A STRATEGY FOR THE DEVELOPMENT OF THE NON-FARM EMPLOYMENT IN THE MAHAVELI DEVELOPMENT AREAS WITH SPECIAL REFERENCE TO SYSTEM " H"

A DISSERTATION PRESENTED

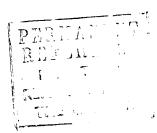
TO THE DEPARTMENT OF TOWN AND COUNTRY

FLAUNING

UNIVERSITY OF MORATUVA



IN PARTIAL FULFILMENT OF
THE DEGREE OF MASTER OF SCIENCE IN
TOWN AND COUNTRY PLANNING



37610

CHULAMANDA WELLAPPILI 12**T**H MARCH

1982

ACKNOWLEDGEMENTS

This study was pursued with the assistance, guidance and advice of Progessor M.W.J.G. Mendis, Mr. A.L.S. Perera, Senior Lecturer of the Department of Town and Country Pleaning, University of Moratuwa, Sri Lanka.

I wish to thank Prof. M.W.J.G. Mendis, the Head of the Department of Town & Country Planning, University of Moratuwa, Sri Lanka for his guidence and valuable advice he had given methrought this period.

My sincere thanks are due to Mr. A.L.S. Perera who had sacrified much of his time and for the invaluable advice, continuous guidance and assistance he gave me throughout the study, that made it possible to complete this study satisfactorily. I offer my sincere thanks and deep gratitude to Mr. Nihal P. Weerasinghe, Lecturer Department off Town & Country Planning and other members of the staff in the Department who helped me with the www.lib.mrt.ac.lk background information necessary for this study.

I also wish to express my deep gratitude to the following persons and institutions who helped me during my research in
the collection of information and who devoted their valuable time
and several discussions.

- Mr. Kapila Pathirana Wimaladharma, The Head, Department of Land Settlement.
- Mr. D.P.D.M. de Silva, Manager, Business Development & Investment. MASL
- Mr. L.P. Perera, Project Co-ordinator of System 'H' and the other officials of Mahaweli Authority of Sri Lanka.
- Mr. S.A.B. Ekanayake, Economist of Mahaweli Development Board.

- Pr. W.M. Ratnayake, Dr. Charles St. George, Mr.Jayantha
 Amarasekera and Mrs. S. Mallawarachchi of C.I.S.I.R.
 - Dr. H.J. Pauw, Dutch Project Manager, Regional Industrial
 Development, National Institute of Business Management.
 - Mr. A. Denis N. Fernando, Additional Secretary of the Ministry of Mahaweli Development.
 - The officials of I.D.B., C.I.S.I.R., ; A.R.T.I.,;

 Ministry of Rural Industrial Development, Ministry of

 Fisheries, Department of Small Scale Industries,

 Department of Land Commissioner and Trorist Board.
 - Mr. K. Seevaratnam, Mr. N.S. Thillainathan, Mr. G.N.M. Fernando, Miss Motha and Miss D.F.M.A. Chitrani.
 - My collegues of the Regional and Physical Planning
 Division of the Mahaweli Development Board.

University of Moratuwa, Sri Lanka.

Finally ie Inthank Tales those Dwhock indlys extended their assistance in numerous liays which knade it possible for me to complete this study.

CHULANANDA WELLAPPILI

Department of Town & Country Planning,
University of Moratuwa, Sri Lanka,
Moratuwa.

12th March, 1982.

-

This study is concerned with the strategy for the development of non-farm employment in the Mahaveli development area with special reference to System 'H' which comes under Stage II of the Mahaveli Development Programme.

The discussion in this study has been carried out in three parts which comprises 6 chapters. Part I consists of 2 chapters and it introduces the background of the country, Mahaveli Development programme and non-farm sector in selected settlement schemes. The chapter I discuss the historical back ground of the country and the introduction of settlement schemes during the colonial period. It then deals with the Mahaveli Development programme and its impact on the agricultural development and employment generation. Chapter II of this study indicates how the objectives of settlement schemes were changed and it examines some critical features of the settlement schemes. The final section of the matter discussion non-farm sector of the selected settlement schemes.

The Part II of this study consists of 3 chapters and it analyses the theoritical background of the non-farm sector and it discuss the existing employment situation in 'H' area and the potential areas for employment generation. The chapter III of this study examines the relationship between non-farm sector and farm sector and the importance of the development of non-farm sector. The chapter IV of this study discusses the H area.

It first deals with the physical characteristics of the area irrigation and settlement pattern. The population component such as planned, existing and projected population are then discussed and it examines the existing employment opportunities in the area. The final section of the chapter discuss the available resources such as natural, agricultural and infrustructure facilities.

The Chapter V of the study examine the potential areas for the creation of employment opportunities. It discuss about the industrial development, tourism, expansion of trade and business, livestock development, inland fishing, open new avenues for employment.

The Part III of this study comprises the conclusion and recommendations.



