have been several reasons affecting groups' decisions about land distribution: what groups were able to obtain credit for⁶, and whether increased abundance of land per member created a greater sense of individual security or a propensity to take individual risks in productive activities.

⁵ Data were incomplete for two groups.

⁶ I discuss this question further below.

Figure 8.1 *Quita Sueño: relationship between land per capita in groups and size of collective plot*



There were other aspects to land tenure and use which suggest that although groups consciously tried to maintain some degree of collective organization and consciousness, they also engaged in commercial patterns of exchange over land which mirrored practices of individual farmers. For example, members of Jutiapa group, EE (see Table 8.3), kept cattle as well as growing maize (and beans), and rented land from a local landowner who provided pasture for their cattle at Lps6/head. Another group in Chichicasté (NC) had made a different arrangement. This group rented out part of its own land to a cattle owner. The group was in some financial difficulties and had no cattle of its own. However, group members looked after the tenant farmer's cattle for payment, although the group had to cover the costs of essential tasks such as putting up fencing. In other words, this was a commercial arrangement in which the group took on some of the risks of cattle rearing (whereas the landowner renting land to group EE had no hand in caring for their cattle).

These different arrangements reflected differences in the two groups. Group EE was relatively commercially successful (as will be seen) and fell into my category of 'commercializing' groups. Group NC had an outstanding loan with the DRI and was

trying to make money from a hierarchical arrangement characteristic of the social and technical division of labour in cattle production, which has been analysed by Howard Ballard (1988). According to her study, it was common practice for young cattle to be cared for by relatively small or medium farmers who took on the risks of disease and death, while large farmers had the main responsibility for fattening and sale to slaughter houses (in which lay the highest returns to investment). Thus although I assume that this arrangement was financially beneficial overall to the group, it involved members in hierarchical and risky exchange relations about which they expressed unease⁷.

A third group in Jamastrán (LC - also in Chichicaste) had a different kind of land problem. This group was relatively recently established, had acquired a considerable land area but had few of its own resources (except labour). Only 65 of its 196 Has were fit for cultivation.⁸ Group members managed to sustain a collective plot as well as individual ones, but had to finance production from pre-harvest sales.

Thus although there were many differences between groups and semi-proletarian farmers in terms of access to and use of land, the relatively greater and more secure access to land by groups did not necessarily exclude relations of hierarchical exchange, especially if a group was in a vulnerable position because of indebtedness. However, if there were any threat of dispossession from land, groups were able to take collective action. While this action was not always successful, there was greater potential for

⁷ This group was also in a conflictive situation with local landowners (members of FENAGH), the reasons for which were unclear, but they felt threatened by the possibility of expulsion from their land. The arrangement over cattle pasture with a local farmer may have been a means of protecting their land as well as a commercial agreement.

⁸ There was some concern in the early 1980s that groups were not using the land allocated to them. The World Bank study mentioned in Footnote 5 pointed out that much of the land allocated to groups was not actually fit for cultivation and that, in practice, groups tended to use a high proportion of the land that was (World Bank, 1983, 27-28).

securing continued access to land than for individual farmers renting small plots. Most importantly, when the group had secured its land, the organization and use of that land depended on internal decisions and priorities of the group which, in principle, involved processes of internal democracy and joint responsibility.

(iii) *Labour*

A key dimension to reproducing maize among semi-proletarian farmers was doing wage work. Key questions for collective groups, then, are to what extent access to land by groups obviated this necessity or whether new land-labour relations were established. A further issue is to what extent groups were able to meet their own labour needs in maize production, both individually and collectively.

Members of groups in both regions were trying to break with their semi-proletarian pasts. In particular, the groups in Quita Sueño, whose members had long histories of landlessness and wage work, had a developed awareness of social relations of land tenure and use of labour in Santa Bárbara and other parts of Honduras. As with many organized groups, they strove to set up new, collectively-organized and relatively equal social relations. These attitudes and perceptions meant that group members were often reluctant to talk about any wage work they still carried out, as well as discuss the implications of employing wage workers themselves. With respect to the latter, it was as if there were a moral weight - implicitly rather than explicitly expressed - not to employ *mozos* (temporary wage workers). Employing the labour of others was referred to with some unease, as was the use of the groups' own labour in projects which were not considered part of the expected activities of organized *campesinos* or which might be seen as taking money from fellow *campesinos*.

Looking first at the use of group members' own labour, the break with the semi-proletarian past was more successful with some groups than with others. However,

even among those who still carried out wage work, the crucial difference between them and semi-proletarian farmers was that the wage relation was no longer connected with exchanges over gaining access to land. Thus, in Jamastrán, the struggling Chichicaste group, LC, still carried out wage work for part of the year. Recently established, wage work was part of its survival strategy. The constraints on this groups' activities meant that, in effect, its members continued to be semi-proletarianized, but wage work was directed to financing other productive activities and consumption needs, not as part of an exchange relationship to obtain land.

Interviews with the Quita Sueño groups gave the impression that they had generally broken the wage labour relation in terms of their own employment. However sources among service organizations working with the groups suggested that members did make up cash income needs from wage work more often than they wished to indicate. That some groups had outstanding debts (which I discuss below) would give grounds for their members undertaking wage labour. However, only one of the ten groups actually admitted to doing any wage work. This group sowed the smallest total area of maize of all the groups (although it was not the smallest in membership) and had chosen to keep cattle (which require little labour) on part of its land. Other sources said that this group was also had an outstanding loan to repay. Members of the group stated: 'We do day-labouring if we are short [of money]. We do ground clearance or pick coffee. We can't get work in tobacco processing - they don't like groups.'⁹

⁹ This comment also indicates some of the potential limits on groups obtaining wage work. Their collective ability to organize probably posed a threat in situations where factory conditions prevailed, such as in tobacco processing, whereas casual day-labouring on farms was easily controlled by landowners, especially in a context of high un- and underemployment.

Given the general ethos of collective work and responsibility (and not exploiting others), did groups employ wage labour themselves? Goud's study suggested that commercializing and struggling groups rarely, if ever, employed others. However, among the groups in Jamastrán, one (the cooperative, EE, in Jutiapa) regularly employed wage workers to 'help out' as well as using the labour of women and children in certain tasks, such as fertilizing, spraying pesticides, and harvesting beans (which is very laborious). The Chichicaste group, NC, which let out part of its land to a cattle farmer, also hired seasonal workers, but only for certain tasks in the bean crop. I estimated that the first of these two groups probably had a real labour shortage for its productive tasks. Using the global figures for estimating labour requirements in maize and bean production (73 days/Ha and 63 days/Ha respectively [CONSUPLANE, 1978, 37]) which I employed in Chapter 6, Section 6.2, and using 270 days/year for labour availability among members of the group¹⁰, the group seemed to be short of about 44% of its labour needs for crops alone (in other words, discounting their cattle). Taking into account that this is only an estimate, and that family labour was used in some tasks, there was still a likely need for the group to hire others on a temporary basis to carry out all its productive activities.

However, labour hiring by groups was not necessarily a result of labour shortage. Using the same technique, the Chichicaste group, NC, mentioned above, was estimated to have only a small labour shortage. The group seemed embarrassed to admit that they employed others to work for them. By contrast, a second Jutiapa group was very proud that all its productive work was carried out internally by the group. Hiring or not hiring labour was clearly a point of principle as well as labour availability.

¹⁰ *This is for members only, not for their families.*

Thus, it was possible for formerly semi-proletarian farmers to become labour hirers whilst they dedicated their time to other activities. For example, in Quita Sueño, some groups claimed that they needed to employ temporary workers in maize production because they did not have the labour time required for all the tasks. My own estimates of labour availability and labour needs, calculated as above, indicate that only two groups might have had a small labour shortage for both maize and beans. However, almost all the groups grew vegetables as well and it was generally the smaller groups (in terms of membership) who stated that they employed others. The most notable of these was the group which had set up a billiard parlour, although it was unclear how much labour was required to run it. This group stated that it employed wage workers in both collective and individual maize production - a decision which might have been based on the available cash in circulation from its other activities rather than on a shortage of labour within the group. However, some groups also stated that they spent considerable time in meetings associated with the organization of the *sectorial* as well as groups' own affairs, and it was clear that the processes involved in this way of life and in collective enterprise demanded extra time and energy of a type not required in individual households and farms.

(iv) Summary and conclusions

The experience of these groups shows that access to land did not necessarily mean that members of groups no longer needed to engage in wage work. However, wage work was no longer performed as part of an arrangement to obtain land. Furthermore, some groups became wage labour hirers. Thus these land and labour accounts also demonstrate ways in which collectively-organized groups were differentiated from each other and how they might set up different exchange relations either to survive or to maintain their productive activities within the group. As I shall show, there were other areas of exchange in reproducing maize, particularly in the area of debt relations, which

indicate that some 'struggling' groups shared some similar conditions to semi-proletarian farmers, while others seemed to be more like collectively-organized petty commodity producers.

Among the *Quita Sueño* groups, with equal amounts of land but unequal memberships, there were different strategies with respect to how much land was allocated to collective work and whether wage labour was employed or not. Whether the different strategies with respect to land and labour use implied some new differentiation developing between the groups, perhaps involving individualization of production processes, was hard to say at the point of fieldwork. However, as we shall see later in later sections, there were other hints that a new differentiation was occurring.

8.2.2 Debt relations and income from maize

Critical issues for semi-proletarian farmers and petty commodity maize producers were indebtedness and the nature of exchange relations affecting the financing of maize production, as well as being able to repay debts and retain maize for consumption. How did collectively-organized groups finance their maize production? Did groups have to rely on personalized loans and pre-harvest sales as semi-proletarian maize farmers did? To what extent was their experience of access to institutional credit subject to the same pressures as those of petty commodity producers? Did groups make positive net incomes from maize?

(i) Financing production

Although organized groups could in principle obtain institutional credit for collective plots, group members and extension workers stated that groups often had great

difficulty in negotiating loans, especially from banks¹¹. In some cases, there might have been political reasons for denying groups credit; in other cases, groups might have been unable to demonstrate a viable economic plan. However, an important reason for restricted access to institutional credit was that export and permanent crops - generally produced by commercially established groups - were given priority by both state and private banks (Goud, 1986, 119). Furthermore, Goud states that BANADESA, which was the main funding bank for collectively-organized groups, would only finance the production of basic grains such as maize if the group requesting credit were legally constituted (for example, as a cooperative) or belonged to a regional cooperative which could administer the loan (*ibid*, 121). In addition, as mentioned above, both banks and groups preferred collective responsibility for the loans: from the banks' point of view, because there would be greater likelihood of repayment; from the groups' perspective, because debts would be shared.

In both El Paraíso and Santa Bárbara, there were integrated rural development programmes (DRIs) committed on paper to providing collective groups with credit and technical assistance. In Jamastrán, two of the four groups had received credit for maize production through the DRI (Table 8.4), while the struggling group, LC, in Chichicaste hoped to obtain credit from the DRI in the future. In 1986-87, this group had negotiated pre-harvest sales with the wife of a commercial farmer in Chichicaste. (The group also financed its activities with wage work.) The other Chichicaste group (NC) had also made pre-harvest sales in addition to obtaining institutional credit. However, the group stated that this loan was for other needs than maize production. This group had a serious debt problem, as we shall see. The fourth group, the cooperative, EE, in

¹¹ Goud estimated that about 30% of groups in the 'agrarian reform sector' received no credit at all (1986, 119).

Jutiapa, which I consider a commercializing group, had access to regular credit from BANADESA.

Table 8.4 Sources of finance for maize production among groups interviewed in Chichicaste and Jutiapa, primera 1986-87

<i>Group</i>	<i>Sources of finance for maize production</i>
<i>LC</i>	Pre-harvest sales; wage work
<i>NC</i>	Credit from DRI
<i>CL</i>	Credit from DRI
<i>EE</i>	Credit from BANADESA

Most of the Quita Sueño groups, who were relatively recently established compared with 3 of the 4 the Jamastrán groups, had also obtained some form of institutional credit since their inception although sources included the agricultural extension activities of some church programmes as well as the DRI in Santa Bárbara, PRODESBA - *Proyecto de Desarrollo Rural de Santa Bárbara* (Table 8.5). PRODESBA was similar to the integrated rural development project being run in El Paraíso.¹² This project aimed to provide Lps 20,400,000 [of agricultural credit] to about 7,500 producers through loans to 2,900 individual farmers, organized in 160 Agricultural Committees, 3,200 beneficiaries of the Agrarian Reform programme belonging to 80 settlements and about 100 women's and youth organizations' (SECPLAN/USE-PRODESBA, 1987, 6; my translation). This was to take place over a seven year period of rural development in the department of Santa Bárbara, from 1985-92. At least 7 of the Quita Sueño groups had received finance for maize production from PRODESBA at some point since 1986.

¹² It was jointly financed by the International Fund for Agricultural Development, the Central American Bank for Economic Integration, a German NGO, and the Honduran government.

Table 8.5 Sources of credit reported by 10 Quita Sueño groups since inception (1986-88)

Source of credit	PRODESBA	Catholic Church	Mennonite Church	No data
Number of groups	7	3	2	2

Note: some groups received credit from more than one source

PRODESBA's own evaluation of its credit programme reveals shortcomings which were familiar from the experience of the DRI in El Paraíso (SECPLAN/USE-PRODESBA, 1987). The credit programme was designed to increase production and productivity (and incomes) by allowing producers to improve their techniques of production. The main target population of the credit scheme was described as having: 'a high rate of illiteracy, little customary use of technical inputs (seed, fertilizers, herbicides, pesticides), low risk techniques of production resulting in low yields, subsistence agriculture, use of family labour, small plots of land (around 2 Has), etc' (*ibid*, 13; my translation) and was to comprise mainly farmers in the hilly areas. The evaluation was, however, critical of the technological packages designed by the research department of the MRN (Ministry of Natural Resources) which, it says, were based on the needs of medium and large farmers who were able to carry out mechanized production in the valleys.

In fact, a very small proportion of the money assigned for credit by PRODESBA was distributed in the first two years of the project (1985 and 1986). Several problems were identified:

- (i) the lack of training of officials assessing producers for credit and the slowness and inefficiency of allocation
- (ii) the lack of preparation of recipients in using the technological packages
- (iii) the low take-up of credit by producers who feared the risks involved

(iv) in the case of organized groups who had received land through the Agrarian Reform programme (such as those in Quita Sueño), the bureaucratic processes: groups had to have a recommendation from the INA before BANADESA would consider their applications to the credit scheme. Many groups never received credit because of the slowness of the INA in approving their applications.

Given the small number of organized groups receiving credit in the scheme (only 9 in 1986), the Quita Sueño groups were rather fortunate to have obtained credit from PRODESBA according to the perspectives of this report.

Evidence on informal access to credit such as pre-harvest sales among the Quita Sueño groups is sketchy. Only two groups mentioned making pre-harvest sales but these were sales by individual group members, made during critical times. It was unclear to whom these sales were made. One group said that pre-harvest sales were much less common than when they rented land (when pre-harvest sales were frequent) because there was 'less trust between people'. Bearing in mind that pre-harvest sales were usually made between people who had other, hierarchical, ties over access to land and/or labour, the breaking of these ties with group organization and access to land was likely to have provided fewer opportunities for personalized relations between farmers of differential wealth. Two groups mentioned that traders occasionally bought green harvests at half-price but this seemed infrequent. However, yet another group mentioned that members of groups sometimes had debts to settle with each other after harvest, which again suggests some degree of differential wealth within or between groups, although the extent of this was unclear.

As with all maize farmers, collectively-organized groups needed ready cash for purchasing inputs. Reinforced or not by credit packages, groups in Chichicaste and Jutiapa regularly bought inputs and hired machines (see Table 8.6). It will be noticed

Table 8.6 Agricultural input use by collectively-organized groups interviewed in Chichicaste and Jutiapa, primera 1986-87 (number of groups)

<i>Input</i>	<i>Owned</i>	<i>Hired or purchased in 1986-87</i>	<i>Not used</i>	<i>No data</i>
<i>Seed</i>		4		
<i>Weedkiller</i>		4		
<i>Urea</i>		4		
<i>Chemical fertilizers</i>		1	3	
<i>Insecticides</i>		4		
<i>Oxen</i>		2	1	1
<i>Tractor</i>	1	2	1	
<i>Sheller</i>	1	3		
<i>Sacks</i>		4		

from the table that one group actually owned its own tractor. This was the 'commercializing' group, EE, in Jutiapa which had been able to finance mechanization with its credit from BANADESA. By contrast, the one group which did not use a tractor for any tasks was the struggling group (LC in Chichicaste) which had made pre-harvest sales to help finance production. Interviews indicated that this group also used less weedkiller and fertilizer than even small farmers, as well as less than that used by the other groups (see Table 8.7). This group had probably been forced to keep its costs down. The other Chichicaste group (NC), which was relatively better established and had received institutional credit from the DRI, showed a peculiarly low use of urea but was the only group which bought chemical fertilizer. In contrast to individual farmers, chemical fertilizer was hardly used by the groups (although chemical fertilizer use among individual small farmers was also rare).

Table 8.7 Comparison of average quantities of biochemical inputs used by small, medium and large maize farmers and collectively-organized groups interviewed in Chichicaste and Jutiapa, *primera* 1986-87 (Kgs/Ha)

Farm size group (Has)	Weedkiller	Seed	Urea	Chemical fertilizer
<i>Chichicaste</i>				
<1-5	1.98	2.1	123	19
5-50	1.84	9.7	127	43
50+	2.2	17	130	108
<i>Group LC</i>	1.4	15.6	75	0
<i>Group NC</i>	1.76	13.2	88	58
<i>Jutiapa</i>				
<1-5	1.56	13.3	130	13
5-50	1.13	10.7	130	16
50+	1.78	19.8	152	87
<i>Group CL</i>	1.95	18.2	130	0
<i>Group EE</i>	2.6	16.25	130	0

The experience of the Quita Sueño groups suggests that credit acted to influence decisions about which crops to grow as well as reinforcing the use of commodities in production. In spite of the PRODESBA report's critique of the technological packages, farmers receiving credit were expected to improve their techniques of production by using more (purchased) technical inputs. As with all farmers interviewed in Chichicaste and Jutiapa in El Paraíso, the groups in Quita Sueño generally used herbicides and fertilizers in maize production, with a high frequency of using chemical fertilizers as well as urea compared with farmers in Jamastrán (see Table 8.8). In the year of interview, there was also a greater tendency to select seed from harvests than among the Jamastrán groups¹³. At least three of the Quita Sueño groups had bought oxen with their credit and most, if not all, groups hired the use of tractors for at least part of their ploughing. The resulting yields from these techniques were generally

¹³ These might have been idiosyncratic data. Groups might have bought seed for the year prior to the selection year - alternating between bought and selected seed was quite common. However, groups regular selection of seed might have accounted for the apparently low incidence of *maíz muerto* in this region.

considerably higher than those achieved among the groups in Chichicaste and Jutiapa (compare the data in Table 8.9 with those in Table 8.11 below). The yields suggest that ground fertility was higher in the Valley of Quimistán than in the Valley of Jamastrán. In addition, information from interviews indicated that there was apparently no problem with *maíz muerto*.

