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**POVERTY ALLEVIATION AND
RURAL SMALL-SCALE INDUSTRIES**

This document was made possible through the financial support of FAO, ILO and UNCHS (Habitat). Valuable advice has been provided by IFAD, UNHCR, FAO, ILO and UNCHS. This document is based on Ian Livingstone's work for UNIDO, and was produced with the assistance of Diane Shooman.

This study has been prepared as a discussion paper for the Working Group on the Industrial Contribution to Rural Development of the ACC Task Force on Rural Development. The views set forth in this publication do not necessarily reflect the views of UNIDO or the members of the ACC Task Force.

This document has not been edited.

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ABBREVIATIONS

ACC	Administrative Committee on Coordination
ASKRINDO	Credit Insurance Scheme, Indonesia
BIDS/ RISP	Bangladesh Institute of Development Studies/ Rural Industries Survey Project
BSCIC	Bangladesh Small and Cottage Industry Corporation
CIRDAP	Centre on Integrated Rural Development for Asia and the Pacific
FAO	Food and Agriculture Organisation of the United Nations
GON	Government of the Netherlands
GTZ	German Agency for Technical Cooperation
IFAD	International Fund for Agricultural Development
ILO	International Labour Office
KShs	Kenyan Shillings
LDC	Least Developed Country
LE	Large-Scale Enterprise
NGO	Non-Governmental Organisation
POSB	Post Office Savings Bank
RHP	Rural Housing Programme
RIDC	Rural Industrial Development Centre
RIDP	Rural Industrial Development Programme
ROSCA	Rotating Savings and Credit Association
RSIE	Rural Small-Scale Industry
SEWA	Self-Employed Women's Association
SIDO	Small-Scale Industry Development Organisation
SLA	Savings and Loans Association
SMIDA	Small-Scale and Micro-Industry Development Agencies
SSE	Small-Scale Enterprise
SSIE	Small-Scale Industrial Enterprise
UNCDF	United Nations Capital Development Fund

UNCHS United Nations Centre for Human Settlements (Habitat)
UNDP United Nations Development Programme
UNHCR United Nations High Commission for Refugees
UNIDO United Nations Industrial Development Organisation
UNIFEM United Nations Development Fund for Women
USAID United States Agency for International Development
WB The World Bank

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INTRODUCTION

1. The purpose of this publication is to provide recommendations for developing comprehensive, coordinated strategies for rural poverty alleviation through rural small scale-industry development. The ensuing discussion consists of four parts:

PART ONE: RURAL POVERTY AND RURAL SMALL-SCALE INDUSTRY

Chapter One: Characteristics of Rural Poverty

2. A profile of the rural poor and their specific needs will provide the framework for an evaluation of the role rural small-scale industry can play in poverty alleviation.

Chapter Two: Rural Small-Scale Industries and Rural Poverty Alleviation

3. The scope of activities encompassed by the designation 'rural small-scale industry' (RSIE) is presented in the employment and income context of rural regions and the rural poor. The advantages of RSIE and the importance of inter-sectoral linkages for poverty alleviation strategies are demonstrated.

PART TWO: MEASURES AND METHODS

Chapter One: Measures for the Promotion of Rural Small-Scale Industries

4. This chapter presents a view of bottlenecks confronting rural small-scale industries, and suggests measures of policy, financing and technical assistance which can be taken toward overcoming them.

Chapter Two: Developing Inter-Sectoral Linkages

5. Important inter-sectoral linkages are mapped out, as well as two sample methods for structuring assistance strategies along their lines.

Chapter Three: Rural Housing and Construction as Focus for Linked Activities

6. These are followed by a specific example of an industry with potential for addressing basic needs of the rural poor, and developing and strengthening inter-sectoral linkages.

PART THREE: REACHING THE MOST NEEDY

Chapter One: Women in Household and Rural Small-Scale Industry

Chapter Two: Refugees in Developing Countries

7. These chapters deal with how the strategies and measures discussed above can be applied to two groups of the rural poor who command particular attention, namely women and refugees in developing countries.

PART FOUR: CONCLUSIONS AND RECOMMENDATIONS

Chapter One: Conclusions

Chapter Two: Recommendations

8. Finally, the main conclusions from the discussion are summarized, and recommendations are given for overall assistance strategies.

**PART ONE
RURAL POVERTY AND RURAL SMALL-SCALE INDUSTRY**

**CHAPTER ONE
CHARACTERISTICS OF RURAL POVERTY**

INTRODUCTION

9. The purpose of this publication is to consider the role rural small-scale industries can play in poverty alleviation¹. Thus the specific needs of the rural poor must provide the framework for these considerations. To lay the groundwork for this discussion, the following sections will provide a profile of the rural poor, of the different groups requiring assistance, and of the circumstances under which it could be hoped that non-farm incomes and specifically incomes from rural small-scale industry would help to reduce poverty.

I. WHAT CONSTITUTES RURAL POVERTY?

10. First, it is necessary to point out that the extent and nature of poverty is not well measured by GNP per capita figures. Poverty is measured most directly by the extent to which proportions of the population are lacking in basic needs, particularly food, shelter, health, and education.

II. THE GLOBAL DIMENSIONS OF RURAL POVERTY

11. The size of the poverty problem in rural areas is revealed in Table 1. 939 million people in the rural areas, or more than one-third of the rural population, were living below the poverty line in 1988. In Sub-Saharan Africa the proportion was estimated as just above 60 per cent, and in the least developed countries 68 per cent.