CONTENTS

	r a g e
ACKNOWLEDGEMENTS	I
SYNOPSIS	III
LIST OF MAPS	V
LIST OF TABLES	VI
LIST OF ILLUSTRATION	VII
LIST OF ANNEXES	VIII
INTRODUCTION	IX

PART_I

C H A P E R I BACKGROUND OF THE SETTLEMENT SCHEMES AND MAHAWELI DEVELOPMENT PROGRAMME.

	1 .	Intr	oduction		
The same of the sa				cki, rothe of the Country	1
33)				endence que piod	2
5	www.]	الجرياا	tpostkinde	ependence period	3
	3.	Some	Current r	national Problems	4
	4.	The	Maha w eli I	Development Programme	
		in t	he context	t of national economy	5
		4.1	Backgroun	nd of the Mahaweli	
		Deve	lopment Pr	rogramme	6
		4.2	Initiatio	on of Mahaweli Programme	6
		4.3	Objection	n of the Project	6
		4.4	Outline o	of the Master Plan	6
		4.5	Physical	Bounderies of the Mahaweli	7
		4.6	Phasing o	of the Master Plan	8
		4.7	Economic	Evaluation	9
٠			4.7.1	Sapital Cost benifit ratio	9
			4.7.2	Internal rate of return	Q

		1.		4.0	Organization and management	9
		1		4.9	Accelerated Mahaweli Development Programme	10
				4.10	Impact of Mahaweli Settlement on increasin	
					agricultural production	11
				4.11	Impact of Mahaweli Settlement on	
					increasing employment opportunities	13
			5•	Concl	usion	1,4
		•	. ·	•		
<u>с</u> н	<u>A</u>	PTI	E R 2			
				PAST	SETTLEMENT SCHEMES, THEIR PROBLEMS	
					MPLOYMENT	
		•	4	T., 4	du a di an	15
			1. 2.		dution	15
				_	round	15
			3.		of Settlement Schemes	ر، 17
			4.	-	tives of Settlement Schemes	19
			5.		cal features of Settlement Schemes	20
		13	3		tPhysical Planning of Settlements	21
		13	Sancia		Einancing of Settlement Schemes	
		0	Marry M. Marry		Site of allotment	22
				5.4	Selection of allotees	23
				•	Land alienation	24
				5 .6	Land tenure Policies	25
·				5.7	Management and administration	25
			6.	Probl	ems of Settlement Schemes	2 6
				6.1	Physical Planning Froblems	27
				6.2	Social	27
				6.3	Agricultural	28
				6.4	Economical	28
	•		•	6. 5	Other	28
		,	7•	Empl'ó	/ yment through land settlement	2 9
				7.1	Non-farm employment in past	
					settlement schemes	2 9
				7.2	Employment	31
					7.2.1 farm employment	31
					7.2.2 non-farm employment	32
				7.3	Potential for further development	34

×

)	Development programme	36
9•	Conclusion	37
	PART II	
C H A P T E R _ 3	IMPORTANCE OF THE NON-FARM SECTOR	, 40
. 1.	Introduction -	40
2.	Background	40
3.	Some previous policies for employment	
	generation .	40
4.	Employment opportunities through new land	
	settlements	41
•	4.1 Farm employment	42
	4.2 non-farm employment	42
5•	Importance of non -farm sector	43
	5.1 Employment generation	43
	5.2 limited land vis-a-vis income	44
bal	Uhidershiversification of income sources	. 44
((((((((((((((((((((Electronie The sen & Dissertations	45
The said	www.lillthligathon of resources	46
	5.6 Reducing cost of living	46
7	5.7 Urban-rural integration	47
6.	Multi-Sectoral Model for evaluating non-farm	
	employment	47
	6.1 Parameters of model	47
	6.2 Multiplier effect of multi-sectoral	
	development	48
7.	Relationship between farm income and non-farm	
	activities	50
8.	Some limitations of the non-farm sector in the	
	study	52
9•	Conclusion	53

Settlement objectives of Mahaweli

CHAPTER 4

PHYSICAL CHARACTERISTIOS, POPULATION AND EMPLOYMENT IN THE "H" AREA

	7. Int	roduction	54
	2. Phy	sical characteristics of the area	54
	2.1	Climate	54
	2.2	Topography and land classification	57
	2.3	Hydrological condition	57
	2.4	Irrigation	58
	3. Set	tlement Planning	58
	3.1	Basic objectives of settlement	
		planning	5 9
	3.2	Prinicples of settlement planning	5
	3.3	Type of settlement	. 59
	4. Pop	ulation in the area	63
	4.1		63
	4.2	Existing population	64
		MupulationSprojection	67
	Electronic Th	neses & Dissertations	
	www.sib.12mp	loyment in the area	72
	5.1	farm employment	72
.)—·	5•2	non-farm employment	75
		5.2.1 Government employment	77
		5.2.2 Business and trade	77
		5.2.3 Supporting and personal	
		services	79
		5.2.4 Manufacturing and processing	
		industries	79
		5.2.5 Hired labour	80
	6. Ava	ilable resources	84
	6.1	Natural resources	84
	6.2	Agricultural raw material	85
	6.3	Infrastructure facilities	91
	D Cam	-1	