Table 8.8 Agricultural input use by 10 collectively-organized groups interviewed in Quita Sueño, primera 1987-88 (number of groups)

<i>Input</i>	<i>Owned now or selected</i>	<i>Hired or purchased in 1987-88</i>	<i>Not used</i>	<i>Incomplete data</i>
<i>Seed</i>	7	1		3
<i>Weedkiller</i>		10		
<i>Urea</i>		10		
<i>Chemical fertilizers</i>		8	2	
<i>Insecticides</i>		1	3	6
<i>Oxen</i>	3	1	1	5
<i>Tractor</i>		8		2

Table 8.9 Average maize yields by type of ground reported among groups interviewed in Quita Sueño, primera 1987-88

	<i>Hillsides without fertilizers</i>	<i>Hillsides with fertilizers</i>	<i>Flat land without fertilizers</i>	<i>Flat land with fertilizers</i>
<i>Average yield (MT/Ha)</i>	1.8	3.3	3.4	4.3

As well as inducing the use of particular technologies in maize production, credit relations might also affect overall work organization and cropping patterns. The credit offered to the Quita Sueño groups from PRODESBA seems to have been short-lived. Six of the 7 groups who stated having received credit had only benefited from it for one year, and the other for two. Some groups said they had fallen into debt. However, the groups had access to other sources of credit outside PRODESBA, especially those run by the church (Table 8.5). This part of Santa Bárbara and the neighbouring community of Macuelizo had an active Catholic Church with a programme of supporting grass-

roots projects. In addition, the Mennonite Church ran a social programme which also provided credit. Credit received from these sources tended to be towards diversifying crop production and thus was also directed to vegetables or other marketable crops such as tomatoes. These credit schemes affected groups' decisions about what to produce and how to use collective plots. For example, one group stated that their tomato patch (financed by church credit) had now become their only collective plot. All maize was to be produced individually. Another group, which also only had a very small collective plot (2 Has), had received credit from the Mennonites for three years. This group claimed that the Mennonites tended to promote individual rather than collective work.

(ii) Making a net cash income from maize

In estimating groups' net cash income from maize production, the same qualifications and caveats apply to calculating costs and net incomes as for individual farmers (see Chapter 6, Section 6.2). However, making estimates for groups was even more difficult than for individual farmers because of the combination of collective and individual maize plots. The data analysed below focus on what the groups considered their collective domain rather than on individual farmers' plots. Collective plots, or areas assigned for collective use and benefit, and collective sales, were the main sources of cash income for the groups, as well as the productive activities for which they could justify their credit applications, even if they involved individually-allocated plots of land and division of proceeds between individuals and the group as in the case of group EE in Jutiapa. In general, it was difficult to estimate whether groups would be able to make further maize sales from their harvests, or calculate the quantities of maize that

might have had to be purchased to meet consumption needs during the year.¹⁴ Thus my estimates below are based on (a) cost estimates which include inputs, any wage labour, and interest on cash loans, and (b) maize sales made up to the point of interview.

As I did not collect detailed quantitative data on costs and sales for groups in both regions, I focus primarily on the evidence from Chichicaste and Jutiapa. I show the estimates I calculated for net cash income per hectare and net cash income per member (effectively, per household). These data are compared with the model drawn up by the DRI for groups' production of maize with credit, and with the mean and median incomes of individual farmers.

Considering net income alone, I would classify the two Jutiapa groups as 'commercializing' (especially as they were making a positive net income and not doing wage work for others) and the two Chichicaste groups as 'struggling'. Looking at the left side of Table 8.10, my estimates show that three groups had a positive net income from maize. The two Jutiapa groups made a positive net income per hectare and an even higher net income per member, with the cooperative, EE, making considerably more per member than the other group. Although the cooperative was a long-established and relatively wealthy group, these data should be treated with some caution because it was difficult to estimate the costs of running their own equipment. The third group with a positive net income (LC) was the most recently-established group of the four. For this group, net income was very low. In fact, this group barely broke even, had sold most of the maize it produced and had a consumption deficit. Its

¹⁴ Although group members were generally entitled to dispose of their own maize as they wished (or needed) to (including sale), members' own plots were assumed to be for household consumption and personal subsistence needs. However, there were indications from interviews that some individual households had difficulty meeting their consumption needs.

costs of production were much lower than for other groups, but equally, it had lower yields (see Table 8.11 below); furthermore part of its maize was unavailable either for consumption or sale because of its pre-harvest debt. The second Chichicaste group (NC) had a substantial negative net income. That they had combined pre-harvest sales with formal credit also suggests that the group was in a financial pickle. In interviews, this group indicated that it had internal problems which were affecting its productive activities.

The two struggling groups in Chichicaste were however in different positions. The overall resource base of the negative net income group, NC, was stronger than the other group's. NC was longer-established, received institutional credit and had diversified its productive activities into plantains as well as grains. The problems faced by this group were organizational as well as economic, whereas for the group, LC, its limited capacities to use its land were apparent.

Table 8.10 Net income from maize production estimated for groups interviewed in Chichicaste and Jutiapa, primera 1986-87, and net income of equivalent farm model designed by the DRI

	Groups interviewed				Project model**			
Group	Costs* of prodn. Lps/Ha	Value of sales Lps/Ha	Net income per Ha Lps	Net income per member Lps	Costs* of prodn. Lps/Ha	Value of sales Lps/Ha	Net income per Ha Lps	Net income per member Lps
	Chichicaste				895	915	20	55
LC	312	328	16	19				
NC	553	308	-245	-360				
	Jutiapa							
CL	536	992	456	842				
EE	420	774	354	1446				

* including interest on loans

** Source: MRN, 1984, 133-134

That there were differences between the two villages is not in itself significant except in the sense that Jutiapa was generally a more prosperous area with better land for cultivation than Chichicaste, as discussed in earlier chapters. The land available to the

Chichicaste groups was classified as undulating, while the Jutiapa groups had flat ground. Yields among the Jutiapa groups were higher than those of the groups in Chichicaste (see Table 8.11), those of the group, LC, being particularly low, partly explained by differences in technology use (see Table 8.7 above). However, as important were the specific conditions of production and exchange of the different groups which had enabled them to invest money and labour in maize in different ways, as well as processes such as the internal dynamics and strategies of the groups, and factors such as length of time that members had been working together. Thus, at the one extreme was the struggling and recently-established group, LC, financing maize production through pre-harvest sales and wage work and using relatively basic technologies compared with other groups. At the other, was the cooperative EE, long enough established for the children of the original members to be running it, receiving credit from BANADESA for relatively mechanized production, combining both individual and joint responsibility for output.

Table 8.11 Maize yields for collective plots among groups interviewed in Chichicaste and Jutiapa, primera 1986-87

<i>Group</i>	<i>Yield (MT/Ha)</i>
<i>LC</i>	1.2
<i>NC</i>	2.2
<i>CL</i>	2.3
<i>EE</i>	3.3*

* Average for all members of the group

It is again instructive to compare my estimates for the groups with the data used for the DRI's farm model for groups or cooperatives (right side of Table 8.10) with the caveats about different calculations for labour costs made in Chapter 6, Section 6.2.3. The model used for groups or cooperatives assumed the cultivation of 54 Has of maize with technologies and techniques of production financed by credit from the DRI, and a group membership of 20 (MRN, 1984, 133-134). Coincidentally, the average area

sown for the four groups I interviewed was 56 Has, also with an average membership of 20.

Again the costs of production assumed in the model were considerably higher than those estimated for the interviewed groups, as was the value of sales. In addition to putting a cash value on all labour used, the estimated costs probably anticipated a higher use of technical inputs and hire of machinery than used by the groups that I interviewed, while the sales were based on assumed yields of 3.2 MT/Ha, whereas only one of the groups that I interviewed achieved this level (see Table 8.11 above). However, the net income per hectare and per member calculated by the DRI did not foresee the range of net incomes estimated from the data given by the interviewed groups. In fact, as in the models for individual farmers, it was estimated that groups would potentially earn very little net income from maize. The assumption behind the group model was, again, that farming would be diversified with the use of credit, and that maize and beans crops would be combined with high value crops such as fruit and vegetables (which were estimated as bringing a net return of about Lps2-3,000/Ha). Nevertheless, the overall net income per member for all cropping activities would only be Lps1,052 according to the DRI (*ibid*, 134) - less than I estimated for a rural labourer in permanent wage work (see Chapter 6, Section 6.2.3).

There are several points arising from this comparison. First, as concluded in Chapter 6, there were apparently considerable discrepancies between models and realities. Second, it was clear that agronomists considered maize a low income activity, even though groups were being encouraged to plant a substantial area of land with maize. In part, the model reflected assumptions about the markets for agricultural products in Honduras: the high demand for maize compared with fruit and vegetables, and the relatively high value of fruit and vegetables compared with maize. Thus large marketed surpluses for maize were needed, whereas only limited quantities of fruit and vegetables

could be absorbed by the market¹⁵ (a point also made by Goud in his discussion of the risks faced by commercializing groups who produced fruit crops [Goud, 1986, 71]).

How did the groups' capacities to make a net income from maize compare with individual farmers? On this occasion, I compared the estimated average net incomes for classes, as opposed to farm size groups, of individual farmers (as summarized in Table 7.5 at the end of Chapter 7) with average net income per group member. Making this comparison for the groups as a whole shows that group members did considerably better on average than semi-proletarian farmers (who had negative net incomes from maize) although not as well as petty commodity producers (Table 8.12). Comparing the net incomes of individual farmers with only the struggling and commercializing groups shows struggling groups doing as badly as semi-proletarian farmers and commercializing groups doing considerably better than petty commodity producers, although the net incomes for the former may be somewhat inflated by the underestimation of one group's costs. Nevertheless, making this comparison indicates the variable nature of income from collectively-organized maize and the differences between groups.

Table 8.12 Average net incomes (means and medians) of individual farmers by class (both villages) and members of collective groups interviewed in Chicacaste and Jutiapa, primera 1986-87*

<i>Farmers</i>	<i>Mean net income (Lps)</i>	<i>Median net income (Lps)</i>
<i>Semi-proletarian</i>	-104	-181
<i>Petty commodity</i>	802	767
<i>Commercial</i>	5,613	4,850
<i>All group members</i>	495	448
<i>Struggling group members</i>	-171	-171
<i>Commercializing group members</i>	1114	1114

* Interest on loans was taken into account

¹⁵ Furthermore, fruit and vegetables are highly perishable compared with maize, and adequate storage was certainly not generally available in the 1980s. Problems in marketing fruit and vegetables have been documented by IRI, 1985.

What did these net income stories imply for loan repayment? One group had made pre-harvest sales and repaid its debts with maize. The other three had institutional loans. The group, NC, which had a negative net income had not been able to repay its loan to the DRI and had not been offered further credit at the time of fieldwork. Both the Jutiapa groups had taken out substantial loans to finance maize production which, according to my estimates, were just covered by their harvest maize sales, but only barely in one case. Both groups had been able to repay their loans (one to the DRI and the other to BANADESA) and were expecting to receive further credit.

The narrow margins between income from harvest sales and loans for these two groups suggests that they were given finance according to models of production rather than their actual circumstances. Goud's study reinforces this point. He pointed out that financial plans for making loans to groups were based on packages that had been prepared beforehand by banks and that loans did not always correspond to needs (Goud, 1986, 123). He also suggested that 'in many cases, credit is considered [by groups] more as an institutional subsidy rather than operating capital: the systematic financing of labour [included in the budget plans] reinforces this attitude' (*op cit*; my translation). It was certainly apparent from my interviews with the groups that the institutional credit they received exceeded their estimated costs of production (which did not include costings for their own labour). One Jutiapa group clearly stated that it had not needed all the loan allocated to it by the DRI.

Thus the abilities of the four collective groups in Jamastrán to make an income from maize were similar in some respects to the experiences of both semi-proletarian and petty commodity producers. It was possible but risky for groups to make positive net incomes from maize, and to repay their debts, but the process could also be precarious and left two of the groups in financial difficulties (one more seriously than the other). Furthermore, these groups were as dependent as individual farmers on continuing

finance to reproduce maize production, whether from institutional credit or more personalized sources.

I did not collect detailed data on income and debt stories for the Quita Sueño groups. The different sources of institutional credit available to the Quita Sueño groups allowed them to manage and negotiate debt relations in a more flexible way than the groups in Chichicaste and Jutiapa. However these different options could have other consequences such as potentially increasing differentiation within and between the groups. For example, credit from church sources allowed groups to diversify their productive activities, but some of these projects seemed to be associated with more individualized work practices. That group members sometimes had debts to settle with each other after harvest also indicates the existence of relative wealth within (and perhaps between) the groups.

I used estimates of overall costs of production made by 6 of the 10 groups interviewed, and calculated the value of sales using the prices they quoted and estimates of the quantities sold (which were made by the local cooperative which worked with the groups) to arrive at a guide to net cash incomes from maize production before any other debts were taken into account¹⁶ (Table 8.13). Net incomes per hectare and per member compared favourably with average net incomes for the Jamastrán groups as a whole (Table 8.10) although they were not as high as those of petty commodity producers or of the commercializing groups in Jamastrán in most cases (Table 8.12). However, the net incomes for Quita Sueño groups would not have been so high if the cost of loans were taken into account.

¹⁶ In other words, costs did not include interest on loans.

Table 8.13 Estimated net income from maize production by 6 groups interviewed in Quita Sueño, primera 1987-88

<i>Group</i>	<i>Estimated costs of production* Lps/Ha</i>	<i>Estimated value of sales** Lps/Ha</i>	<i>Estimated net income Lps/Ha</i>	<i>Estimated net income Lps/member</i>
<i>EM</i>	430	1,037	607	567
<i>FM</i>	430	739	309	559
<i>F1</i>	500	940	440	684
<i>BV</i>	500	743	243	597
<i>LL</i>	640	1200	560	1494
<i>AL</i>	715	946	231	336

* Based on estimates per *manzana* by group; exclude interest on loans

** Based on estimated sales data from local cooperative and prices cited by groups

The data in Table 8.13 do not reveal the internal social relations through which maize was reproduced in Quita Sueño. For example, the group EM, which had the lowest costs of production, and had partially financed its productive activities as well as consumption from wage work, was stated to have outstanding debts. Yet this group did not apparently obtain the lowest net income from maize. By contrast, the group AL had set up a billiard parlour and employed wage workers in both collective and individual maize production. One consequence was that it had the highest costs of production and the lowest cash income from maize. Thus processes of differentiation in decisions about use of resources and in their outcomes were occurring among these groups, but are not revealed by data on net incomes from maize alone.

(iii) Summary and conclusions

This section has shown that although there was evidence that some groups still relied on personalized relations with landowners, to whom they made pre-harvest sales to finance maize production, most groups tried to obtain access to institutional credit. Only in one case were pre-harvest sales made as a group to finance collective maize production. However, the occasional use of pre-harvest sales among members of the Quita Sueño groups also suggests that individuals within groups could run into difficulties even if groups had strategies for maize farming which apparently made

positive net incomes. These individual difficulties might have been cyclical and linked to other issues such as family size and the ability of individual plots to provide adequate maize for consumption and other needs.

In Table 8.1 at the beginning of this chapter, I characterized groups according to whether they were 'commercializing' or 'struggling'. The data on net incomes in this section reinforce the suggestion that the two Jutiapa groups could be classified, so far, as commercializing with respect to maize production, while the two Chichicaste groups were in various conditions of struggling to reproduce maize. In the table, I suggested that one of these was closer to the conditions of semi-proletarian farmers while the other was in a similar position to many indebted petty commodity producers.

The experiences of the Quita Sueño groups also suggest that differentiation can occur between groups with similar conditions as well as within groups. Although at least 6 of the 10 groups appeared to make a positive net income from maize, it is difficult to categorize the *sectorial* as a whole as commercializing. The groups had rather insecure access to institutional credit for maize production and at least one group admitted to doing wage work, while others probably also did so. Groups were managing to reproduce maize as well as market part of it, but rather precariously.

8.2.3 Managing consumption

A characteristic of many semi-proletarian farmers and some petty commodity producers was that they could not retain enough maize for their own consumption needs. For semi-proletarian farmers, access to wage work was essential for survival while some petty commodity producers may have had opportunities to earn income from other crops or livestock, or in petty trading and artesanal activities.

How much maize groups had been forced to sell to repay credit, and to what extent they able to balance their income or debts with maize consumption needs, were more difficult to establish than with individual farmers because of the combination of collectively-farmed areas and plots under individual control. I evaluate the positions of the Jamastrán groups as follows.

(i) The struggling group, LC in Chichicaste, had had to hand over about a third of its harvest in repayment of its pre-harvest loan and seemed to have sold the rest. At the time of interviewing (end of April), the group was having to buy maize for domestic consumption and therefore had a consumption deficit which would have lasted until the beginning of the next harvest in September. This consumption deficit could only have been financed by the group's wage work. However, the group also hoped to obtain an institutional loan for the next season's maize which would have provided members with a consumption fund.

(ii) The second struggling group, NC in Chichicaste, which was also trying to commercialize its production, claimed to have lost 40% of its maize harvest because of *malz muerto*. Of the remaining harvest, 30% was handed over in repayment of pre-harvest loans, and 38% was sold in the market. This group had a negative net income from harvest sales and an outstanding debt to the DRI, but had not sold all its output after harvest as the first group had. About 1 MT of maize per family had been left for domestic consumption. Although this was more than the notional yearly maize requirements¹⁷, the group claimed it was going to have to buy maize before the next

¹⁷ Calculations of the necessary basic diet suggest a minimum amount of 83.6 Kgs of maize per head per year (Menchú, 1982, quoted in SIECA, 1983, 18). This amount is based on the components of a minimum balanced diet. Many people in the rural areas do not eat such a diet. Thus it has been calculated that for the lowest income bracket in the rural areas, 92.71 Kgs/head/ya is the actual average level of consumption (FAO, 1988, 14). For the members of these groups, maize and beans would have been the most important staples in the daily diet, and given their low levels of income, I use the FAO figure, rounded to 93 Kgs. This does not differentiate for consumption by age or gender

harvest. Thus the problem for this group was its outstanding debt: more maize would have to be sold to repay the loan from the DRI. Although members had kept back about 19 MTs of maize from their harvest, they would have had to sell about 18 MTs (or find the equivalent value elsewhere) to cover their estimated debts. Thus, this group would also appear to have had a consumption deficit overall unless it had been able to finance its maize debts in other ways.

(iii) The first commercializing group, CL in Jutiapa, seemed to have managed its affairs well from an ideological perspective as well economically. The collective plot was used for commercial maize production and individual plots for domestic needs. The group had sold all its collectively produced maize and kept the output from individual plots for domestic consumption. Up to the year they were interviewed, they had never had to use any of the collectively produced maize for consumption needs.

(iv) Finally, the second commercializing group, EE in Jutiapa, presented an even better outcome based on individually-managed plots. Sixty-six per cent of the harvest had been sold at harvest, leaving about 109 MT. This quantity was much more than needed for domestic consumption which meant that the group had considerable maize in hand for further sales.

