DOI: 10.31357/fhssphd.2005.00715

Land Tenure, Labour and Markets:

A Study of Rural – Urban Linkages in North Central Sri Lanka

By

R.M.K.Ratnayake

Registered Number - GS/SS/930/2000

Ph.D

Land Tenure, Labour and Markets:

A Study of Rural – Urban Linkages in North Central Sri Lanka

By R.M.K.Ratnayke

Thesis submitted to the University of Sri Jayewardenepura for the award of the Degree of Doctor of Philosophy in Geography

DECLARATION BY CANDIDATE

The work described in this thesis was carried out by me under the supervision of Prof. Y.A.D.S. Wanasinghe (University of Sri Jayewardenepura, Sri Lanka) and Dr. Clas Lindberg (Uppsala University, Sweden). A report on this thesis has not been submitted in whole or in part to any University or for a Degree or a Diploma.

R.M.K.Ratnayake,

Department of Geography,

University of Sri Jayewardenepura,

Gangodawila,

Nugegoda.

06th October 2005



DECLARATION BY SUPERVISORS

We certify that the above statement made by the candidate is true and that this thesis is suitable for submission to the University for the purpose of evaluation.

Prof. Y.A.D.S. Wanasinghe,

Department of Geography,

University of Sri Jayewardenepura,

Gangodawila,

Nugegoda.

Dr. Clas Lindberg,

Department of Social and Economic Geography,

Uppsala University,

Uppsala,

Sweden.

1st October 2005

ACKNOWLEDGEMENTS

First and foremost I would like to thank the SJP-Sida/ SAREC Research Cooperation Project and the Senior Prof. M.M. Karunanayake. Without this opportunity granted me to pursue a Ph.D. Study Programme, this thesis would have been an impossible dream.

It is with pleasure that I place on record my sincere and profound gratitude to Senior Prof. M.M. Karunanayake, Project Leader, SJP-Sida/ SAREC Research Cooperation Project and former Dean of the Faculty of Graduate Studies, Prof. (Mrs.) Y.A.D.S. Wanasinghe and Prof. M.D.C. Abhayaratne, two Team Leaders of the Regional Development and Poverty Alleviation of the Project who remain in my memories for their contribution to make my endeavor a success.

Above all, I wish to express my deep appreciation and gratitude to Prof. (Mrs) Y.A.D.S. Wanasinghe, who taught me and later became my supervisor, for her guidance, constant encouragement and sound advice. I am also profoundly grateful to Dr. Class Lindberg of the Department of Economic and Cultural Geography, Uppsala University, Sweden who is my Foreign Supervisor, for his valuable advice, guidance and support. Without the help of these two scholars, this thesis would not have emerged in the present form.

My sincere thanks are also due to Dr. Mikael Lindberg and Dr Daniel Hallencrutz, staff members, administrative officers and Ph.D. candidates at the Uppsala University, Sweden for their valuable comments and support.

I also express my thanks to Dr. C.KM. Deheragoda, Head, Department of Geography and Prof. K.N.J. Katupotha, former Head of the Department of Geography who have advised and guided me during this period.

I am grateful to Mr. Prabath Malawige whose advice and helped me to carryout work in the GIS Laboratory satisfactorily.

I extend my thanks to research assistants Nishantha Hettiarachchi and Janaka Handunpathiraja and investigators Thilakasiri, Sajeeva, Wasantha, Samarasinghe and Pradeep who extended their fullest support and cooperation in the field. I would also like to thank all those who supported me at the field level including officers in various Government organizations, traders and farmers for their honest and generous support.

I am also grateful to D.P.S. Chandrakumara, Senior Lecturer, Department of Economics, Rev. Sanga Sumana, G.F.De Alwis and all staff members of the Department of Geography, University of Sri Jayewardenepura, who advised me in various capacities.

My thank are due to the minor staff members of the Department of Geography and all others in the University.

I should mention that my studies involved great inconveniences to my wife Anoja who gave me her untainted support and encouragement and looked after our two children Sachi and Ruwin. I thank them all for their help without which this study could not have been completed.