CHAPTER 5	POTENTIAL ARE	.s FOR D	EVELOPMENT	
, ,	1. Introduct			9 5
/	2. Back grou			9 5
•	_		for employment	
	generatio		- •	96
	-		or employment	
	generatio:	ns		97
	4.1 Industira	l develo	pment	97
	4.1.1 M	ajor ind	ust r ies	99
•	. 4	.1.1.1	Phosphat industry	99
	4	1.1.2	forest industry	100
	4.1.	1.2.1	plywood industry	102
	4.1	.1.1.2	pulp & paper production	102
*	4.1	.1.2.3	charcoal production	102
•	4.1.1.3	Fruit a	nd vegitable procesing	
		industr	ies	104
	ц.	1.1.3.1	Passion fruit	105
·	4.	1.1.3.2	Mangoes	105
	4	.1.1.3.3	Citrus	106
	ersity of Morat	Ou.		
Source	ronic"Theses &			106
WWW	.lib.mrt.ac.lk		Rice Bran industry	107
į.		4.1.2.2	Cement production from	406
j.		1	rice hulls	108
			Soya bean	109
	•		ground nut	110
		4.1.2.5	gingelly	111
	4.1.3	process	ing industries	111
	4.1.4	light er	ngineering industies	118
		cottage	industies	112
	4.1.6	other in	ndusties	113
	4.2 tourisam		2	116
	4.3 inland fis	shing		117
	4.4 expansion	of trade	e & business activites	121
	4.5 livestokk	develop	ment	(2)
	4.6. large sca	ale farme	ers	122
	4.7 self empl	Loyment p	programmes	i 24
5•	Problems of en	nploymen	t gen erations	124
6.	Conclusion			125

PART_II

CHAPTER_6

CONCLUSION AND RECOMMENDATIONS

126-137

ANNEXES

138 - 141

BIBICIOGRAPHY

142 - 150



University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations www.lib.mrt.ac.lk

LIST OF MAPS

		Page
1.	General layout plans of Mahaweli Development Programme	8
1a	Map of acelerated Mahaweli Development Brogramme	8a
2.	Colomization schemes in Sri Lanka District wize	16
3. ·	Location of selected settlement schemes for study	30
4.	District Bounderies of OHT area	55
5•	Stage I & Stage II of CHC area	56
6.	Towns & Village centres in RE area	62
7.	AGA Divisions in H area	66
8.	Electricity in ⁹ H ⁹ area	87
9•	Banking Facilities in ² H ² area	88
10.	Postal facilities in *H* area	89
11.	Co-operation facilities of Menaturea, Sri Lanka.	90
12.	Health facilities in Theses & Dissertations	92
13.	WWW.lib.mrt.ac.lk Education facilities in ⁹ H ⁹ area	93
14.	State industires in Sri Lanka	97
15.	The location of selected state industries	103
16.	Inland fisheries development projects in Sri Lanka	119
17.	National parkes and main tourist areas	(14
17a	National reserves, santuries and forest	115
	reserves in Mahaweli Development areas	118
18.	Polential areas for industrial development.	

LIST OF TABLES

		Page
۹.	Size of land allotment	22
2.	Demographic features of selected settlement schemes	B 1
3.	No. of farma employment	32
4.	Non-farm employment in seltlement schemes	32
5•	Farm and non-farm employment in settlement schemes	33
6.	The type of non-farm employment in settlement schemes	34
7•	Non-farm potential and performances of settlement schemes	34
8.	The ratio of total employment to farm employment	48
9•.	Land classes ih PH area	62
10.	Progress of settlement in "H" area as at 30.12.81	60
11.	Planned population in ⁹ H ⁹ area	63
12.	Population extinates for system and Sri Lanka.	64
13.	Population in the Project areas according at 501981	
	general census www.lib.mrt.ac.lk	65
14.	Population in Project area 1982	68
15.	Projected population in 9H9 area	69
16.	Projected population in "H" area by regions	70
17.	No. of farm employment by regions	73
18.	Laboure requirement of various crops man days/ha	
	according to various feasiability reports	74
19.	Non-farm employment in ^e H ^e area	
20.	Manufactering industries and processing industries in H area	79
21.	Types of labour used in area block 302 - 304 in H, area Maha 1977/78	81
22.	Sources of labour supply for fixed laboure	81
23.	Total employment in the area	82
24.	Agricultural production of the area	85.

ILLUSTRATION

		Page
1.	Area under major colonization schemes	18
2.	The relationship between farm income and non-farm sector	
3.	A schemetic form of settlement structure and layout pattern of a settlement	61
4.	Employment in H area.	83



(<u>T</u>

ANNEXES.

		rage
1.	Material requirement and man-power requirement for accelerated Mahaweli development Programme.	१३४
II.	Estimated agricultural production and labour requirement under Mahaweli Development Programme.	139
III.	Essential food production and food deficit of the Country.	140
Iv.	Skilled man-power requirement in Sri Lanka.	141
V.	Investment required for creation of an employment.	141



University of Moratuwa, Sri Lanka. Electronic Theses & Dissertations www.lib.mrt.ac.lk

(<u>T</u> · ·

· · ·