Combining the outcomes on income and consumption, I obtain the overall picture presented in Table 8.14. The two commercializing groups were viable on the three counts of credit repayment, net income and adequate consumption. One group would be able to make extra income from further maize sales, and both would be able to

and should be considered an overestimate. However, a certain amount of maize is always kept for other expenditures and emergencies, and using this figure as a consumption estimate is not unreasonable. I have assumed families to have an average of 6 members in my calculations, a standard measure in Honduras in the 1980s.

reproduce their maize production if they continued to obtain credit in future seasons (and everything indicated that they would). For the two struggling groups, resolving debts meant that they were forced to sell most of their maize harvests, as well as repay debts in kind in one case, and they would have had little or no income from maize, as well as insufficient maize for domestic consumption.

Table 8.14 Chickicaste and Jutiapa: consumption, income and loan repayment outcomes among groups interviewed, primavera 1986-87

<i>Group</i>	<i>Had enough maize for domestic consumption after sales</i>	<i>Made net income from maize</i>	<i>Could repay loans from harvest sales</i>	<i>Could make further maize sales</i>
<i>LC</i>	No	Yes (just)	n.a.	No
<i>NC</i>	At time of interview only	No	No	No
<i>CL</i>	Yes	Yes	Yes	n.d.
<i>EE</i>	Yes	Yes	Yes	Yes

n.a. = not applicable - this group repaid its pre-harvest loan with maize

n.d. = no data

These consumption, income and debt relations further confirm the differentiation of collectively-organized groups. On one hand, strategies for sustaining maize production included some of the exchange relations characteristic of semi-proletarian farmers: pre-harvest sales and wage work. On the other, groups experienced some of the problems and achievements of individual petty commodity producers. Institutional credit could be a risky strategy if other aspects of the group's survival were also at risk (for example, lack of internal cohesion or political threats, as well as harvest losses). However, under more stable or established conditions, groups could also combine collective and individual work with institutional credit and 'improved' techniques of production to provide adequate quantities of maize for consumption needs and make a net cash income.

To what extent was this differentiation evident among the Quita Sueño groups who had much more similar conditions of production? I asked groups to evaluate their own consumption needs (*gasto*) and I compared their estimates with those for output and sales. Some groups indicated family sizes when they made their estimates. The data for 6 groups¹⁸ showed that all but one would have been able to cover most of their consumption needs providing that they did not have to use the maize to cover other debts or emergencies (see Table 8.15). The margins between sufficiency and deficit were very narrow, as groups pointed out in interviews. For example, families with more than 5 or 6 people might have had insufficient maize from their own plots to cover consumption needs (see the data for groups F1 and AL in the table), and financial crises among all families might only be met by selling extra maize and creating a consumption deficit.

Table 8.15 Estimated yearly maize consumption needs for 6 groups interviewed in Quita Sueño, primera 1987-88

<i>Group</i>	<i>Stated maize needs per household (Kgs)</i>	<i>Estimated maize retained for consumption (Kgs/HH)*</i>	<i>Consumption balance</i>	<i>Comments</i>
<i>EM</i>	818	973	155	n.d.
<i>FM</i>	873	716	-157	n.d.
<i>F1</i>	818	960	142	Family of 5
	2182		-1222	Family of 8
<i>F2</i>	1091	1136	45	n.d.
<i>EC</i>	818	848	30	n.d.
<i>AL</i>	909	992	83	Family of 4-5
	1636		-644	One family of 11

n.d. = no data

* Estimated using overall production data provided by the local cooperative working with the groups

¹⁸ The other data were incomplete.

The data on consumption reveal a tricky area in managing group production and consumption of maize. Collective plots were usually for commercial production and individual plots for domestic consumption and other domestic needs. However, the allocation of land between the two sets of plots could affect people's productive capacities and capacities to provide for consumption: what was optimal for group income might leave individual families in difficult circumstances and vice versa. In addition, groups only seemed to be able to compensate for individual problems (for example, differences in land availability resulting from differential family or group size) by informal loans between members. However these problems were recognized by the groups. They had thus decided to set up a collective storage system for the *sectorial* from which groups and individuals would be able to buy back maize at reasonable prices as well as make further sales after the harvest period. Although differences existed between groups and individuals, there was still the political will to resolve these problems in a collective manner.

This and the previous section suggest that for many groups there was a fine borderline between (i) making a net income and indebtedness, and (ii) food security and food insecurity in maize. Their increased entitlements compared with those of semi-proletarian farmers, especially in access to land and potential and actual access to institutional credit, did not necessarily ensure food security in maize. Nevertheless, these different conditions of exchange under which land and finance were obtained did allow the possibility of improving productive capacities: two Jamastrán groups had established maize production on an economically viable basis, providing they could continue to obtain credit on a seasonal basis, while the Quita Sueño groups were managing to survive and were planning projects on the basis of continued maize production in the future. In the face of adversity, collective organization could assist these groups to take joint action either to resolve internal problems or face external

conflict. Although collective organization was not a panacea for the food insecurity problems faced by semi-proletarian maize farmers, it had been able to improve the conditions of production and exchange for some.

8.2.4 Collective organization and prices

Among individual farmers, both semi-proletarian farmers and petty commodity producers were under pressure to sell their maize at harvest time to reimburse debts. For some semi-proletarian farmers, maize sales were linked to other exchanges over land, labour or agricultural inputs, as well as pre-harvest sales. Petty commodity producers were usually under pressure to repay their loans from the DRI. However, in general, it was observed that the longer farmers could hold on to their maize, the higher was the price they could obtain.

The experience of groups shows similar characteristics. As with individual farmers, groups had to sell their maize at harvest time to repay debts. Key questions are (i) whether groups, as collectively organized units, were able to obtain higher prices for maize than individual semi-proletarian farmers and even petty commodity producers, and (ii) whether they were able to sell their maize later than individual farmers (and thereby obtain higher prices). I can only make these comparisons for the groups and individuals in Chichicaste and Jutiapa, as I do not have data for individual farmers in the Quita Sueño area. I can, however, look at the time of sale for both sets of data, and in the case of the Quita Sueño groups, I can make some comments about the impact of collective organization on prices received for maize.

To compare data in Chichicaste and Jutiapa, I have again used the classifications adopted at the end of Chapter 7 and compare price data for semi-proletarian farmers (SPF) and petty commodity producers (PCP) with those of the four groups. I make a comparison with only two classes of individual farmers because a key question about

groups' capacities to reproduce maize was whether they were able to improve on their earlier conditions as semi-proletarian farmers. I have also excluded all pre-harvest sales, both by individual farmers and by groups. To simplify comparison of time of sale, I have attributed numbers to months: thus September (the first harvest month) = 1, while March = 7.

The evidence suggests that, although the prices obtained by groups for maize fell within the general ranges of prices received by semi-proletarian and petty commodity producers as a whole (Table 8.16, Column 3), group prices were nevertheless higher than the averages for semi-proletarian farmers in both villages and comparable to average prices received by petty commodity producers (Column 2). It is impossible from these data to know whether the higher prices obtained by the groups were due to their collective bargaining power with traders. One Jutiapa group obtained a particularly high price for its maize (Lps.44/Kg or Lps440/MT) with a relatively early sale (January, or month 5 - see Column 4). It is possible that this information was misreported, but the group had sold to a single trader with warehouses in the south of Honduras (while other groups sold to several traders) and might have been able to negotiate a special deal.¹⁹ The sales data reported do however indicate that groups as a whole were able to make later maize sales than semi-proletarian farmers (Column 4). This suggests that the collective nature of their organization was able to withstand the pressures to make too early sales to repay debts, and that internal resources within the groups enabled them to cover other cash needs until sales were made.

¹⁹ This group's history of output market relations indicated a surprising awareness of the importance of negotiation. Members had established relations with the IHMA, with a cooperative which would buy maize, as well as with traders from the main market centres in the region of Tegucigalpa and Choluteca.

Table 8.16 Comparison of prices received for maize and time of harvest sales of semi-proletarian farmers and petty commodity producers with collectively-organized groups interviewed in Chichicaste and Jutiapa, primera 1986-87

<i>Farmers (1)</i>	<i>Average price (Lps/Kg) (2)</i>	<i>Price range received (Lps/Kg) (3)</i>	<i>Average time of harvest sales (4)</i>	<i>Range of times of sale (5)</i>
<i>Individual farmers</i>				
<i>SPF, Chichicaste</i>	.35	.30 - .39	4.7	3-5.5
<i>SPF, Jutiapa</i>	.33	.33	2	2
<i>PCP, Chichicaste</i>	.38	.33 - .44	5.7	5.5-6
<i>PCP, Jutiapa</i>	.38	.28 - .44	5.5	4-6.5
<i>Groups</i>				
<i>LC, Chichicaste</i>	.39		6	
<i>NC, Chichicaste</i>	.38		5.5	
<i>CL, Jutiapa</i>	.44		5	
<i>EE, Jutiapa</i>	.36		i.d.	

* i.d. = incomplete data

Analysing the data provided by the Quita Sueño groups adds some weight (although not conclusive) to the argument that collective organization might have been associated with obtaining higher prices. Given that the Quita Sueño groups had many similar conditions of production to each other, but made different choices about how much land to sow and harvest collectively, their sales experiences at harvest time can be compared, in particular: whether the size of collective plot was associated with prices received for maize; whether time of sale was the main factor affecting prices received; and whether there was any evidence that groups with larger collective plots were able to make later maize sales.

I did not have consistent information on these issues for all the 10 groups but was still able to make some comparisons. First, there was a weak, positive correlation (with a coefficient of .42) between prices received for maize and the size of collective plots (Figure 8.2). This weak correlation is apparent on the basis of data provided by 5 groups, some of which made more than one harvest sale at different prices. Collective plot sizes ranged from 4.2 Has to 11.6 Has. Second, there was a strong positive correlation (with a coefficient of .8) between price and time of sale (Figure 8.3), which is

to be expected from the earlier analysis of data from individual maize farmers. The correlation in Figure 8.3 is based on data from 7 groups, again with more than one sale being made at different times (and prices) by 4 of the groups. Third, time of sale and size of collective plot were also weakly and positively correlated as shown by Figure 8.4 (the coefficient was .45). These data were reported by the same 5 groups as in Figure 8.2 and some groups made more than one sale.

Figure 8.2 Quita Sueño: prices received for maize by size of collective maize plots, primera 1987-88

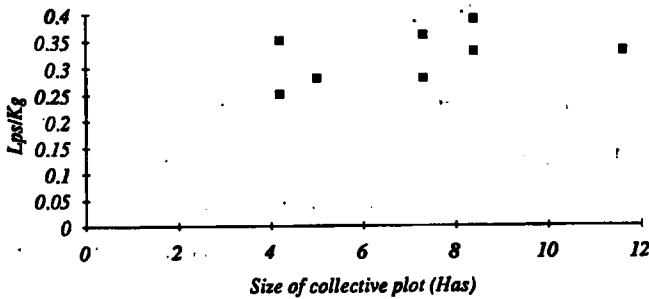


Figure 8.3 Quita Sueño: prices received for maize by time of sale, primera 1987-88

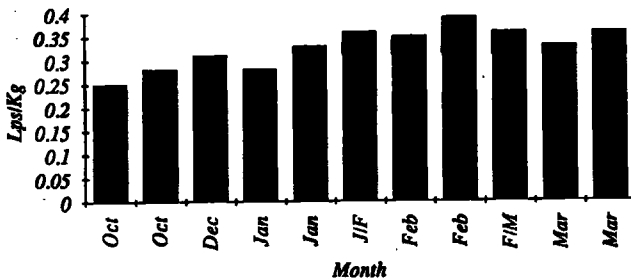
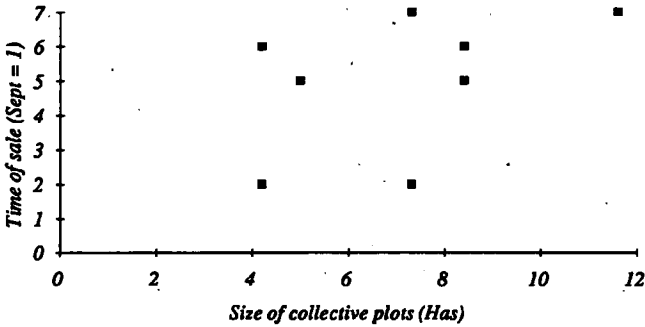


Figure 8.4 Quita Sueño: time of maize sales by size of collective maize plots, primera 1987-88



What can be concluded from these data? As with individual farmers, if groups could hold on to their maize, they could obtain a higher price (Figure 8.3). Some groups adopted the strategy of selling part of their maize early to meet immediate debts and cash needs and storing the rest to obtain a higher price in February or March. From the interviews, there was no particular relationship between this strategy of double sales and the size of plot, although in general the size of plot did seem to have some weak association with the ability to make later sales (Figure 8.4). As with the groups in Chichicaste and Jutiapa, however, it is difficult to judge whether the size of collective plot is linked to the internal strength of the group, decisions to delay sales and/or the ability to bargain collectively with traders.

This brief analysis suggests that collectively-organized groups were able to obtain higher prices for maize than semi-proletarian farmers, and thus had improved on earlier exchange relations in this respect. The fact of collective organization, and the greater quantities of maize produced and sold on a collective basis, increased the possibility of delaying sales as well as potentially enhancing bargaining positions with traders. Although the groups that I interviewed had different capacities for reproducing maize,

these relatively higher prices as well as increased collective control of production and distribution of output would have improved their food security over that of semi-proletarian farmers, if only marginally in some cases.

8.3 Conclusions

These case studies have shown that, through collective organization, the groups interviewed had generally broken with their semi-proletarian pasts and had established themselves in maize production with varying degrees of collective and individual work, and varying capacities to produce and reproduce maize. The evidence of these groups also shows that reproducing maize was not solely dependent on commoditized exchange relations. Non-commoditized relations were evident in labour use, while personalized relations characterized exchanges between group members (for example, in loans) as well as the more hierarchical exchanges sometimes set up with local landowners. On one hand, groups expressed internal solidarity of a voluntary nature and, in many cases, tried to develop maize production on the basis of collective effort involving reciprocity of an equal rather than hierarchical nature. On the other hand, some groups had consciously adopted an individualized approach to organizing maize production, and some had developed other commercial activities which involved making money from exchanges with members of other groups.

Although the conditions of producing and reproducing maize by organized groups paralleled those of semi-proletarian and petty commodity producers in some respects, they also had some fundamental differences:

- (i) more or less assured access to land (different from most semi-proletarian farmers)
- (ii) political or ideological principles which guided internal organization as well as social relations with outside individuals and agents

(iii) collective organization leading to internal solidarity and cohesion

(iv) the possibility of taking joint action in relation to external forces.

Groups were, however, different from each other in their capacities to reproduce maize as well as adopting different production strategies. I have followed the analysis of Goud (1986) in classifying groups' reproductive capacities, although I have used my own terminology. Even so, as with any categories, groups do not necessarily fit neatly into a particular classification. Nevertheless, among the groups that I interviewed, it seemed that at least two (in Jutiapa) had partially consolidated their activities on a relatively secure financial footing and were able to sustain maize farming, make a cash income and provide adequate maize for consumption, with the possibility of continued access to credit to finance seasonal cash outlays. I have called these two groups 'commercializing'. For the remaining groups, reproducing maize was more or less precarious. The experience of the Quita Sueño groups was uneven: within the sectorial some were 'struggling' while others showed evidence of taking steps towards being commercializing groups. Finally, the two Chichicaste groups were both 'struggling' but for different reasons. Thus, while some struggling groups exhibited semi-proletarian characteristics by doing wage work to survive, others experienced similar pressures and difficulties in reproducing maize to many petty commodity producers. This was largely because such groups who were attempting to commercialize their production with the help of institutional loans could easily become indebted through harvest failures or organizational and administrative problems.

As well as problems faced in reproducing maize, there were also signs of some differentiation among groups such as those in Quita Sueño, especially in decisions over land use and organization of work. Individualization of work practices seemed to be occurring in some groups. Furthermore, some groups had set up commercial activities

within the *sectorial*, including small stores where members could exchange maize as well as cash for basic products such as soap or salt. The question is whether these were enterprising initiatives from which all could benefit, or whether they would become a source of gaining differential wealth and control over resources. Differential wealth was already evident in that members of groups could make loans to each other and, while little is known of the terms of such loans, they might ultimately prove divisive.

These diverse experiences suggest that it is difficult in practice to make direct comparisons either between the struggling and semi-proletarian categories, or the commercializing and petty commodity producing categories. However, although none of the groups could be said to be experiencing 'secure stagnation' in the same sense as semi-proletarian farmers, 'insecure transformation' characterized the production and reproduction strategies of many of the groups interviewed.

CHAPTER 9

MAIZE MARKETS AND MAIZE PRODUCTION

Introduction

Although output markets are one of the end points in a chain of exchanges for maize farmers, they have a special significance in the reproduction of maize production and consumption. First, the reproduction of commoditized maize production requires, and is based on, the existence of maize markets to recuperate costs and continue the production cycle. Second, markets are the main mechanism through which waged consumers, non-maize producing farmers and deficit maize farmers gain access to maize¹. How maize markets function is therefore an essential part of understanding the reproduction of maize as a whole.

As pointed out in Chapter 2 (Section 2.3.3), an area of debate not given much consideration in the literature on Honduras in the 1980s was the social relations through which markets function, and the social hierarchies and power relations which might affect the nature of market transactions. My analysis focuses on these issues and asks the questions: (i) how did the organization and operation of maize markets affect maize farmers in the 1980s, in particular the food security of semi-proletarian farmers and vulnerable petty commodity producers? (ii) did maize trade, which functions within a cash economy, also exhibit some of the personalized characteristics present in maize production?

¹ Other mechanisms include personal exchanges between relatives, donations and food for work.

I argue that, as in production, social relations in maize markets in the 1980s were highly commoditized but personalized relations were an integral part of the commoditization of maize output and helped to secure traders' profits. Although there was little evidence that oligopolies or monopolies existed nationally in maize markets, control over certain types of local maize market was apparent and could affect farmers. Thus, although I concur with other writers on Honduras (for example, Pollard *et al*, 1984; Loria and Cuevas, 1984; IRI, 1985) that maize markets were competitive, I argue that personalized relations also affected the workings of some markets and certain types of exchange. Along with much of the recent literature on markets, this conclusion contests the notion that commoditization is a linear, impersonalizing process. While there was considerable fluidity in these relations, personalized relations enabled the flow and turnover of maize between different types of trader, allowed some degree of collusion when desirable for traders, permitted pre-harvest purchases and tied transactions in local areas, and secured services and contracts from others engaged in maize trade.

In Honduras, these relations existed in markets whose participants were differentiated - largely by wealth, and, to a certain extent, by task - and in relation to a highly differentiated farming sector. Thus, although I agree with the literature on Honduras that 'There is a marked absence of intricate networks of commission agents, sub-agents, financiers, and merchant traders common in other parts of the world' (IRI, 1985, 252), 'informal networks' referred to by the same authors (*op cit*) not only played an important role in the operation of maize trade, but could have differential effects for participants.