R.M.K.Ratnayake 01th October 2005

CONTENT

			Page
	List o	of Figures	i - i
	List o	of Tables	ii - iii
	List c	of Boxes	iii iii.
		*	
CHA	APTER	ONE	
Intro	oduction	1	01 - 23
1.1	Back	ground to the study	01 - 07
1.2	Objec	etive	08 - 08
1.3	Нуро	thesis	08 - 08
1.4	Meth	odology	09 - 18
	1.4.1	Selection of the Sample	09 - 10
	1.4.2	Methods of Data Collection and Analysis	10 - 18
1.5	Outlin	ne of the Study	18 - 19
1.6	Key A	Area Concepts	19 - 21
1.7	Local	Terms	22 - 23
CHA	APTER '	TWO	
Theo	oretical]	Perspectives on Regional Development	
and l	Rural –	Urban Linkages	24 - 33
СНА	APTER T	THREE	
The	North C	Central Province	34 – 46
3.1	An C	Overview of the North Central Province	34 - 40
3.2	Rural	Settlements	41 - 46
	3.2.1	Purana (traditional) Villages	41 – 42
	3.2.2	Linear Villages in Colonization Schemes	42 - 43
	3.2.3	Settlements in Mahaweli	43 - 46

CHAPTER FOUR

Regio	nal Dev	velopment and the Role of Urban Centres	46 - 75
4.1	Appro	paches to Regional Development in Sri Lanka	46 - 49
4.2	Regio	nal Development Issues in the North Central Province	50 - 55
	4.2.1	Climate	50 - 51
	4.2.2	Poverty	51 - 53
	4.2.3	Pressure of Agricultural Land	53 - 54
	4.2.4	Marketing	54 - 55
	4.2.5	Out Flow of Money	55 - 55
	4.2.6	Low Productivity and Low Profitability	55 - 56
4.3	The T	rends in the Growth and Expansion of Small Towns	
	and Tl	neir Role in Regional Development	56 - 75
СНАІ	PTER F	FIVE	
Land	Tenure	e, Land Use and Labour	76 - 110
5.1	Land 7	Γenure	76 - 83
	5.1.1	Land Ownership	83 - 84
5.2	Land U	Jse	84 - 85
	5.2.1	Paddy Cultivation	85 - 86
	5.2.2	Chena or Shifting Cultivation	86 - 88
	5.2.3	Homestead Cultivation	89 - 89
	5.2.4	Use of Forest and Reservation	89 - 90
5.3	Labou	r Utilization in Rural Areas	90 - 110
	5.3.1	The Occupational structure of villages	90 - 92
	5.3.2	Labour Use in the Agricultural Sector	92 - 93
	5.3.3	Variation in Labour Utilization in paddy	
		Cultivation	93 - 99
	5.3.4	Labour Utilization in Rural Areas	99 - 104
	5.3.5	Employment in Urban Areas	105 - 110

CHAPTER SIX

Link	ages be	tween	Urban Centres and their Hinterlands	111 - 146
6.1	An A	nalysi	s of Consumption and Marketing Linkages	
	Rela	ted to	Agriculture	111 – 111
	6.1.1	Maı	rketing of Agricultural Inputs: From the Sellers	
		Pers	spective	111 – 114
	6.1.2	Puro	chasing of Agro-inputs from Village Traders	
		and	Farmers	114 - 118
	6.1.3	Mar	keting of paddy	119 – 122
	6.1.4	Mar	keting of other Crops	122 – 134
	6.1.4.	1 The	prevailing pattern	122 – 125
	6.1.4.	2 Rec	ent Innovations	125 - 133
5.2	An Aı	nalysi	s of Linkages with Urban Centres in the NCP	
	and th	e othe	er outside the NCP	134 - 137
	6.2.2	Seas	sonality of Demand	137 - 140
	6.2.1	Link	kages between the Periodic Markets (polas) in	
		Urba	an Centres in the Hinterland	140 – 146
СНА	PTER S	SEVE	N	
Conc	lusion			147 - 150
	Refer	ences		151 - 165
	Appei	ndix		
		i.	Questionnaire	i - xii
		ii.	Discussion Points	xiii - xiv
		iii.	Abbreviations	XV