In this chapter, I adopt a notion of markets which are structured by social relations, including social hierarchies and power, ideas raised by Bhaduri and Bhadwaj (1983, 1985) and also discussed in much of the recent literature (for example, Hewitt de

Alcántara, 1993; Mackintosh, 1990; White, 1993). Mackintosh usefully distinguishes between meanings of 'the market' which are often embedded in studies such as those carried out by the World Bank: *the* market as a process of buying and selling (associated with an ideological stance based on private property), different markets as abstract models of buying and selling, and markets as sets of institutions and ways of buying and selling (1990, 46-47). In this chapter, I am predominantly concerned with markets and their effects on farmers as in the third meaning, while looking at the implications for understanding maize markets (second meaning) and the role of the market more generally (first meaning). This follows Hewitt's notion that 'markets are culturally and politically specific institutions' (1993, 3). She points out that social hierarchies and relations of subordination in rural economies in the Third World mean that 'private trade is [not] necessarily synonymous with free markets' (*ibid*, 6) and that therefore one cannot refer to markets as if they constituted a 'single exchange environment' (*ibid*, 7). These ideas do not deny that markets provide the institutional settings for the exchange of commodities, but they do suggest that commodity exchange is affected by the different social relations and hierarchies in which it takes place, and will therefore benefit some participants more than others.

The chapter first describes the context of Honduran maize markets, in Section 9.1. Section 9.2 looks at farmer-trader relations, the social relations of price setting and some of their implications. In Section 9.3, I analyse the profitability of maize trade and the differential wealth of traders. Finally, Section 9.4 analyses the relationship between differentiation and personalized processes of exchange in some of the mechanisms for securing profits from trade.

9.1 Types of market, trading worlds and terminologies

The growing and differentiated demand for marketed maize in Honduras has increased opportunities for making profits from trade. There are different markets for maize and different kinds of participants in those markets making money from transporting, storage, buying and selling. This section outlines the most important processes, necessary background for Sections 9.2-9.4.

9.1.1 Types of market

The weight of maize in low income diets was important for maize traders in the 1980s. In rural areas, maize was probably the only staple which was accessible (in financial terms) as well as available², although sorghum was eaten in some areas (and cassava in some coastal parts). In urban areas, the use of wheat flour had grown (see Table 9.1) but the continuing high consumption of maize, particularly among low income groups, indicated that it was the cheaper food (as well as the customarily preferred one among many people). For traders (and farmers with surpluses), this meant that, in principle, there was a constant and ready market for maize.

Table 9.1 Per capita consumption of food grains in urban and rural areas, 1967-68 and 1978-79 (Kgs/year)

Food	1967-68		1978-79	
	Urban areas	Rural areas	Urban areas	Rural areas
Maize	79	75	56	85
Rice	9	4	16	12
Wheat bread	-	-	12	3
Sorghum	3	9	1	10

Source: Johnson, 1988, 242, Table 95 (data from IHMA/CEE, 1981)

² In times of hunger or severe incapacity to obtain food, '*tortillas con sal*' (often mixed with sorghum) were sometimes the only food.

However, although the demand for maize is widespread across Honduras, it is also responsive to changes in income. On one hand, the limited purchasing power of low income people can potentially put a ceiling on demand, particularly if maize prices rise relative to income or wages. On the other hand, Honduran economists have calculated that maize has a negative income elasticity, and is quickly substituted (by rice or wheat) if and when incomes rise (Aguirre and Tablada, 1988, 12 and Table 1.13).

In spite of its income elasticity, the social factors involved in maize consumption (such as availability and preferred diet), the generally limited purchasing power in relation to other grains of many maize consumers, as well as the existence of maize deficit farmers and other demand for maize in rural areas, continued to make maize a highly marketable commodity for personal consumption in the 1980s. Among traders interviewed in Danlí and San Pedro Sula, several indicated that, of all the goods that they sold, maize was their most important source of daily earnings. San Pedro Sula traders, in particular, reported a tremendous expansion in market activity over the previous twenty years (see Chapter 3, Section 3.2.3).

Another important component of demand in the 1970s and 1980s was from industry.³ In the mid-1980s, there were four main types of industrial processing using maize as a key input: animal feeds, maize flour for domestic use, packaged maize snacks, and the production of starch. Within the industrial sector, the growth in production of animal feeds was the principal source of demand for maize. Although there were several companies producing animal feeds, a high proportion of the demand for maize was

³ *National statistical sources suggested that industry accounted for 20-30% of total demand in the 1980s.*

concentrated in one firm. Interviewing the manager of this company revealed that its activities had grown at 10-15% per annum from the late 1970s to the late 1980s.⁴

Part of the expansion of maize markets was because of population increase, and within that, a growing waged and informal sector in rural as well as urban areas which needed to buy maize. There were also non-maize producing farmers (and their workers) who bought maize. For example, in El Paraíso, coffee farmers were an important component of rural demand, larger coffee farmers sometimes establishing contractual deals with local traders, and even becoming involved in maize trade themselves. There was also local circulation of maize in rural areas, directly between farmers and between farmers and traders. As well as obtaining maize from local traders, deficit maize farmers might buy maize from neighbours or landlords, or be lent or given it by relatives.

9.1.2 Trading worlds and terminologies

The analysis and argument in Sections 9.2-9.4 is based on information from interviews with traders in Danlí, El Paraíso (1987), in the industrial city of San Pedro Sula in the department of Cortés in Northern Honduras (1988), and from the interviews with individual and collective farmers as well as data from secondary sources. Danlí was the main market centre for El Paraíso and for the farmers in the Jamastrán Valley. All maize leaving the valley, whether destined for the Danlí market or for further afield, had to be transported through Danlí. San Pedro Sula was the main site for the maize trade in the high output areas of the northern regions. It was also the main (but not only) market centre for maize grown in the Quita Sueño area of Santa Bárbara. There

⁴ The firm obtained substantial amounts of maize from imports and also used sorghum as a maize substitute when necessary.

were several market places in San Pedro Sula compared with a single one in Danlí. Traders supplied maize to deficit areas of Honduras and many of the companies which bought maize for industrial purposes were located in or near San Pedro Sula.

As well as having different positions in maize trade in terms of geography and size of market, there were differences between the traders interviewed in the two locations. In both places, I interviewed traders with fixed positions in the market place, most of whom were wholesalers. In Danlí, many of these traders were women who had been engaged in some form of business for most of their lives, while in San Pedro Sula the majority were men, many from humble origins in the countryside. In Danlí, the relatively small size of the market meant that many traders combined retailing with wholesaling of grains as well as other goods. In San Pedro Sula, there was a clear division of labour between wholesaling and retailing. However, maize wholesalers also traded other goods as well as grains. Many had contracts with local companies to store and supply large quantities of tins and packaged goods to retailers.

The relatively rural nature of Danlí compared with the urban conglomeration of San Pedro Sula resulted in other differences. Large wholesalers in Danlí had their own transport (trucks) to collect maize from farmers or to take it to Tegucigalpa, whereas San Pedro Sula wholesalers relied almost entirely on independent truckers (*transportistas*). Because of the quantities of maize that they bought and sold, some San Pedro Sula traders also obtained bank credit and used commercial warehouses for storing maize. This appeared not to happen in the mid-1980s in Danlí, although local bank officials were trying to encourage the larger wholesalers there to do the same. These general characteristics and differences are summarized in Table 9.2.

Table 9.2 General characteristics of Danlí and San Pedro Sula traders interviewed, 1987 and 1988

General characteristics	Danlí traders	San Pedro Sula traders
Wholesaled all goods	No	Yes
Wholesaled maize	Yes	Yes
Retailed maize	Yes	No
Large local market	No	Yes
Supplied maize outside area	Yes	Yes
Own transport for collecting maize	Among large traders	Generally no
Bought maize from itinerant traders and truckers	Yes	Yes
Used commercial storage ('deposits')	Generally no	Some did
Had bank accounts and kept internal financial records	One or two	More common
Used bank credit	Possibly one or two	Some did

There are many layers and functions within maize trade, some of which relate to seasonal changes in the markets, and others to the types of market in which traders work. The overlapping divisions of labour in maize trade and maize flows have been documented by marketing studies as early as 1976 (Luna Morán) and in the 1980s by the IRI Research Institute (1985) and others. The following description combines the information from these studies with that provided in interviews with traders, industrialists and IHMA⁵ personnel.

The simplest pattern is that a trucker or itinerant trader (see Table 9.3) buys maize from the producer, then sells it to a wholesaler who sells it to a retailer. Some large farmers and collectively-organized groups or cooperatives sell directly to the IHMA, and some truckers and other traders also supply the IHMA as well as industry (the main animal feeds company is said to be supplied largely by itinerant traders). In villages, there may also be *juntadores* who are usually large maize farmers and/or traders, and who buy maize from other local farmers to sell further to other traders.

⁵ Instituto Hondureño de Mercadeo Agrícola or Honduran marketing board.

Table 9.3 Trader terminology

<i>Honduran term</i>	<i>Term I use</i>	<i>Functions</i>
<i>Juntador(es)</i>	<i>Juntador(es)</i>	Local traders who buy maize from producers and sell it further, to itinerant traders, wholesalers, the IHMA or industry.
<i>Transportistas, camioneros ('coyotes')</i>	<i>Truckers</i>	Own their own trucks/lorries but no capital; transport maize for payment of transport costs (per sack).
<i>Comerciantes ('coyotes')</i>	<i>Itinerant traders</i>	Traders who may or may not have own transport but have cash; buy maize from farmers or other traders to sell to wholesalers or industry (or the IHMA).
<i>Comisionistas ('coyotes')</i>	<i>Comisionistas</i>	Have no cash or transport; may go with itinerant trader or wholesaler to look for maize, or link up wholesalers, itinerant traders and truckers in the market place; get paid commission.
<i>Mayoristas, bodegueros</i>	<i>Wholesalers or traders</i>	Have cash or credit, and storage; may have transport; buy maize and wholesale it to retailers or industry; may buy maize directly from producers, <i>juntadores</i> or itinerant traders. May also buy from the IHMA.
<i>Minoristas, detallistas</i>	<i>Retailers</i>	Buy maize from wholesalers and/or producers, <i>juntadores</i> , itinerant traders and the IHMA; retail maize in relatively small amounts to consumers.

Itinerant traders and wholesalers may be the same people. Wholesalers can also hire independent truckers to buy or fetch maize. Truckers, who usually only have transport but no capital, may also travel accompanied by another trader who has capital but no transport or storage, or by a *comisionista* (see Table 9.3). If the second trader is not a wholesaler, he or she buys maize and then looks for a purchaser - a wholesaler or an industrial company. A *comisionista* offers to find buyers and sellers and receives a commission. San Pedro Sula traders reported that *comisionistas* operated in the market

place to 'match' itinerant traders and truckers with wholesalers. Itinerant traders, truckers and *comisionistas* are often called *coyotes* - a pejorative name given to a trader who roams the countryside looking to buy maize as cheaply as possible.

There are thus many possibilities for differentiation between locations and types of market for maize, as well as between traders, and many opportunities for overlapping functions and flexible responses. Traders can put their capital or assets into different activities depending on seasons and market possibilities, a difficult and often impossible task for farmers. The question is what the links are between the dynamics of different market places and markets for maize (rural, urban, industrial), how exchange of commodities takes place between the different types of trader operating in these market places and markets, and how different types of maize farmers are affected by these processes. Below I focus on selected aspects, relating them to Honduran and other debates.

9.2 *Farmers' interaction with markets and prices*

Price changes and their effects comprise one of the most frequently addressed areas of analysis in the Honduran literature on maize and other grain markets.⁶ In this section I

⁶ Studies have taken place to establish the elasticity of demand and supply of grains (Aguirre, 1988; Aguirre and Tablada, 1988), determine whether prices show evidence of inefficiency in allocation of resources (Aguirre and Tablada, 1989; Hanrahan, 1983; Querada and Scobie, n.d.), ascertain who actually benefits from price differentials and changes (Hanrahan, 1983; Pollard et al, 1984), and establish whether state intervention through the IHMA's guaranteed price and stabilization programme actually has positive effects for producers and consumers (Economic Perspectives, 1986; Hanrahan, 1983; IRI, 1985; Loria and Cuevas, 1984; Pollard et al, 1984). Conclusions from these studies include that: (i) there is both inefficiency and efficiency in the allocation of resources in maize production; (ii) farmers obtain between 50 and 60% of the final maize price (although there is some debate about whether this position is deteriorating or not, and whether 50-60% is an adequate percentage or not); (iii) price intervention by the IHMA has generally protected urban consumers from sharp price rises, but mainly benefited large farmers and possibly traders, while small farmers have not gained; some analysts have also argued that price intervention has impeded efficient allocation of resources.

argue that establishing prices involved different social processes in different markets and market places in which some participants benefited more than others. Analysing these differences helps to explain how the food insecurity of semi-proletarian farmers and some petty commodity producers seem to have been reinforced by the operation of maize markets. It also suggests that the needs of different types of farmer in the 1980s could not be met by a single price policy which assumed uniform conditions of production and exchange.

9.2.1 Farmer-trader relations and prices in El Paraiso and Santa Bárbara

In analysing prices received by farmers in Chapters 7 and 8, I established that there was a positive relationship between price and time of sale, and that time of sale tended to have some association with type of farmer. A further issue is whether prices were affected by farmers' relations with traders.

This issue was taken up in part by Loria and Cuevas (1984) who wanted to establish whether prices were sending the wrong signals to basic grains farmers because national output had been stagnating in the early 1980s. They interviewed a cross-section of farmers and traders across the country, concentrating on high output areas and areas where there were many 'small' (up to 35 Has in their study) and 'medium' farmers (35-70 Has); 'large' farmers were described as having over 70 Has (*ibid*, 17). This study found that farmers made sales based on the best price that they were offered: the only or nearest buyers accounted for only 24% of sales in the case of maize. Loria and Cuevas concluded: 'according to our results, price-competition seems to predominate in the marketing of basic grains at the farm level' (*ibid*, 20).

Although this study was much more extensive in its geographical scope than my own, it was unclear how many very small maize farmers were interviewed given the classification of the farm size groups. Furthermore, although 24% nearest or only

buyers may not appear a high figure overall, it could still indicate that particular communities - or types of farmer - were affected by monopolies or oligopolies in local markets. (Loria and Cuevas do not indicate which farmers were in the group that sold to nearest or only buyers.)

I cannot draw strong conclusions from my own data, but they raise some issues about the role of farmer-trader relations in establishing prices. If I compare type of farmer in both villages with the origins of traders to whom these farmers sold their maize (including pre-harvest sales), I find that just under half of semi-proletarian farmers (SPF) made sales to local purchasers (same village), and that the majority of petty commodity producers (PCP) and commercial farmers (CF) sold to traders from the market centres of Danlí, Tegucigalpa and Choluteca (Southern Honduras) (see Table 9.4). The origin of maize purchasers is not significant in itself, except to suggest that the marketing networks of semi-proletarian farmers were relatively confined. However, relating prices received to origin of traders (where both sets of data are known) suggests that higher prices were paid by traders from the three market centres rather than local purchasers. In Table 9.5, I have shaded the area for price of Lps.34/Kg and above (Lps.34/Kg was the average price received by all SPF when pre-harvest sales were removed). It can be seen that the shaded area comprises entirely sales made to traders from outside the local villages.

Table 9.4 Origin of maize purchasers by number of sales and type of farmer, among individual farmers interviewed in Chichicaste and Jutiapa, primera 1987-88

	No. of sales	Same village	Nearby village	Danlí	Other in E.P.	Tegucigalpa	Choluteca	No data
SPF	11	5	1	0	0	2	0	3
PCP	18	1	1	6	1	5	4	0
CF	10	0	0	3	2	4	1	0
All	39	6	2	9	3	11	5	3

E.P. = El Paraiso

Other interview data provide an even more complex picture of the relationship between farmers, purchasers and prices. First, no farmers sold maize to the IHMA in the year of interview, irrespective of price, size of farm or receipt of institutional credit. (I return to this point.) Second, many farmers knew the traders they sold their maize to, even if they were not local. However, although a few farmers stated that they always sold to the same trader, most seemed to make decisions about sales from season to season. This information concurs with Loria and Cuevas's view that few sales were actually fixed beforehand: they concluded that although traders often bought maize in the same geographical areas and from the same farmers, competition between traders was sufficient to prevent clientilism and price-fixing (*ibid*, 36).

Table 9.5 Prices received by individual maize farmers interviewed in Chichicaste and Jutiapa and origins of purchasers (where known), primera 1987-88

<i>Lps/Kg</i>	<i>Same village</i>	<i>Nearby village</i>	<i>Danlí</i>	<i>Other in El Paraíso</i>	<i>Tegucigalpa</i>	<i>Choluteca</i>
.17	3					
.22				1		
.28			1			
.30	1				1	
.32						1
.33	1	2	2			
.34				1		
.35					1	1
.36			1		1	
.37					1	
.38			1		1	
.39			1		1	
.40			2			
.41					1	
.42				1		
.44			1		1	2
.46					2	

Third, however, there were many interconnections between farming and trading in local communities, including between Danlí and the villages. The following profiles of some

of the local purchasers of maize, most of whom bought maize from a number of the farmers interviewed, support this view:

Wife of local commercial maize farmer, Chichicasté: bought maize from local farmers, including pre-harvest purchases.

Itinerant trader from Chichicasté: had a truck and bought and sold maize in Chichicasté; also sold maize in Tegucigalpa; reputed to deal in pre-harvest purchases; also had a house in Danlí.

Farmer/trader from Chichicasté: had land in Chichicasté and house in Danlí; sowed grain and had cattle; had truck and warehouse.

Commercial farmer, Chichicasté: made pre-harvest purchases.

Farmer/trader, Jutiapa: cattle and grain farmer; bought maize at harvest time; possibly largest trader in Jutiapa; had reputation for making pre-harvest purchases.

Local merchant and trucker, Jutiapa: had store and café; had truck and bought grain locally to sell in outlying communities and Danlí.

Farmer/trader, Jutiapa: sowed maize; bought and sold maize on a small scale in his own house.

On one hand, these activities could result in many possibilities for agreements between farmers and traders, and therefore competition.⁷ On the other hand, it was apparent that commercial maize farmers often engaged in trade, mainly as local *juntadores* who sold further to itinerant traders, wholesalers or industry. It was thus important for *juntadores* to make sure that prices they paid to local farmers were lower than those they received from other purchasers. That many were reputed made pre-harvest

⁷ Loria and Cuevas also investigated whether there were financial links between traders and farmers and concluded that less than 10% of maize farmers had received advance payments from traders to seal an agreement to purchase. This practice seemed to be a diminishing one because traders considered it bad for business. Informal agreements to purchase were made but often broken because of price competition (1984, 25, 27). It should be noted, however, that Loria and Cuevas were referring to traders in general and not to relations between commercial farmers and small farmers and tenants, from whom they also bought maize.

purchases would make economic sense in this context. Witness the following account provided by a farmer/trader himself:

This farmer sowed 140 Has of maize, beans and sorghum, of which 35 Has had been rented from [a major landowner in the valley]. He had been farming for 18 years and trading for 10. The grain he traded in most was maize. He bought maize in the area to sell to [a large animal feeds company in Tegucigalpa] and had had contracts to supply this company for 10 years. He hardly ever sold maize to the IHMA because of their quality requirements. He reckoned to produce about 5,000 sacks of maize [about 455 MT] but bought another 2,000 sacks to resell as well. He bought maize at Lps30/sack and sold it at Lps35. He said it was only worthwhile buying grain at harvest time, when prices were low, or buying pre-harvest.

These processes were particularly important for semi-proletarian farmers. To the extent that they engaged in personalized relations with local traders, made pre-harvest sales and had to sell maize early at harvest-time, semi-proletarian farmers were likely to receive lower average prices than petty commodity producers and commercial farmers. Furthermore, my interviews suggest that these conditions often coincided.

In general, interpreting price data and their assumed relationship to social variables needs treating with caution. For example, interview data from the groups in Quita Sueño indicate that perceptions of which traders would offer the best prices was not necessarily borne out by reality. A number of groups thought that better prices could be obtained from traders coming from the main industrial and market city of San Pedro Sula than from local traders. In practice, the data reported show that the highest prices were received from local traders or from those elsewhere in the department (Santa Bárbara town) and further in the rural west (La Entrada and Copán) (Table 9.6). However, although these price levels are partly related to the time of sale, they may also indicate that groups were unable to secure deals with traders from San Pedro Sula in the year of interview.

Table 9.6 Relationship between prices received for maize by groups in Quita Sueño and origin of traders, primera 1987-88

Origin of trader	Prices received for maize by groups (Lps/Kg) and number of groups					
	.28	.31	.33	.35	.36	.39
Copán				1	1	
Santa Bárbara					1	
La Entrada						1
Local villages	1	1	1		2	
San Pedro Sula			1	1		

Note: some groups had more than one sale with traders from different places; some groups did not report the origin of the traders they sold maize to and are not included here.

The experiences of these groups also illustrate the limits and possibilities of farmer-trader relations among semi-proletarian farmers who had become organized. Groups commented that the number of traders in the area had grown considerably since the days when members worked as tenant farmers. When group members lived in the mountain villages, they used to sell maize to *juntadores* (as well as pre-harvest to their landowners). Now that the groups were located on the main route between San Pedro Sula and the west of Honduras, they had access to many types of trader. Some groups thus took advantage of the diverse participants in the market. Several groups sold to three or more truckers and itinerant traders. Another sold part of its harvest to a local cooperative and another part to large coffee farmers who bought maize to resell to small coffee producers. Yet another group sold part of its maize to a cattle rancher from Copán as well as to a trader from San Pedro Sula. No groups sold maize to the IHMA. It was claimed that the procedures were too bureaucratic and costly. Equally, groups did not try to sell directly to the animal feeds industry based in San Pedro Sula for similar reasons, although some of the traders they sold maize to undoubtedly did.

On one hand, the expansion of maize markets and the different types of commercial outlet for maize gave the groups greater opportunity to negotiate sales because of the

competition between traders, and because groups were a ready and accessible source of maize. On the other hand, groups had institutional loans to repay at harvest time, and there would have been pressures to sell at least part of the harvest very quickly. Thus, although there was some weak positive association between the amount of collectively produced maize and prices received (Chapter 8, Section 8.2), the extent to which groups actually could take advantage of joint action to negotiate prices with traders was limited at that stage in their history.

9.2.2 Access to other markets: institutional alternatives

Although there were different opportunities for negotiation in private maize trade, it seems apparent from these data that the social processes involved (including those analysed in previous chapters) could help to determine who benefited from trading transactions. However, analysis of other market possibilities also suggests that semi-proletarian farmers, and even petty commodity producers, were unlikely to benefit from them. One such alternative was the IHMA.

As outlined in Chapter 2, Section 2.3.3, the purpose of the IHMA in the 1980s was to provide guaranteed prices for maize (and other grains) to farmers and to stabilize prices to consumers by selling maize at a ceiling price, using imports if necessary. Guaranteed prices were fixed at harvest time and remained the same during the farming year. It was assumed that this type of intervention would provide incentives to farmers to increase output.

Chapter 2 also discussed some of the problems faced by the IHMA. From the farmers point of view, the transaction costs of selling maize to the IHMA were higher than selling to local traders, because farmers had to transport their grain to an IHMA granary and often wait long periods to make their sale (Loria and Cuevas, 1984, 24). Farmers did not necessarily receive the guaranteed price because of deductions for the

poor quality of their maize. Payments by cheque meant that farmers also had to wait until banks processed them. In addition, for farmers with credit from BANADESA, loan repayments would be deducted, which could act as a disincentive to sell maize to the IHMA. However, because the IHMA operated as part of BANADESA's loan recovery programme, it favoured purchasing from these farmers, and credit-holders featured prominently among those farmers who did sell to the IHMA (*ibid*, 40).

These problems were substantiated by interviews among maize farmers in El Paraíso and Santa Bárbara. No farmers had sold their maize to the IHMA in the year of interview⁸. In Jamastrán, the IHMA price in the Danlí granary that year was lower than the prices many farmers interviewed obtained from private traders.⁹ The somewhat higher price in the Tegucigalpa granary would have been offset by transport costs. But transporting maize to the granary in Danlí would not have been financially viable for many semi-proletarian farmers. Even commercial farmers were generally reluctant to sell to the IHMA because of time and cost: of the two largest commercial farmers interviewed, one stated that he would never sell to the IHMA because of the costs of transport; the other had once been kept waiting for two weeks in Tegucigalpa and had eventually taken his maize to an industrial company. Another bitter experience was recounted by a commercial farmer in Jutiapa: during the 1984-85 harvest, he had taken his maize to Tegucigalpa but the IHMA had only accepted two lorry-loads. He

⁸ Several had sold beans to the IHMA, however. The IHMA's price was far higher than the market price that year. One commercial maize farmer in Jutiapa had actually been buying up all the beans from local small farmers and selling them further to the IHMA. One petty commodity producer interviewed in Chichicasté had also tried to finance his maize cash deficit by buying beans and selling them in the market with his own to the IHMA. Another had also sold his beans to the IHMA and then bought beans for family consumption in the market because they were cheaper.

⁹ IHMA prices for maize from September 1986 to August 1987 were Lps16/Quintal in Danlí and Lps17/Quintal in Tegucigalpa, or Lps.35/Kg and Lps.37/Kg respectively. These prices were for maize with not more than 15% humidity, 2% impurities and 5% damaged grain. Poorer quality maize than this would exchange at lower prices.

sold his other two lorry-loads to an industrial company but had had to wait 6 months for payment which meant that he could not repay his bank loan on time.

Among petty commodity producers, one farmer knew that he was entitled to sell up to a given quantity of maize to the IHMA because of his loan from BANADESA, but stated that he could obtain a better price from two traders to whom he regularly sold his surplus. Petty commodity producers who had received institutional credit from the DRI also considered the possibility of making joint sales to the IHMA. In Jutiapa, a group of them met with IHMA representatives, were given a price for a given quality of selected maize and were told that the IHMA could buy only 20% of their output because of the extent of *maíz muerto*. The farmers rejected the deal and after aborted negotiations with an animal feeds company and a savings and loan federation, they opted for individual sales to private traders.

Collectively-organized groups gave similar feedback. One group in Quita Sueño recounted how they had sold maize to the IHMA one year and had received Lps14/Quintal (Lps308/MT or Lps.31/Kg) rather than the advertised guaranteed price of Lps17/Quintal (Lps374/MT or Lps.37/Kg). Furthermore, for every Quintal sold to the IHMA, they had to pay Lp1 in transport costs.

I suggest that the IHMA served to reinforce social differentiation among maize farmers in the 1980s. Guaranteed prices were only attractive if they were sufficiently higher than market prices after deducting transaction costs¹⁰. However, only commercial farmers and those petty commodity producers receiving credit from BANADESA would be likely to sell to the IHMA under these circumstances. Furthermore,

¹⁰ Loria and Cuevas found a much higher rate of sales to IHMA than I did, but this is probably because the average farm sizes were higher in their sample; their data might also have been affected by the locations of the farmers interviewed, as well as relative prices in the year of their study.

commercial farmers were able to choose different options, while the conditions under which many petty commodity producers and most semi-proletarian farmers sold maize meant that the IHMA was an unlikely purchaser. Furthermore, even if IHMA prices were considerably higher than market prices, local traders would be unlikely to raise their own prices to such farmers, knowing that these farmers did not have access to the IHMA option. (On the other hand, traders could buy locally at lower prices and then sell to the IHMA.) Furthermore, farmers who were net purchasers of maize would be worse off if retail prices for maize rose above the prices they had received.

Another alternative was selling to agro-industry which bought maize at fixed prices during the harvest period. One marketing study suggested that agro-industry had an important influence on market prices in the north of Honduras: 'Agro-industry, the major user of basic grains, is heavily concentrated in the San Pedro Sula area. It is this concentration of demand, coupled with wholesale markets in that area, which establishes general price level [*sic*] for basic grains in Honduras' (IRI, 1985, 273). Although I have not seen economic analysis to substantiate this statement, the IHMA manager in San Pedro Sula, and many San Pedro Sula wholesalers agreed with it.

Among farmers I interviewed, only the largest sold to companies. For most farmers, similar problems involved in selling to the IHMA prevailed: high transaction costs, and delayed realization of payments. Moreover, processing firms received truckloads of grain, not the small quantities sold by semi-proletarian farmers and many petty commodity producers. Thus, apart from commercial farmers, those who mostly sold to industrial firms were truckers, itinerant traders and wholesalers.

Although the quantities of maize required by industry were considerable, I also found limited evidence of contractual arrangements with farmers and trader to secure grain (see, for example, the account in Section 9.2.1). As in market relations in general, the

apparent desire for flexibility and keeping options open seemed prevalent. Thus the manager of the largest animal feeds company stated that he had a few large, 'friendly' commercial farmers who supplied maize on a regular basis. By contrast, he preferred not to make deals with traders.

However, it appeared that deals could be made in other ways, based on personal relations between buyers and sellers. For example, one San Pedro Sula industrialist gave the following account about a trader I later interviewed:

This trader supplies several companies who process maize. Theoretically, they pay him Lp1/sack but in fact they fix a price with him and then he is able to make substantial profits by buying maize well below the price being paid by the companies. He has 20-30 employees and two sons who work with him and he hires truckers. He probably makes about Lps60,000 a month during the harvest period.'

When I went to interview the trader, he was talking to a manager of a maize processing factory he was said to supply. However, he was reluctant to discuss his relations with industry and stated that he only sold maize to retailers: 'however it is possible that those who come here to buy maize sell it to industry'. It was possible that much of the maize he handled never entered the warehouse but went straight from farmers via 'his' truckers to industry.¹¹

These interviews do not prove that personalized processes of securing maize at fixed prices by industry were generalized. However they do indicate that such processes did occur between firms, commercial farmers and some traders, in which each would share the benefits of relative prices in wholesale markets, those set by the IHMA and those

¹¹ Although my industrialist informant denied it, his company also bought maize from this trader.

set by industry, as well as sharing the margins between the farmgate price and the final price of sale.

9.2.3 Conclusions

Looking at these farmer-market relations indicates that prices do not result from a linear and impersonal relationship between supply and demand but are affected by social relations and hierarchies. Particular prices can be arrived at through different routes and mechanisms. Prices can also have different effects for different participants in markets. My fieldwork suggests that semi-proletarian farmers in particular were likely to benefit least from these different routes, which reinforced their need to engage in personalized and non-commoditized relations to reproduce maize.

From a macro-economic perspective, this discussion shows that there are limits on using aggregate price data to analyse and understand the effects of price changes in the economy. For example, the Central Bank of Honduras publishes yearly wholesale prices for maize. These data (in so far as they are accurate aggregates) may have some use in a time series in conjunction with other aggregate price data to show overall price trends and relations between commodities. However, to evaluate how different prices might affect the productive capacities of different types of farmer, as well as who else might benefit from them, requires analysing the social relations of exchange in different markets and market places.

9.3 The profitability of maize trade

A particular policy concern in Honduras was the extent to which markets operated efficiently. Much of this concern was based on analysis of price margins. This section argues that analysis of price margins can provide insights into who benefits from trade.

However, looking only at price margins can be misleading in trying to understand the nature of competition and its effects.

An example of the type of concern expressed is evident in a marketing study by the IRI Research Institute, which stated: 'The markets for agricultural products in Honduras are in the last stage of a transition from "subsistence farming" to the "specialization and trade" system...If the market institutions perform the required marketing functions effectively and efficiently proper signals [sic] will be directed toward producers prompting them to use more than the 20% of potentially useful land that now is in cultivation' (IRI, 1985, 3). The study went on to say:

Participants in the marketing channels represent a significant number of people who by their contribution to the increasing value of products merit their fair share of the proceeds allocated by the marketing system. The more complete and modern the marketing system the more services are performed and therefore the share of the consumers [sic] dollar taken by those dealing with the product after it leaves the place of production will increase. Thus the farmer's share of the consumer's dollar will decline but for a good and sufficient reason. Honduran farmers receive about 50% of the consumer's dollar and this has been interpreted to reflect an unfair distribution of market receipts. In other countries with a highly developed marketing system, farmers receive only 38% of the consumers [sic] dollar but are much better off than those who receive 50% in countries with primitive markets' (*ibid*, 3-4).

I cannot pursue all the issues contained in this quotation. However, one key point is whether traders add value to products. They add value in transporting maize and providing storage, and in so far as they improve the quality of maize in drying it. However, the process of buying and selling, while allowing maize to be circulated and distributed through markets, does not in itself add value to or transform products. Second, the comparison of benefits of more or less efficient markets to farmers in the United States (in this case) and Honduras does not take into account the very different conditions of production (as well as trade) in both countries, and particularly the extent

of commoditized farming practices and subsidies to farmers in the United States (nor that many U.S. farmers have been in crisis in the last decade). Such comparisons should therefore be treated with caution. Furthermore, large margins to trade are not necessarily evidence of efficiency, or of provision of more extensive services, as they can be created by monopolies and oligopolies.

However, as pointed out by IRI, there was concern about whether traders' margins¹² showed evidence of inefficiency (or monopoly/oligopoly) in markets, and about the general 'fairness' of trade in Honduras. Furthermore, it was also quite commonly expressed among farmers that traders 'buy cheap and sell dear'. This statement reflected the fact that traders could make money from maize while many farmers could not, and that when deficit farmers came to buy maize, they had to pay a price in considerable excess of what they had received for their output.

9.3.1 Price shares and profit margins

My own analysis of secondary price data between 1978 and 1986 indicates that farmers tended to receive an average of 60% of the final retail price of maize (Johnson, 1988, 181 and Table 80). Pollard *et al.*, who analysed secondary price data from 1966-1982 estimated a lowest figure of 44% in 1971 and a highest of 80% in 1976 (1984, 77, Table 32). Using their data and my baseline of 1978 gives an average of 63% for farmers' share of the retail price between 1978 and 1982, thus similar to my own calculations.

¹² The terms price share and margin seem to be used interchangeably in the literature. However, as the IRI study points out, the calculation of margins includes costs such as transport, sacks and so on (*ibid.*, 257). In this sub-section I am therefore using the term margin to refer to gross rather than net margin.

In practice, there must be considerable variation in this percentage between different types of farmer, times of sale and regions of the country. For example, I compared the lowest prices reported by farmers in Chichicasté and Jutiapa (on the assumption that traders 'buy cheap and sell dear') with wholesale and retail data collected by the Ministry of Natural Resources [Agriculture] in Danlí, Tegucigalpa and Choluteca (in the south of Honduras) for January/February (the most common months of farmgate sales among interviewees). My results show a similar percentage to the average of 63% calculated above for January/February sales, whereas the proportion of retail prices received by farmers with the lowest prices in February was already higher than this average (Table 9.7). (This again confirms that the later the sale, the more farmers can benefit from price changes.) Notably, the highest percentages received by farmers were against retail prices in Danlí - retail prices were higher in Tegucigalpa and Choluteca because of transport costs and more active markets. These data should, however, be treated with some caution. The secondary data have been subject to smoothing and averaging and do not reflect the daily process of price changes which affects both farmers and traders.

Table 9.7 Percentage of retail prices in nearest market centres received by Chichicasté and Jutiapa maize farmers with lowest farmgate prices, primera 1986-87

	<i>Chichicasté</i>		<i>Jutiapa</i>	
	<i>Jan/Feb</i>	<i>Feb</i>	<i>Jan/Feb</i>	<i>Feb</i>
	<i>Percentage of retail price</i>			
<i>Danlí</i>	65	75	65	75
<i>Tegucigalpa</i>	58	70	58	67
<i>Choluteca</i>	60	73	60	69
<i>Average</i>	61	73	61	70

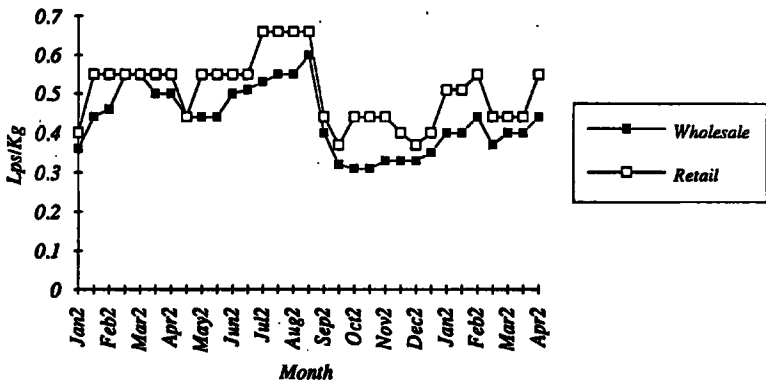
Source: calculated from time series price data gathered by the Ministry of Natural Resources and own field data

Making profits from trade depends on price differentials - the difference between lowest prices paid by traders and the highest selling prices they could obtain. In this respect, traders were, and are, better able to take advantage of cyclical price changes

than farmers. Farmers' resentment that traders could make a quick profit merely by exchanging goods that farmers had laboured months over to produce was understandable.

The nature of cyclical price trends is demonstrated in Figure 9.1 which shows price changes in Danlí for 17 months in 1986-87. The peak wholesale and retail prices occurred in July and August before the new harvest appeared. As soon as the new harvest started to emerge in September, prices dropped dramatically. (There was also a dip in April/May because of the second harvest produced in the north of the country.) Although these trends vary in extent and location each year, traders and large commercial farmers with storage can benefit from the price changes.