List of Figures

		Page
1.1	Urban centres and villages selected for in-depth study	1
1.2	Methods of collection primary data from villages and towns	13
2.1	Rural regional development process, structures and flows	30
3.1	Divisional Secretariat Divisions in the North Central Province	35
3.2	Level of poverty in the North Central Province, 1999	39
3.3	Hierarchy of Urban Centres in the North Central Province	4(
3.4	Mahaweli Irrigation Systems "H", "B" and "G" in the	
	North Central Province,2001	45
4.1	The hinterland of Kahatagasdigiliya urban centre	61
4.2	The hinterland of Higurakgoda urban centre	64
4.3	The hinterland of Tambuttegama urban centre	67
4.4	Tambuttegama Junction in 1984	71
4.5	Tambuttegama urban centre 2000	72
5.1	Changing pattern of the land tenure system in the NCP	82
5.2	Land use in Kothmalpura (Mahaweli village)	86
5.3	Land use pattern in Diganhalmillewa (traditional tank village)	87
5.4	Labour participation in paddy cultivation of Mahaweli settlements	100
5.5	Labour participation in paddy cultivation of colonization schemes	101
5.6	Labour participation in paddy cultivation of traditional villages	102
5.7	Pattern of the labour participation in paddy cultivation	
	in the NCP (Average)	103
6.1	Flows of the paddy in the North Central Province	123
6.2	Flow of paddy and rice	124
6.3	The distribution of fruits and vegetables produced in the NCP	130
6.4	Inflow of commodities to urban centres in the NCP	136
6.5	Outflow of goods from urban centres in the NCP to the hinterland	137
6.6	Pola circuits in the Anuradhanura District	1.42

List of Tables

		Page
1.1	Urban and rural linkages and interdependencies	02
1.2	Area selected for the study	10
1.3	Selected families/entrepreneurs for the study	12
4.1	The Gross Domestic Product and Government Expenditure	
	by province 2001	49
4.2	Distribution of the families by monthly income of households	52
4.3	Distribution of households by size of landholding	54
4.4	Central Places in the NCP	57
4.5	Functional diversity at Kahatagasdigiliya, 2000	60
4.6	Functional diversity at Higurakgoda, 2000	63
4.7	Services, facilities and infrastructure at each settlement level in	
	the irrigation System "H" of the Mahaweli Development Project Area	66
4.8	Availability of public sector services in urban centres in the NCP	70
4.9	Functional diversity at Tambuttegama	74
5.1	Land ownership in rural settlements 2001/2002	84
5.2	Occupationed structure of villages	91
5.3	Economic activities by settlements type	91
5.4	Number employed in the non-farm sector	92
5.5	Required man-days for paddy cultivation per hectare in Yala and	
	Maha	93
5.6	Man-days required for paddy land preparation (per hectare)	94
5.7	Man-days required for harvesting (per hectare)	97
5.8	Labour utilization in paddy cultivation in each season (per hectare)	98
5.9	Place of birth of entrepreneurs by District	105
5.10	Reason for migration of entrepreneurs to urban centres in the NCP	106
5.11	Current residence of entrepreneurs	106
5.12	Investment of profits by entrepreneurs	107
5.13	Labour participation in all the enterprises in the urban centre	108
5.14	Place of birth of employees in selected enterprises in urban centres	108

5.15	Permanent residences of employees in urban enterprises	109
6.1	Shops that sell agro-inputs at the selected urban centres	112
6.2	Place of purchase of agricultural inputs	115
6.3	Source of goods sold in the urban centres	134
6.4	Periods of low sales in urban centres	139
6.5	The Pola circuits in the North Central Province	143
	<u>Boxes</u>	
6.1	An Entrepreneur at Tambuttegama	113
6.2	Village Entrepreneurs in Mahaweli and Purana Villages	116
6.3	Mahaweli Farmer at Kothmalpura	117
6.4	A Small Scale Operator who Buys and Sells Paddy	121
6.5	A Collector and Distributor of Vegetables	131
6.6	Farmer's Experience at the DDEC	132