Figure 9.1 Danlí: bi-monthly wholesale and retail maize prices, 1986-87



Source: time series price data gathered by Ministry of Natural Resources

As well as the proportion of final price received by farmers, some analysts of price margins in Honduras have been concerned about an apparent reallocation over time of the difference between farmgate and retail prices in favour of wholesalers. Although not all are agreed on this trend, Pollard *et al* have suggested that it may call into

question the degree of competitiveness among wholesalers (*ibid*, 81). Plotting yearly data of the proportion of final price that was received by wholesalers from 1965/66 to 1987/88, (using the same source as Pollard), shows an increased percentage going to wholesalers between the late 1960s and early 1970s (see Figure 9.2). Between the late 1970s and the 1980s, however, there does not seem to be a notable change: the percentage of the final price received by wholesalers was generally between 80-90% in the 1980s.¹³

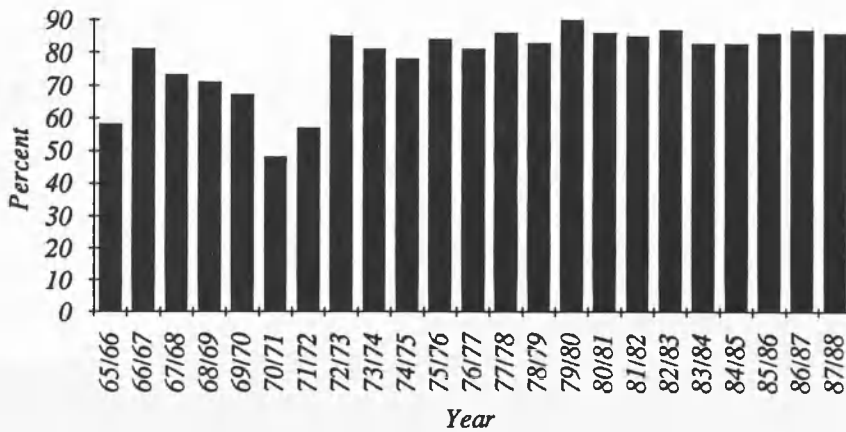
Analysing the monthly wholesale price data for the 5 intervening years between the Pollard study and my own suggests that the percentage of the final price taken by wholesalers fluctuated seasonally as well as yearly. Figure 9.3 shows that it was rather less during the main harvest months (November-January) and more during the scarcer periods. Even so, analysing the data on which this figure is based showed that wholesalers' share did not fall below 77% of the final price.

¹³ Thus, assuming an average 63% of the retail price received by farmers, I estimate that the wholesale share of the difference between farmgate and retail prices fluctuated annually from about 55-80% in the 1980s.

with storage, delayed sales would probably give them a higher share of the final price. While wholesalers appeared to obtain a lower average share of the final price at harvest-time because of competition (Figure 9.3), they could make money from considerable turnover. Figure 9.3 also suggests that there was less competition between wholesalers during the non-harvest period, when those wholesalers with access to long-term storage would have had greater control over the market. (Some wholesalers stated that they sold most maize during the scarce periods.) Finally, retailers appeared from these data to do less well in the scarce period. If true, this may have been because of measures by the IHMA to stabilize prices to consumers. (I return to retailers' margins below.)

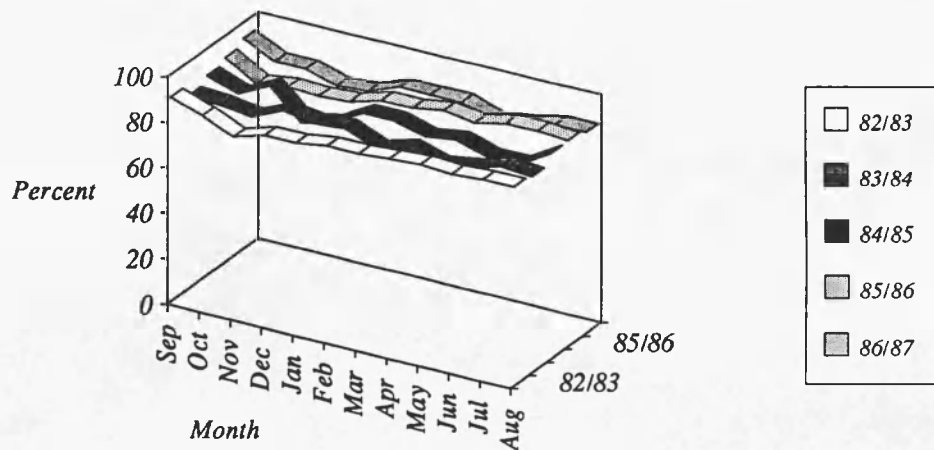
Aggregated price data conceal a range of transactions and trends (as well as the social relations that underlie them). Within trends, prices can vary considerably, suggesting a large number of (often small) fluctuations in price during a particular period. This is borne out by analysing my field data in relation to official data for one month in 1988, and which, on the surface, appear to contradict part of the above discussion. From a small case study combining my field data from San Pedro Sula with those from the Chamber of Commerce, I was able to estimate and compare profit margins for wholesaling and retailing traders. Table 9.8 gives the purchasing and selling prices per metric tonne for four wholesalers and the retail prices for May 1988 gathered by the Chamber of Commerce (which turned out to be static). These traders bought and sold maize at three different sets of prices during the month, each transacting a slightly different deal. Assuming that the maize was sold as soon as it was bought, and no storage costs were involved, gross profit margins ranged from 2.86-5.7% of the wholesale purchasing price. If unloading and loading costs are taken into account (calculated at Lps7.12/MT), net profit margins would then have ranged from 1-3.86% of the purchasing price. These would be equivalent to net profits of Lps3.88/MT to

Figure 9.2 Yearly wholesale prices as a percentage of retail prices, Honduras 1965/66-1987/88



Source: calculated from time series price data provided by the IHMA

Figure 9.3 Monthly wholesale prices as a percentage of retail prices, Honduras 1982/83-1986-87



Source: calculated from time series price data provided by the IHMA

Several points can be concluded from these data. They suggest that wealthier farmers and traders could benefit from the price fluctuations characteristic of Honduran maize markets, whereas deficit farmers, in particular, would suffer. For commercial farmers

Lps14.88/MT. For the San Pedro Sula wholesalers, daily turnover ranged from about 9 to 27 tonnes, resulting in a minimum net profit of about Lps35/day to Lps402/day. (Minimum gross profits would have been about Lps99 and, maximum, Lps594 a day.)

In these data, the overall share of the retail price received by wholesalers ranged from 72-76%, slightly less than the lowest figure of 77% calculated from IHMA's data on monthly price changes above. These wholesale prices might have been relatively low because of the arriving *postrera* harvest in the north of Honduras at that point. One result was that gross profit rates for retailers were much higher than for wholesalers. For retailers, buying maize at a range of Lps396-418/MT and selling it at Lps550, gave gross profit margins of 32-29% of the purchasing price.

Table 9.8 Estimated profit rates for four wholesalers interviewed in San Pedro Sula, May 1988

Traders	Trader 1	Trader 2	Trader 3	Trader 4
Wholesale purchasing price (Lps/MT)	385	385	391	396
Wholesale selling price (Lps/MT)	396	407	407	418
Gross profit rate	2.86%	5.7%	4.1%	5.6%
Porterage (Lps/MT)	7.12	7.12	7.12	7.12
Net profit rate	1%	3.86%	2.3%	3.75%
Retail price (Lps/MT)	550	550	550	550
Wholesale purchasing price as % of retail	70%	70%	71%	72%
Wholesale selling price as % of retail	72%	74%	74%	76%

Source: calculated from own fieldwork data and data provided Chamber of Commerce, San Pedro Sula

However, these margins can create a deceptive impression. Retailers' turnover is relatively low compared with wholesalers' (and is not usually measured in tonnes). For example, interviews with traders in Danlí (who both retailed as well as wholesaled maize) indicated that typical retailing rates ranged from 15 to 350 Kgs a day. San

Pedro Sula retailers would have had much higher turnovers because of the size of the market. Nevertheless, let us assume that the Danlí traders had bought and sold maize at the wholesale and retail prices quoted in Table 9.8. Gross daily profits from retailing would have ranged from Lps1.95 at the lowest retailing margin to Lps52.5 at the highest (see Table 9.9), considerably lower than those for wholesalers¹⁴.

*Table 9.9 Estimates of hypothetical daily gross profits for retailers in Danlí, May 1988**

	<i>Lempiras</i>	
	<i>Daily sales @ 15 Kgs</i>	<i>Daily sales @ 350 Kgs</i>
<i>Purchasing price</i>		
<i>Lowest</i>	.40	.40
<i>Highest</i>	.42	.42
<i>Selling price</i>	.55	.55
<i>Minimum gross profit (.55 - .42 x Kgs)</i>	1.95	45.5
<i>Maximum gross profit (.55 - .40 x Kgs)</i>	2.25	52.5

* Based on data in Table 9.8 and interview data from Danlí traders

Returning to wholesalers' profits, there are several implications from these data. The first is that wholesalers' profit margins based on immediate turnover were actually quite low. This means that (i) substantial quantities of maize would have to be moved for large total profits to be made, and (ii) there would be good reason, from the trader's point of view, to store maize until prices rose well above the purchasing price. Mechanisms of securing turnover are discussed in Section 9.4. A rough guide to the kind of profits that might be expected from obtaining bank credit to purchase and commercially store maize is given in Table 9.10.

Let us assume that a San Pedro Sula wholesaler bought maize at Lps418/MT in March of 1988 (after the main harvest and before the second harvest in the north) and stored it

¹⁴ As several Danlí traders engaged in both wholesale and retail, in practice, their total profits from maize would have been higher.

to sell when maize was relatively scarce again. If he or she sold it in San Pedro Sula between June and August, they would obtain between Lps37 and 121/MT in gross profits (Table 9.10). These profits would be reduced by commercial storage costs but would still give a profit margin of 8.3-28%, much higher than the margins from immediate sales (see Table 9.8 above). However, the wholesaler would also have to pay interest on the loan to purchase the maize. It is difficult to make accurate calculations because the amount charged would depend on the period of the loan. Assuming an interest rate of 14% (approximate for the mid-1980s), the wholesaler would have to store the maize until at least July to make a profit, and preferably until August (or 5 months) to make a higher profit margin than from immediate sales. This would involve tying up capital which perhaps only some of the large wholesalers were prepared or able to do (see also Section 9.4.3 below).

Table 9.10 San Pedro Sula: potential profits from storing maize commercially, 1988 (Lps/MT)

<i>Month</i>	<i>June</i>	<i>July</i>	<i>August</i>
<i>March purchasing price</i>	418	418	418
<i>San Pedro Sula wholesale selling price*</i>	455	484	539
<i>Gross profit</i>	37	66	121
<i>Net profit (gross profit minus storage costs)</i>	34.8	63.8	118.8
<i>Profit rate (percentage of purchasing price)</i>	8.3%	15.3%	28%

** Data provided by Ministry of Natural Resources*

9.3.2 Evidence of trader wealth

The IRI study noted above suggested that Honduran traders did not receive a particularly high share of the final price for maize (and other agricultural products) compared with traders in 'a highly developed marketing system' such as in the United States. As well as suggesting that Honduran markets were not performing the services

to circulation that they should be, this statement also implies that Honduran traders did not do particularly well out of trade.

In this respect, my field observations did not always tally with what traders recounted nor with what others told me about them. For example, the impressions given by traders in Danlí and San Pedro Sula about their activities were often contradictory. Some of these contradictions were related to their respective trading worlds.

Thus, of 7 traders interviewed in Danlí, 2 thought business was bad, another stated that profits were low, and the majority claimed that turnover was slight. These interviews took place in June, just after the sowing period for the next main crop, and after the second harvest from the north of the country. Maize would have been coming into Danlí at this point from other market centres, although large commercial farmers in the area might also have been selling stored maize. The ability to make money from maize during these periods was a point of differentiation between stallholders, selling a variety of goods and retailing as well as wholesaling maize, and those with substantial warehouse capacity, specializing in grains. Thus several of the former complained that large traders could buy and sell more competitively because of their scale of operation, while one of the large wholesalers in Danlí stated that the sowing or scarce period was when he did most business. The smaller traders in Danlí frequently expressed that they felt out-manoeuvred in the market place by the large wholesalers.

The trading world of San Pedro Sula contrasted sharply with that of Danlí. I interviewed only wholesalers and deliberately chose those who had a reputation for high turnover. For these 9 traders, maize was constant business. The overwhelming impression given by San Pedro Sula wholesalers was that the number of participants in the market place had grown and that trade was very competitive. Observing them generally gave a picture of intense activity:

Saturday, 12am; busy store with 5 people working as well as owner, and several people buying things; two lorries outside.

Saturday, 5pm; people coming all the time to buy...had three or four people working there; had sold 20 sacks of high priced beans that day [worth about Lps1,800].

Sunday, 2pm; trader works extremely hard and always very busy; sells everything; received a quantity of maize while I was waiting...

Wednesday, 3.45pm; lots of lorries, maize on the pavement etc...during the interview there arrived several respectably-dressed clients, a lorry which came to unload, someone who came to buy maize, and a small truck from [a rice mill].

But not all wholesalers exuded an appearance of intense movement:

Wednesday, 4.30pm;...he was in the hammock when I arrived. His employees, including some of the [adult] children were playing cards. The warehouse didn't look much but he said they had substantial storage space behind.

Saturday, 4pm; there was was little activity in the warehouse. Only one person was there, resting on the sacks. But [the wholesaler] was in his office, talking to the manager of [a maize processing company].

Appearances could be deceptive. The first of these last two traders was long-established, still had a thriving business but had also diversified into farming. The other was one of the main suppliers of maize to industry.

Certainly, among San Pedro Sula wholesalers, estimated earnings indicated substantial wealth from maize trade. No large wholesaler interviewed appeared to have had a turnover of less than Lps8,000 a year according to my calculations, and some may have had a turnover as high as Lps200,000 a year from maize. According to other informants, some wholesalers may have made even more. Nevertheless, even though traders made profits, there were different degrees of wealth and considerable differentiation among traders, which were evident from their personal histories.

Data from Danlí indicate that there were several routes into trading, differences in traders' success in business and influence over the activities of other traders. Table 9.11 reveals that all the traders for whom there were data had had humble beginnings, and several had long-standing experience of commercial activity. A number had started with small loans or small investments, while two had received loans from one of the major traders in the town. The wealthier the trader, the more specialized the activities became: the majority traded other goods in addition to maize, although maize was a key activity in terms of earnings, while traders 6 and 7 specialized only in grains. These were the largest traders in the town.

Looking at data for San Pedro Sula show some similar patterns (Table 9.12): small beginnings in commerce, while at least 2 of the 9 had been truckers and itinerant traders. In addition, most had begun their working lives in the rural areas and were migrants to San Pedro Sula:

Born in Ocotopeque [in the west of Honduras] but was brought up in San Pedro Sula. He had started in petty trade when he was 10: "I ran around all over the place [buying and selling]."

Born in El Progreso [near San Pedro Sula]. He was a driver for 5 years. Then he bought his own truck and worked for 10 years as an itinerant trader.

Born in El Progreso. He had farmed there and still had a farm. He worked for 15 years as an itinerant trader.

Born in Santa Bárbara. He went to Cortés to cut sugar cane and then he started trading in San Pedro Sula. He started to buy land in the countryside and now combines trading and farming.

Table 9.11 Histories of traders interviewed in Danlí, 1987

Trader	Number of years as a trader	Previous occupation	How started trading	Other trading activities	Other activities
<i>Only retailed</i>					
1	6 months	Grocer, seamstress & piñata-maker	Loan from trader 7 and savings	Other grains and spices; artisanal goods	Artisanal work
<i>Wholesaled and retailed</i>					
2	20	Seamstress	Bought contents of market position from previous trader	Dry goods; other grains; household goods	n.d.
3	14	n.d.	Had private loan	Dry goods; other grains; household goods	n.d.
4	3	Tobacco processing	Sold some land	Dry goods; other grains; household goods	Farm
5	8	Clothes pedlar	Used savings	Dry goods; other grains; household goods	n.d.
6	Many years	n.d.	Loans from family and other traders, including trader 7	Other grains	n.d.
<i>Only wholesaled</i>					
7	Since childhood	n.d.	n.d.	Other grains	Owning land; had cattle

n.d. = no data

Evident from these testimonies was that, in spite of small beginnings, these wholesalers had managed to make money from trade and had built up their wealth in a way that no semi-proletarian farmers or petty commodity producers could do unless they likewise managed to diversify their activities. Furthermore, although, for many traders, business activities which had begun with petty trade in rural areas were now located in a urban centres, links with the countryside were often maintained. Owning land, cattle and growing crops was a way of investing profits from trade. In addition, purchasing land

for productive (or non-productive) purposes was a way of saving or building up an insurance for the future, as well as making extra earnings. Landed property was also an accepted way of enhancing social status.

Table 9.12 Histories of wholesalers interviewed in San Pedro Sula, 1988

<i>Trader</i>	<i>Number of years as a trader</i>	<i>Previous occupation</i>	<i>How started trading</i>	<i>Other trading activities</i>	<i>Other activities</i>
1	3+	n.d.	n.d.	Tins; packaged foods; other grains	Farm
2	10 years in San Pedro Sula	In commerce since childhood	Savings	Tins; packaged foods; other grains	n.d.
3	23	n.d.	n.d.	Tins; packaged foods; other grains	n.d.
4	9	Driver and itinerant trader	Savings	Tins; packaged foods; other grains	n.d.
5	19+ in San Pedro Sula	Commerce	Savings	Tins; packaged foods; other grains	Planning poultry farm
6	1?	Farming; itinerant trader	Savings	Tins; packaged foods; other grains	Farm
7	1?	Forestry	n.d.	Tins; packaged foods; other grains	n.d.
8	33	Farming	Savings	Tins; packaged foods; other grains	Farm
9	1?	Sugar worker; petty commerce; farming	Savings	Tins; packaged foods; other grains	Farm

n.d. = no data

Investing in land and agriculture was not the only outlet for traders' profits. There were also instances of traders' investing in industrial processing. For example, one former trader and his son, who had counted among the large wholesalers of San Pedro Sula, had subsequently established a factory to make animal feeds from maize. The company also acted as a distributor for concentrates, as well as for the national bottling plant. The traders had diversified their investments, using the networks they had already established.

9.3.3 Conclusions

Maize trade often had low margins - suggesting considerable competition, particularly during harvests - but it could be highly profitable if traders could achieve a high turnover and/or store maize until prices rose. Because of cyclical price fluctuations, different types of trader, as well as commercial farmers, therefore benefited at different times. Although there was considerable differentiation of traders by wealth, there was also social mobility in maize trade, evinced in the contrast between many traders' humble beginnings and the later use of their profits to invest in other activities.

9.4 The social relations of securing profits

Understanding the extent to which traders were competitive and obtained 'fair' margins (even if many farmers were not able to make money from maize) requires analysis of the mechanisms used by traders to secure profits in output markets as well as of prices. This section argues that personalized as well as commoditized relations between traders and other buyers and sellers of maize played a role in securing access to maize and in ensuring profits. However, personalized relations were also located in the social hierarchies of trade.

Between traders and farmers, one mechanism of securing profits has already been discussed in previous chapters, that of pre-harvest sales. This mechanism depended on social hierarchies in the villages and the lack of resources for maize production faced by semi-proletarian farmers. Another mechanism was the role of unweighed purchases, a widespread practice related to the more general social hierarchy between production and trade, in other words, the relationship between a frequently non-profit making sphere and a profit-making one. An IHMA official recounted how unweighed maize could provide an extra earning for traders. Sacks are ostensibly equivalent to 2 Quintales (Lbs 200, or 91 Kgs), and prices are agreed per sack. However, a full sack actually contains about 7 *medios*¹⁵ or about 224 Lbs (102 Kgs). Traders would buy unweighed sacks and then sell them weighed to earn extra money on the deal. Thus when I analysed the wholesale and retail price data given me by some Danlí traders (who performed both functions), I found that they were very similar (and apparently negative in some cases - in other words, the trader seemed to be exchanging maize at a loss). Recalculating the prices they gave me according to differential weights made it evident that this was one way of making a profit.

However, social relations between traders, differentiated by task and wealth, and between traders and other purchasers of maize also played a role in securing profits. Relations between buyers and sellers have usually been discussed in the literature on Honduras in terms of 'marketing channels' (for example, IRI, 1985), charted to show how maize reaches its final destination after leaving the farmgate. Although such descriptions of maize flows indicate different trading chains (see Section 9.1 above), they do not explain the relations between participants. The IRI study and Loria and Cuevas (1984) also looked at differentiation by task in maize trade (trucking,

¹⁵ A *medio* is 32 lbs or about 15 kgs.

wholesaling, retailing) and pinpointed areas in which these functions overlap. Loria and Cuevas also examined to what extent participants in the market make agreements to buy from or sell to each other or financed each other. They found that although agreements were often made, they were difficult to enforce because of competition (1984, 36). Moreover, their data suggested that financing between traders was infrequent (*ibid*, 33).

However Loria and Cuevas did not distinguish between types of trader in reaching these conclusions. In contrast, I would suggest that a social hierarchy does exist between traders in which personalized relations play a role in smoothing transactions. These processes were evident in the relations between wholesalers and truckers/itinerant traders, between wholesalers themselves and industry, and in relations to forms of finance.

9.4.1 Wholesalers and truckers/itinerant traders

Relations between wholesalers and truckers/itinerant traders revolved around the importance of transport in trade. Wholesalers did not necessarily have their own transport, but they did need to be able to command the transport of others.

Among the 7 Danlí traders, for example, 3 had no form of transport and did not hire it. One of these only retailed maize (sending her husband out to buy a sack by bus while I was interviewing her). The other two were relatively small traders who bought from itinerant traders coming in to Danlí. Of the other 4, two also regularly bought from itinerant traders. But both these traders also hired truckers to buy or fetch maize from producers, and one would use truckers to supply clients in Tegucigalpa. The remaining two traders were said to be the largest in Danlí. Both had more than one truck of their own, as well as using other truckers to transport maize. Both these traders acted as suppliers to industry in Tegucigalpa.

The predominant practice among San Pedro Sula wholesalers seemed to be to avoid paying for the maintenance of vehicles, and even to avoid transport costs altogether. One source from a former large trading family stated that maize did not even have to enter the warehouse for transactions to take place: wholesalers would simply transfer the load from one truck to another truck in connection with a sale to another trader or processing company. However, of the 9 wholesalers interviewed in San Pedro Sula, 3 had no trucks of any sort, 3 used to have them but no longer did and only 2 still had their own trucks but did not generally use them for transporting maize. All these traders used hired truckers or bought maize from itinerant traders. One longstanding trader explained that she and her husband used to have their own lorries but had found that it was more profitable not to. Another trader explained that when he sold maize to other traders in the deficit south of the country, the trader from the south would send transport to pick it up. San Pedro Sula traders only seemed to hire transport to pick up maize when it was scarce.

The relationship between wholesalers and itinerant traders and truckers was therefore an important one and securing maize supplies from truckers and itinerant traders involved a number of personalized as well as commoditized processes. One process was through financial arrangements. Several San Pedro Sula wholesalers loaned money to itinerant traders and truckers to buy maize although much depended on personal links and relations of trust, as well as the state of the market:

Trader stated that itinerant traders operated with their own money (not with the banks) but that wholesalers would also lend money to trusted traders and truckers.

Trader stated that he only lent money to traders and truckers to go and look for maize when it was scarce.

A former trader informant stated that itinerant traders often had to wait for payment from wholesalers. However, if maize was scarce, traders

would do anything to buy it and would then be more likely to lend money to truckers or traders to look for grain.

In contrast, one San Pedro Sula wholesaler stated that he did not like lending to truckers and itinerant traders because there was no guarantee that he could recuperate the money.

There was less evidence of these practices in Danlí. Nevertheless, an employee of one large wholesaler there stated that his boss commonly lent money to truckers and other traders. This informant also said that the wholesaler 'worked with' (in other words, loaned money to) friends who had trucks and who bought maize for him. However, the financial arrangements between wholesalers and truckers could work the other way.

It was said of the same wholesaler:

If he did not have ready cash at the time of purchase, the itinerant traders would leave the maize and come back for payment at the end of the day. They would be paid that day's purchasing price for maize.

9.4.2 Trading between wholesalers, and between wholesalers and industry

Although traders were generally concerned to buy and sell maize quickly, for reasons such as storage problems or the maize deteriorating in quality, the often small price margins involved in wholesale transactions made buying and selling the maximum amount of grain in the shortest time an important profit-making strategy. Several traders said they did not like to keep maize for more than about a week.¹⁶ To achieve a rapid and high quantity turnover, traders needed good contacts with other wholesalers and industrial firms.

¹⁶ Although keeping maize in circulation was undoubtedly essential to making money, these comments helped to create the impression that the traders did not hoard maize or manipulate prices by creating false scarcity, of which they were often accused in the press.

The precise nature of social relations between wholesalers themselves, and between wholesalers and industry was not always clear and traders tended to be cautious about revealing their links and networks. The overall impression was that traders combined fluid and flexible arrangements with more formal agreements. Witness this brief account given by informants about the networks established by one of the Danlí wholesalers:

He works with large traders in Tegucigalpa and has contracts with the animal feeds industry and institutions involved in food aid. He has worked in trade since childhood and now has several warehouses and trucks. He can move around quickly [ie respond quickly to situations]. He buys from everyone, but especially from small and medium producers. He only trades in maize.'

This wholesaler was located in a rural market town. His success as a trader was highly dependent on links which involved forms of patronage: he had patrons in Tegucigalpa and he in turn was patron to a local network in the Danlí area. As well as receiving loans from Tegucigalpa traders, he would also make loans to traders and others in Danlí. Thus although this wholesaler was working in a commoditized maize market which responded to supply and demand and was affected by its wider insertion into national markets, his ability to make money from maize was built on social relations and informal agreements with numerous actors and agents.

Understanding how this wholesaler maintained his activities and made profits from maize required digging below the surface of his apparently empty warehouse when I visited it. This underlines how difficult it is to judge the operation of trade by appearances, or to chart its relationships in flow diagrams. Although I would hesitate to describe this wholesaler as having an oligopoly, he had an important role in trade in the Danlí area and its connections to Tegucigalpa.

Also apparent from this case is that although most Danlí traders adopted a diversified strategy and retailed as well as wholesaled maize, the really substantial wholesalers established networks outside their local markets as well as within them. This was particularly important given the limited nature of local markets. Thus the two supposedly largest traders in Danlí both sold maize to industrial companies in Tegucigalpa.

By contrast, the city of San Pedro Sula itself constituted an important source of demand - in the urban market for domestic consumption and from the various maize processing firms. Although wholesalers occasionally mentioned having contracts with industry, most traders and industrial managers implied that arrangements were informal. However, some San Pedro Sula wholesalers indicated that they never attempted to sell maize to industry because firms already had their established suppliers among other traders.

As well as meeting the substantial demand for maize in the San Pedro Sula area, wholesalers also supplied maize to other parts of the country. Establishing contacts and sales outside the immediate markets was increasingly backed-up by access to efficient means of communication and payment, especially among San Pedro Sula wholesalers. Telephones and bank accounts were evident. One wholesaler stated that he would take orders (by phone) from Choluteca traders, they would then deposit the money in his bank account, and send a truck to fetch the maize.

However, social relations between wholesalers involved elements of collusion and implicit agreements as well as competition. For example, wholesalers in San Pedro Sula were known to check out prices with each other. Who would be the first to engineer a change was never clear, but one informant stated that when prices were about to change, there was a reverberation around the market. As Loria and Cuevas

have also said: 'A lack of direct communication was observed...However, there was perfect knowledge about prices paid, for instance, 'each wholesaler knew the price offered by his neighbour' (1984, 36). However, while traders in a given market might agree to sell maize at the same or a similar price, they would also be buying at different prices from itinerant traders and farmers. Equally, they might also strike individual deals with other wholesalers, retailers or firms to whom they sold maize. Thus elements of collusion, personalized relations and competition were closely interlinked.

9.4.3 Informal and institutionalized credit relations

Making quick purchases and taking advantage of price differentials did not necessarily require ready cash, as implied above. For example, the manager of an IHMA granary stated that traders often went to their warehouses with no money. They would sell goods all morning, and then buy grain again in the afternoons with the proceeds. Alternatively, interviews with traders revealed that some wholesalers bought maize on credit: for example, one large wholesaler in Danlí had the practice of buying maize on credit from farmers and then paying them when she had the money. This process was only operable with commercial farmers. Furthermore, large local coffee producers bought maize on credit from her and did not pay her back until the coffee harvest.

One story told was particularly illustrative of the arrangements that could operate in such situations. A large landowner and farmer in the Danlí area was known also to function as a middleman in coffee as well as maize. He bought maize on credit from the wholesaler mentioned and resold it to the coffee farmers who also supplied coffee to his mill. Furthermore, he had rented storage belonging to a local cooperative (purpose-built for the cooperative's own use) and was using it to store the large quantities of maize he was proposing to sell to the coffee cultivators.

This kind of arrangement was possible in areas where rural and urban relations were still closely interwoven and where there was intimate personal knowledge of local people and possible transactions, often based on social hierarchies. However, there was a gradually growing trend for large wholesalers to engage in institutional forms of finance from banks. Thus, on one hand, traders had developed flexible means of financing trade through their links with truckers, other wholesalers and some commercial farmers and could hence manage to turn around large (or even small) quantities of maize without necessarily having ready cash to hand. On the other hand, although they continued to work with informal credit and loans with trusted clientele, a growing number had bank accounts, used cheque books, obtained bank loans and had more financially accountable systems.

Access to bank credit depended partly on the size of traders' enterprises. This was because credit was linked to storing grain in commercial warehouses. Such storage had drying facilities and wholesalers were able to maintain the quality of their maize, meaning that it would still be a saleable product in later months and the bank would be able to recuperate its credit.

Thus the smaller traders of Danlí financed their activities themselves or borrowed from other traders locally. However, two of the large wholesalers were mooted either already to be using bank credit or to be planning to. Even so, they expressed caution about the risks they might be taking. One said that she feared the commitment. Although such views were also expressed by San Pedro Sula wholesalers, a number had bank credit or had tried to obtain it. Nevertheless, only two of the younger dynamic traders indicated that they were actually happy having such a commitment to banks.

This degree of caution contrasts with Loria and Cuevas's findings. Out of their 50 interviewees, 20 or 40% claimed to use some institutional credit in trade (*ibid*, 33). My interviewees may have been particularly reticent in talking about their relations to financial institutions. Alternatively, several may have been sufficiently wealthy to finance trade themselves or from other business activities (see Section 9.3.2).

9.4.4 Conclusions

The processes of securing profits involved social differentiation by wealth and task among traders, different mechanisms of trying to increase differentials between purchasing and selling prices, some oligopolistic elements, particularly in rural markets and small towns, and some elements of collusion and implicit and explicit agreements over sales and prices. Financial relations were often key to these processes - who could finance whom through loans or delayed payments. Although personalized relations based on differentiation enabled networks of buyers and sellers and profits to be secured, they were situated in highly commoditized and competitive markets which meant that there was considerable fluidity between different types of exchange.

9.5 Conclusions

This chapter has demonstrated the following points:

- (i) Maize trade was differentiated by type of market and type of trader; these markets and the functions of participants in them overlapped and provided many opportunities for making profits from exchange.
- (ii) Establishing prices could operate in different ways and was affected by different social processes; commercial farmers had many more possibilities of making transactions in different markets than petty commodity producers and semi-proletarian

farmers; in particular, semi-proletarian farmers tended to have constrained possibilities for sales which were often made to local traders and farmer/traders, for somewhat lower prices than other farmers; at the other extreme, commercial farmers with bank credit could take advantage of guaranteed prices at IHMA granaries (if they were sufficiently higher than market prices) and fixed prices in industry, as well as having a wider network of relations with private traders.

(iii) Analysing price margins and shares of the final price attributed to trade (and different types of trader) is only one dimension of assessing the competitiveness and effectiveness of maize markets; the social relations between traders themselves and between traders and other participants in the market, and the personalized elements that these relations often involved, are an important part of obtaining and securing profits.

The relationship between maize production and maize trade depends on marketed surpluses and the existence of urban and rural demand. An irony in this relationship is that marketed surpluses are partially constituted from sales of maize needed for consumption by indebted farmers, while the demand for maize (apart from industrial demand) arises from the daily consumption of low income people who have frequently migrated from rural areas because they were unable to continue producing maize, as well as those who could not produce (or retain) sufficient maize for their own consumption.

However, changing output market operations alone could not solve the problems in reproducing maize faced by many semi-proletarian farmers, as well as some petty commodity producers, in the 1980s. Although semi-proletarian maize farmers were affected by market variables, such farmers were not able to respond easily to price changes: it was difficult for them to increase their output in response to price increases; it was also difficult for them to transfer their assets into other activities if prices fell.

Traders, however, could stand to benefit from price increases, even if differentially, while price controls could only have marginally detrimental effects for them because of the relatively weak interventions by the IHMA, and the importance of personal networks and personalized deals in trade. The significance of state intervention in the 1980s was to have some control over the extremes of price fluctuations - for producers or consumers - through its own national purchase and foreign import policies. However, for policy-making in the arena of producer-market-consumer relations, a single price policy or deregulation without targeted controls would have little effect in reducing the food insecurity faced by many maize farmers.

CONCLUSIONS AND POLICY IMPLICATIONS

I now draw out some theoretical conclusions and policy implications.

Theoretical conclusions

(i) Class relations

My analysis of the production and exchange relations of maize has enabled me to highlight some class characteristics of maize producers. The thesis adds to understanding class relations and social differentiation in the countryside by looking at how access to land is related to access to labour, technology and finance through the production and exchange relations of a particular crop. Furthermore, it focuses on farmers' capacities to reproduce maize production, and on the mechanisms through which different types of maize production by different groups of farmers are sustained or changed. It also pinpoints some of the dynamics of social differentiation by showing how social groups in the Honduran countryside interact, the effects of agencies such as the state, and how such relations may serve to reinforce or undermine different social positions and productive capacities.

I have arrived at a characterization of the class relations of farmers involved in Honduran maize production in the 1980s by moving from concepts to empirical observation back to concepts. The categories I arrived at are not identical to the small, medium, large farmer categories often used with respect to food staple production. For example, I called most of the 'small' maize farmers interviewed in Jutiapa petty commodity producers. As well as showing that land area is only one criterion in understanding social relations of production, my conclusions on social differentiation also demonstrated differences between farmers in the two villages in Jamastrán.

Class categories are not immutable. As well as acknowledging the effect of wider processes of economic and social change which impinge on social relations, I have tried to demonstrate that the constitution of class relations is an active process. In other words, maize farmers in Honduras are active participants in their social relations with others and help to mould the nature and type of exchanges in which they engage. Thus the existence of commercial and semi-proletarian maize farmers is interdependent, but relations do not go uncontested. This was most apparent in the formation of collectively-organized groups and peasant organizations, but negotiation over rights and obligations could also take place between individuals.

My analysis also reinforces the idea that petty commodity production is an unstable form of production. On one hand, semi-proletarian maize farmers in Honduras in the 1980s could become petty commodity producers; on the other hand, petty commodity producers could experience acute difficulties in surviving the demands of increased incorporation into the market. This leaves an unresolved issue: whether capitalist development will ultimately result in the existence of commercial (if family-based) farming and wage labour, or whether its uneven development will continue to provide spaces for both semi-proletarian and petty commodity production.

This analysis has further methodological implications. I have drawn some conclusions about class relations by focusing on the production and reproduction of a particular crop. My conclusions from this approach do not claim to encapsulate the entirety of Honduran rural classes relations: other studies in Honduras have made important contributions to this area. However, I have looked at social relations in an important area of Honduran economic and social life and perhaps such an approach could be applied to other activities in the countryside and urban areas.

(ii) Commoditization

In analysing the reproduction of maize production, I focused on processes of exchange. A key area was thus commoditization and how it affected the relations between farmers, as well as what impact policy interventions had on the commoditization of production.

The thesis has shown that commoditization is a non-linear process. It adds to analysis by Latin American writers of the impact of commoditization on peasant livelihoods, and to the European debates in the 1980s about the nature of commoditization (for example, Long *et al* (ed), 1986). It also supports the analysis of uneven development in markets discussed in the South Asian literature (for example, Bharadwaj, 1985), as well as the work of writers such as Brass (1986) on the appearances and realities of commoditized and non-commoditized relations.

My analysis adds to this work by looking further at the different ways commoditized and non-commoditized processes can be combined and can act as a further point of differentiation between maize farmers. Thus my approach is different from those which distinguish between subsistence and commercialized maize production by comparing farmers' relations to output markets, and those which categorize maize farmers on assumed use of purchased technological inputs. By analysing the different types of exchange involved in producing and reproducing maize, it is possible to observe the extent of commoditization and non-commoditization in maize farming practices within and between different types of farm.

As Brass also discovered, apparently non-commoditized relations can be a hidden form of commoditization. For example, the loans of agricultural inputs made by commercial farmers to semi-proletarian farmers seem, on the surface, to be non-commoditized form of exchange because they do not take place in competitive conditions in the market.

However, such loans would not be possible without the existence of financial and commodity markets, through which commercial farmers were able to purchase more agricultural inputs than they needed, and on the basis of which the loans to (and payments from) other farmers were made. For this reason, I have chosen to call such exchanges 'personalized relations': on one hand, they depended on commoditization, and, on the other, they relied on the existence of social hierarchies and the ability to make exchanges on a personal basis. I summarize these different relations in the table below. However, as my analysis has shown, in practice the distinctions overlap and change.

Non-commoditized, personalized and commoditized relations in Honduran maize farming in the 1980s

	<i>Characteristics</i>	<i>Examples</i>
<i>Non-commoditized</i>	Outside the market and conditions of competition; no cash exchange; based on reciprocity (may be unequal); benefits may also be unequal.	Family labour Labour exchange (<i>mano vuelta</i>) Voluntary labour
<i>Personalized</i>	Within or connected to markets; exchange involves cash for goods/services; also involves arrangement/agreement based on personal ties, rights and obligations (often implicit); may be equal or hierarchical.	Land/labour exchanges Loans of inputs from landowners to SPF Pre-harvest sales
<i>Commoditized</i>	Within markets and conditions of competition; exchange for cash/other commodities; obligations are payment/delivery of goods/services; personal relations not necessary.	Wage labour Purchase of agricultural inputs Maize sales

That commoditized and non-commoditized processes exist simultaneously is not necessarily evidence of types of production with essential differences. In Honduran maize production, I found that personalized and non-commoditized relations were combined with commoditized ones as strategies for survival (simple reproduction) and accumulation. These strategies were partly a response to the uneven development of input and output markets. They were also responses to the highly unequal access to

resources experienced by maize farmers, and its related social differentiation. Thus, although non-commoditized and personalized relations can be present in situations of relative social equality, they are reinforced by social difference and the ability to command favours, gifts and obligations, as well as the possibility of making a gain from them (such as in pre-harvest sales).