CHAPTER ONE

Introduction

1.1 Background to the study

Recent research underlines the potential advantages of urban centres in stimulating regional development (Dewar et al, 1986, UNCRD, 1996, Wanasinghe, 2003). Small towns or rural service centres can help to transform the economy in rural areas by providing access agricultural inputs (seeds, fertilizer), as well as support services (agricultural extension, credit facilities) and maintenance of agricultural machinery, can usually be provided directly to farmers. Small urban centres (small towns) or rural service centres that are at the lower levels of the central place hierarchy are also the first collecting points in the agricultural marketing chain. In addition, small urban centres are considered as suitable locations for concentrating lower order public sector services such as administration, primary and secondary education, health care and institutional credit facilities. In turn, rural households provide resources such as food, labour and markets for urban goods and services. Thus, small towns can serve as "effective instruments" for improving beneficial rural - urban linkages (Baker, 1996). Linkages between rural and urban areas can therefore generate incomes and improve the quality of life of people in both rural and urban areas (Douglass, 1998 and Unwin, 1989). This symbiotic relationship between rural - urban centres is well illustrated by Douglass in Table 1.1 which shows how beneficial agriculture-related linkages can emerge between urban centres and rural areas.

Table 1.1

Urban and rural linkages and interdependencies

Urban	Rural
Agricultural trade/transport centre	Agricultural production
Agricultural support services	Agricultural intensification
Production inputs	Rural infrastructure
Repair services	Production incentives
Information on production methods	Education and capacity to adopt innovation
Non-agricultural consumer markets	Rural income and demand for
Processed agricultural production	non-agricultural goods and
Private services	services
Public services (health, education etc.)	
Agro-based industry	Cash crop production and
•	agricultural diversification
Non-agricultural employment	All of the above

Source: Douglass, 1990

Rural agricultural produce can find a market in the nearest urban centre, which is link to regional and international markets while the expansion of urban markets leads to the increase in the volume of agricultural produce and this, together with the development of rural resources, acts in a positive way to increase the income of rural families. Increase in rural incomes in turn would create a demand for consumer durables and services provided by urban centres.

Some of the beneficial linkages shown in Douglass' model can be observed in rural Sri Lanka, but urban centres have not always been able to provide neither non-agricultural employment opportunities for rural communities through the establishment of agro-based industries nor reasonable prices for local produce. This is especially true in the major

paddy producing areas in the Dry Zone such as the North Central Province (NCP), where the Government has upgraded existing junction settlements and established new urban centres with a view to providing essential services, markets and job opportunities to rural communities.

Regional development in Sri Lanka is the result of the two concurrent processes namely, a development process and a political process. The development process involved initially, infrastructure development, irrigation development and land settlement associated with river basin development including the multi purpose Accelerated Mahaweli Development Program in less developed areas. The political process involved devolution aimed at greater power sharing by sub national governments. The main visible power sharing by Act No 42 of 1987, enabled the devolution of power to a system of Provincial Councils (Karunanayake and Abhayaratne, 2002).

A salient feature in regional development in Sri Lanka is the emergence of a well defined core area and a periphery can be clearly identified in Sri Lanka. Imbalances between the core and the periphery have intensified in Sri Lanka since the 1970s. The more developed and highly urbanized Colombo Metropolitan Region (CMR) that approximates to the Western Province of the island has emerged as the centre of gravity in the national economy. The CMR in which 25.8 percent of the population of the country is concentrated covers only 5 percent of the land area (Department of Census and Statistics, 2001). The total contribution of the CMR to the GDP in 2004 amounted to 49 percent in 2004. Its share in the manufacturing sector had increased from 56.8 percent in 1981 to