Finally, my study has shown that, for some of the farmers interviewed, output was commoditized through forced sales and sales of maize required for consumption. This is a different approach from that which focuses on '*producción comercializable*' or 'marketable output' as though it were entirely real surpluses. For farmers interviewed, the commoditization of output was closely linked to debt and obligation rather than to the existence of marketed surpluses in two important ways. Some debts were incurred through informal loans - for example of agricultural inputs - involving hierarchical ties. With some qualifiers, I have also used the term 'institutionalized forced sales' to describe the implicit social hierarchy and complexities involved in institutional loans and the conditions under which farmers often had to sell maize needed for consumption to repay debts. The nature of any coercion involved was not necessarily obvious. The first was based on moral force and rights and obligations involved in commercial and semi-proletarian farmer relations (although violence or dispossession could in principle be threatened). Although interlinked transactions were not evident in the second, farmers were often under pressure to participate in credit schemes in which loan models appeared to be based on total commoditization of production processes (resulting in high estimates of costs of production), and where many farmers found they needed to sell maize required for consumption in order to repay debts and stay in the scheme.

(iii) Markets

The discussion of commoditized output brings me to the nature of exchange relations in Honduran maize markets. As stated above, commoditization is non-linear and the development of markets is an uneven process. These characteristics have also been analysed by other writers, including in the institutional economic literature (for example, Bardhan, 1989).

My analysis adds to literature on the concrete and political analysis of markets (for example, Hewitt de Alcántara (ed), 1993; Mackintosh, 1990; White (ed), 1993) by demonstrating that although maize was highly commoditized in Honduras in the 1980s and there was competition between traders, exchange in the market also involved personalized relations. This observation is significant for understanding markets in developed as well as developing capitalist economies. However, in Honduras, personalized relations were built on social hierarchies and abilities to command the services of others as well as optimize gain from particular transactions. Acknowledging these processes suggests, one, that institutional arrangements are not static, and two, that personalized relations can occur in conditions of competition. Indeed, the latter also suggests that personalized relations can even aid competition (as well as help secure profits), a point which problematizes notions of market efficiency based on abstract models.

These observations thus also adds to the literature on markets in Honduras. My analysis has looked at some of the ways in which personalized relations could affect transactions over maize sales, from pre-harvest sales to the restricted marketing networks available to semi-proletarian farmers to the implicit deals and collusion that could be perceived at times between traders and/or traders and industrialists.

I am unable to link these relations directly to price determination (except in the instance of pre-harvest sales). However my analysis of price data suggests that social relations should be taken into account in interpreting prices and price movements (for example, the relationship between the social positions of maize farmers and timing of sales, and hence prices received). In general, my analysis of prices suggests that there was considerable competition in maize markets around harvest-time, and this competition was reinforced or aided by the social nature of the transactions made. At other times of the year, price competition was less evident. Producers making pre-harvest sales were then at the mercy of those who had some control over local markets, especially farmer-traders. Prices to consumers, whether the urban poor or deficit producers, might also have been affected by those who had the capacity to store grain. However, as suggested by my analysis in Chapter 8, the IHMA may have been able to influence prices to consumers in scarce periods more than it could aid semi-proletarian farmers, especially those who made pre-harvest sales.

Thus my evaluation of maize markets suggests that evidence of competition in small price margins could hide evidence of social relations which were based on social differentiation, hierarchies and power. In Honduran literature, the role of power in relation to agrarian relations based on unequal distribution of land has always been a key element, but less so in analysis of markets.

Although I have not tried to develop the concept of power in this thesis, my research adds to literature which explores the role of power in exchange relations (for example, Olsen, 1993). The types of power I have identified are located in the realms of manipulation and authority, rather than force or coercion (*ibid*, 87). In addition, Olsen's distinction between being manipulated (or forced) by someone and manipulated (or forced) by circumstances (*ibid*, 88) were also found in Honduran maize farming. For example, semi-proletarian farmers were forced by someone (commercial farmers)

and also by circumstances (lack of access to resources) to sell maize needed for consumption to repay debts. Likewise, petty commodity producers were forced by circumstances (the need to continue access to credit) to repay debts by selling maize required for consumption, with the implicit 'someone' residing in the institutional credit programmes set up by a government ministry.

My analysis of exchange relations in Honduran maize farming has thus raised some issues of methodology in relation to understanding social hierarchies and power relations. Exchange could be culturally embedded and involve moral obligation as well as economic interest (Rival, 1992). For example, although commercial farmers stood to gain from land/labour exchanges or from pre-harvest sales, semi-proletarian farmers who rented or borrowed land and provided labour also had rights embedded in their relations with commercial farmers. These rights were not explicitly stated or bound in legal codes. They were implicit in the unequal reciprocity involved in the exchange and were expressed in the language used to describe the relationship ('he helps me with...', 'he gives me...', 'I help him with...'). The recording and analysis of such exchanges requires a multi-disciplinary approach to fieldwork as well as a multi-disciplinary theoretical or conceptual framework for analysing the role and significance of exchange in developing capitalist economies.

(iv) Food insecurity

I have addressed food insecurity by analysing the risks, threats and vulnerabilities facing maize farmers in Honduras, in particular through processes of exchange. This approach borrows from Sen and from recent analyses of exchange relations, particularly in a South Asian context, but adds to this literature by focusing on the reproduction of entitlements and the mechanisms through which reproduction is threatened (or secured).

This approach sees food insecurity as a process of vulnerability creation and reinforcement rather than a phenomenon resulting from serious food shortages or acute lack of income (and therefore ability to command food) resulting in visible hunger and starvation. The type of food insecurity I identify and address in this thesis involves a constant precariousness with respect to growing and consuming food staples and being able to sustain these processes without constant indebtedness and threats to entitlements. In the case of Honduran maize farming, this process is based on social inequalities in the countryside.

In this context, a key area of analysis is the strategies pursued by the food insecure (and potentially food insecure) to reproduce maize production, as well as the obstacles to achieving it. I have looked at how farmers balanced security and risk, and how they were affected by the social relations of survival and of intensifying production. My concepts of secure stagnation and insecure transformation try to encapsulate some of the contradictions inherent in this balancing act. On one hand, semi-proletarian farmers were caught in relations which impeded their productive capacities. On the other, they engaged in hierarchical exchanges with commercial farmers to secure land, access to cash income from wage work and the loan of agricultural inputs. On one hand, petty commodity producers hoped to increase their productive capacities through credit and technical assistance. On the other, their potential for raising yields and increasing output was threatened by institutional indebtedness. For semi-proletarian farmers, the use of 'secure' to describe their position is thus somewhat ambiguous: security had its price and could be threatened by technological change, debt and social breakdown in commercial-semi-proletarian farmer exchanges. For petty commodity producers, insecurity did not characterize all farmers, but neither did transformation: studying maize production suggests that this form of production could lead to loss of entitlements as well as to potential improvements in livelihoods.

Policy implications

(i) Land

In Chapter 2 of this thesis, I identified three policy areas with respect to land which affected or would affect maize production: land reform (or redistribution of land), land titling and the creation and reinforcement of land markets. The first largely preceded my research, the second was ongoing during my stay in Honduras (1986-88), and the promotion of land markets appeared on the policy agenda in the early 1990s. Following Bharadwaj (Chapter 2, Section 2.3.3), the question is not simply whether a land policy is needed but whether it has the desired effects.

A key issue is the highly unequal distribution of land (Chapter 4). Although the land redistribution effected by the 1975 land reform law was limited (and much land distributed was newly colonized land), the land reform law did enable a considerable number of landless and semi-proletarian farmers to secure means of production. Moreover, the experiences of the collectively-organized maize producers analysed in this study suggest that collective action on land could have positive results for such farmers, even if there were difficulties and contradictions.

Although security of tenure is also a key issue for land policy, applying a land titling programme of the kind enacted in the 1980s was unlikely to resolve problems in access to land of semi-proletarian farmers, principally because they often rented private land (or land controlled or 'owned' by individual farmers) and because the size of their plots was very small. (Land titling would only apply to those who had national land, for which the lower limit for titling in the 1980s was 2.5 hectares.) Land titling could however reinforce the position of petty commodity producers with access to national land, as well as help to consolidate the holdings of commercial farmers with mixed tenure.

The prospects of a programme which reinforces land markets helping the sort of semi-proletarian maize farmers identified in this study are therefore not very optimistic. As explained in Chapter 2 (Section 2.3.1), the *Ley para la Modernización y el Desarrollo del Sector Agrícola*¹ passed in 1991 was designed to encourage the exploitation of unused land, and to allow renting out, joint investment and sale of land, as well as increase institutional support for agricultural production. However, this supposed freeing up of landholdings and land use requires legal titles to land, which depend in turn on the speed and effectiveness of the land titling programme.

One possible effect is that the reinforcement of land markets could result in increased rents (even though the agricultural modernization act was intended to facilitate renting), while encouraging the purchase and sale of land could potentially put prices for plots of land outside the reach of many petty commodity producers, as well as semi-proletarian farmers. Such developments are likely to be reinforced because the importance of returns to land and land productivity will grow as land becomes further commoditized. Export crops and other higher value food crops are likely to expand, in so far as there are markets for output. If the value of land increases sufficiently, landowners may gain more from selling land than from investing in production.

This policy area is complex and politically sensitive. Inequalities in the Honduran countryside affected the productive capacities of petty commodity producers as well as semi-proletarian farmers in the 1980s. It is unclear if these laws will reinforce petty commodity producers in the 1990s but they are likely to undermine the entitlements of semi-proletarian farmers, for whom either land redistribution or the creation of other employment opportunities is necessary.

¹ *Law for the Modernization and Development of the Agricultural Sector*

(ii) Credit

There are many problems in applying rural credit programmes in contexts of inequality. One is who receives loans. It was not always evident from my research that recipients of project as opposed to bank credit were those necessarily most in need of it. However, the difference in interest rates between project and bank credit indicated that interest rates were judged by policy-makers to affect farmers' capacities for loan repayment as well as the demand for credit. There was therefore good reason to extend the availability of project credit to a wide range of farmers at lower rates of interest (even if these interest rates were still high enough in practice to prevent many farmers from taking out institutional loans). An associated problem was that many farmers fell outside the arena of institutional access to credit because of their type of access to land and the small-scale of their production. Thus rural credit did not generally reach those semi-proletarian farmers and petty commodity producers with small amounts of land, some of whom turned instead to informal sources of credit in pre-harvest sales at extremely high interest rates.

My thesis identified other difficulties in providing credit to highly differentiated maize farmers. On one hand, access to credit could free farmers from some of the social relations of dependence on patrons, whether wealthier family members, neighbours or commercial farmers. This was particularly important given that such relations usually depended on social hierarchies and differential benefits from the exchange. On the other hand, the way credit was calculated and allocated, and the assumed commoditization of inputs, labour and output, could result in high loans compared with farmers' capacities to repay them, especially if farmers experienced high pre-harvest crop losses.

The relationship between who receives credit, types of collateral, levels of funding and levels of interest rates continues as a point of debate in Honduras in the 1990s (Thorpe, 1993). Measures launched by the Honduran government in the early 1990s to cancel agricultural debts to BANADESA (*ibid*, 147-148) may have benefited those petty commodity producers who were able to obtain state bank loans as well as commercial farmers. However, within the structural adjustment programme of the late 1980s and early 1990s in Honduras, interest rates were liberalized and the costs of credit increased (*ibid*, 150-151). This would have affected petty commodity maize producers and commercial farmers directly, but could also affect the terms on which semi-proletarian farmers and some petty commodity producers borrowed money and made other types of loans informally, especially if their creditors depended in turn on institutional sources of funds.

The main tension the 1990s rural credit debates has been between allowing the market to determine who receives credit and using state intervention to restrain interest rates. For semi-proletarian farmers and many petty commodity producers, the question is how they could viably receive credit on terms that would enable repayment. The type of semi-proletarian farmers and vulnerable petty commodity producers identified in this research could only properly benefit from rural credit (i) if it were made available on terms that funded essential inputs at low interest rates, and (ii) if problems in access to land were addressed at the same time. For semi-proletarian farmers, loans of inputs from commercial farmers (as opposed to pre-harvest sales) could remain the best short-term credit option in the absence of institutional possibilities.

(iii) Technical assistance

Policy issues related to technical assistance are closely related to rural credit programmes in Honduras. This association raises a further policy dilemma. One is the

assumptions made about technology use and the appropriateness of technology changed reinforced by credit and technical assistance. Another is the increase in use of purchased inputs requiring farmers to take out loans.

Technical assistance was bound up with government attempts to increase national output as well as improve livelihoods in the 1980s. It is therefore not surprising that the main means for increasing maize output and yields were centred on improved seeds, fertilizer and other biochemical inputs, and some changes in other techniques of production, such as mechanical ploughing. There were also attempts to change age-long practices such as burning off stubble and weeds by ploughing them in and/or putting cattle on the land before preparation. In spite of this, use of weedkiller was common among both credit recipients and non-recipients.

However, as my analysis has shown, not only did such practices result in high cash costs of production for many farmers, but, in El Paraíso, maize fungus was prevalent and a source of pre-harvest losses (and hence difficulties in repaying cash loans). These problems raise questions about the orientation of the technical assistance policies applied in the 1980s. Although there were some attempts to develop other farm practices which did not involve high cash inputs and which used indigenous varieties of maize, these practices were not prevalent and or much promoted by those working in the DRIs.

The question is complex as many of the technical changes were labour-saving (thus increasing productivity), while more 'appropriate' farming practices often required considerable labour input. If more labour time were to be spent in maize farming, labour would have to be adequately remunerated. However, maize is not a high value crop. This dilemma is further complicated by the fact that many farmers supplement

their farm income with wage work: more time spent on the farm using 'appropriate' farming techniques could be an additional problem for them.

Although the DRIs tried to organize committees of participants, it was not evident at the time of my research that farmers had much influence on the assumptions being made in credit and technical assistance packages. Time-consuming though it may be, in process and results, working with farmers' committees and collectively-organized groups² to resolve some of these issues may be part of the way forward.

(iv) Output markets and pricing

My study suggests that the nature of maize output markets, how prices are determined, and what effects they have, need some re-evaluation. The importance of social processes needs to be taken into account in policies designed to make the functioning of markets more efficient and in decisions whether to regulate or deregulate prices.

These considerations are not evident in the reform of output markets which has taken place since this study was carried out. Domestic prices for agricultural products have been liberalized within Honduras's structural adjustment programme, although some, such as grains, have been subject to intervention if they fall outside price bands. The rationale behind price liberalization was to increase agricultural output, based on the assumption that prices would rise and provide incentives to farmers. Market prices for maize did rise (Thorpe, 1992, 144), in principle benefiting petty commodity producers and commercial farmers (assuming costs of production did not experience equivalent increases), but potentially undermining net incomes from maize for farmers who had to purchase maize for household consumption.

² For example, '...sitting, asking and listening; leaning from the poorest, learning indigenous technical knowledge; joint R and D; learning by working...' (Chambers, 1983, 209).

Another reform accompanying price liberalization has been to reduce state-held storage by the IHMA except for grain reserves and to make the IHMA a market facilitator (Chapter 2. Section 2.3.3). Given the limited impact of the IHMA on output markets and prices during the 1980s, this might seem a logical step. However, the alternative outlets for maize sales are still problematic for farmers, especially those semi-proletarian farmers with limited networks and bargaining power.

Furthermore, other experiences suggest that the liberalization of prices and allowing the private sector to have an increasing role can have contradictory effects. These have been documented for Nicaragua where extensive state intervention in grain markets was dismantled and liberalized. Although price structures in Nicaragua during the 1980s led to parallel markets as well as the retention of maize for domestic consumption rather than sale (Dore, 1988), liberalization with the change of government encouraged the re-emergence of farmer/traders and allowed large urban-based companies to benefit from trade (Spoor, 1992). In the case of Honduras, Thorpe suggests that the main beneficiaries of price liberalization have also been traders (*ibid*, 120).

My analysis of the social context of trade in the 1980s suggests that these effects could be predicted. Maize production and trade were differentiated on the basis of each activity's ability to realize profits. Within production and trade, there was also considerable differentiation which resulted in differential benefits for semi-proletarian farmers, petty commodity producers and commercial farmers, on one hand, and different types of trade, on the other. Those with established commercial operations and networks, control over a series of subordinate relations, and ability to move capital into different activities were those most likely to benefit from liberalized markets.

If an output market and pricing policy is to try and meet the needs of semi-proletarian farmers and petty commodity producers of maize in Honduras, the social processes which influence exchange need to be taken into account. The effects of price changes need to include analysis of the non-commoditized and personalized aspects of exchange, and the role of social hierarchies and power. Again, this is a complex issue because personalized exchange relations, in particular, rely on commoditization and can therefore affect and be affected by price changes. Assumed non-commoditized relations, such as the use of household labour, may also affect prices as well as be affected by price changes. If household labour were no longer required, alternative productive activities for that labour would be needed. On the other hand, resorting to increased use of household labour because of price conditions could also put a burden on household livelihoods (as well as potentially affect wage rates).

Above all, price policies need to take into account the underlying social and economic conditions of production and exchange. The key challenge is how to develop an output market and price policy for maize and other food staples that meet the needs of poor farmers and consumers without having to resort to food hand-outs. Such a policy would depend on other structural changes to improve semi-proletarian and petty commodity producers' access to resources for production and/or other employment possibilities.

(v) Lessons for food security

To develop adequate responses, food security policies have to take into account the social conditions and causes of food insecurity among particular groups of the population. I have tried to demonstrate this by focusing on a particular crop and analysing the difficulties in producing and reproducing it. Equivalent studies of other elements of livelihood strategies in both urban and rural areas would demonstrate the

complex relations which circumscribe many people's capacities to ensure adequate access to food as well as forming the basis for action. Thus analysing and articulating these processes is necessary among organizations which purport to represent the food insecure as well among the policy-makers in government, financial institutions and aid organizations.

How can policies be developed to increase the entitlements of the food insecure as well as ensure that they are not undermined by measures to reactivate economic growth in an era of structural adjustment? In Chapter 1, I pointed out that policy involves many processes of negotiation (and confrontation) over contested issues. However, it has not been easy for the food insecure and organizations representing vulnerable sectors of the population to contribute to the formulation of food security policies in Honduras, although it is evident that economic reactivation cannot improve the position of the food insecure unless social and economic inequalities are also taken into account.

A common approach to food insecurity under structural adjustment has been to target food programmes. Although immediate relief can be brought (and there are experiences where productive activity and livelihood possibilities have resulted when part of the goal has been to address social inequalities³), such programmes do not generally solve longer-term livelihood issues or change the social relations and inequalities that affect people's access to resources and benefits from production.

A longer-term approach to food insecurity might be to establish an active and collaborative targeted programme of working to improve rural and urban livelihoods. With respect to maize and other food staple production, such a policy would include (i) a targeted land policy involving farmer organizations, (ii) a targeted credit policy within

³ *Television interview with Gita Sen, 1991.*

an institutional framework which provides mechanisms for regulating interest rates and enforcing clear guidelines about credit use and repayment, and (iii) farmer participation in decisions about crop production and the development of technological capacities. In more general terms, it would include developing targeted employment opportunities in urban as well as rural areas.

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