III. TARGET GROUPS

12. Within these rural populations different target groups have been identified.

III.A Smallholders

13. Smallholders have been distinguished as a broad category. Within the smallholder sector there is usually considerable stratification, and in richer agricultural areas incomes at the upper end can be quite high compared with average incomes even in the cities. It is at the lower end of the smallholder sector that we should look for the rural poor, those with very small holdings, and especially the landless and near-landless.

¹ Detailed reviews of the state and causes of rural poverty in developing countries have been recently carried out by the World Bank (1990), IFAD (1992) and FAO (1991). Academic studies on the subject have been conducted by Iliffe, 1987 and O'Connor, 1991.

**TABLE 1: RURAL POPULATION BELOW THE POVERTY LINE
IN 114 DEVELOPING COUNTRIES**

Region	Population Total Rural (millions)		Rural pop as percent of total population	Rural Pop below poverty line	
				Millions	%
Asia	2713	2019	74	633	31
Asia (excl. India and China)	812	567	70	262	46
Sub-Saharan Africa	462	337	73	204	61
Near East and North Africa	208	106	51	27	26
Latin America and the Caribbean	425	123	29	76	62
Total 114 countries	3809	2584	68	939	36
Total 112 countries (excl China and India)	1908	1132	59	569	50
Least Developed Countries	418	343	82	234	68

Source: IFAD (1992)

III.B The Landless and Near-Landless

14. The very high proportions of landless and near-landless in many Central and Latin American and Asian countries are shown in Table 2. Evidence is that these numbers in many countries are increasing at a rate of some 3 - 5 per cent per annum overall, in some places quite rapidly².

² IFAD, 1992, p 74

**TABLE 2: LANDLESS AND NEAR-LANDLESS RURAL HOUSEHOLDS
SELECTED COUNTRIES, MID-1970s**

(Per cent of rural households)

Country/Region	Near-Landless	Landless	Combined
Dominican Republic	48	44	92
Guatemala	47	38	85
Ecuador	52	23	75
Peru	46	29	75
Brazil	10	60	70
Philippines	34	35	69
Columbia	24	42	66
El Salvador (a)	-	65	65
Honduras	46	18	64
Bangladesh (a)	33	29	62
Costa Rica	11	44	55
India	13	40	53
Mexico	33	18	51
Malaysia	35	12	47

Source: IFAD (1992)

(a) Data from late 1970s to mid-1980s

III.C The 'Peripheral Poor'

15. Certain regions, usually the drier or semi-arid portions of a country, and sometimes a semi-arid country in its entirety, are poor especially for reasons of climate and soil. Here most small farmers would constitute the rural poor. Within semi-arid regions, there is the special category of pastoralists.

16. The latter are one of a number of groups identified as constituting the 'peripheral poor', marginalised groups "at the periphery of the development process", "eking out their existence in a highly isolated and alienated state"³, others being small artisanal fishermen and 'ethnic indigenous', such as the Amerindians of Latin America and the 'tribals' of Asia. The distribution of these groups in 64 developing countries in 1988 is estimated in Table 3, which shows, for example, 324 million landless and, surprisingly perhaps, more than 50 million small and artisanal fishermen.

³ IFAD, 1992

**TABLE 3: FUNCTIONALLY VULNERABLE POPULATION
IN 64 DEVELOPING COUNTRIES, 1988**

Functionally Vulnerable Groups	Population (000)	Percentage of Total Vulnerable Population
Smallholder farmer	713141	64.3
Landless	324177	29.2
Nomadic pastoralist	9875	0.9
Ethnic indigenous	58930	5.3
Small and artisanal fishermen	51596	4.7
Refugees/displaced	8349	0.8
Total (1)	1109496	100.0
Among women-headed households	221653	20.0

Source: IFAD (1992)

(1) Total may not add up due to overlap

17. The poverty of these groups is most directly connected with lack of access to resources, particularly cultivable land, as a result of land pressure associated with population growth, unequal land distribution, exacerbated in some cases by discrimination, or access to only dry, low productivity land or remote hill areas. In the case of pastoralists there has been progressive alienation over the years of the best rangelands for cultivation or development projects.

III.D Women-headed Households

18. Another category, overlapping generally with all of the above, is that of women-headed households, which in Table 3 is estimated at 20 per cent of the total vulnerable population. In many individual districts within African countries the proportion of rural households which is woman-headed is as high as 50 per cent. These often subsist on very small holdings or in drier low-productivity agricultural areas, and may be handicapped as much by lack of or limited family labour accompanied, due to poverty, by lack of agricultural equipment or draught power with which to increase their low farm output. Table 4 gives estimates of the numbers of rural women in poverty by region, and of the woman-headed households.

**TABLE 4: PROPORTION OF WOMAN-HEADED HOUSEHOLDS
AMONG RURAL HOUSEHOLDS
AND TOTAL NUMBER OF RURAL WOMEN IN POVERTY, 1988**

Region	% of woman-headed households (most recent estimate)	Total no. of rural women in poverty (mn)
Asia	9	363
Asia, excl China and India	14	150
Sub-Saharan Africa	31	130
Near East and North Africa	17	18
L America and the Caribbean	17	43
Total 114 countries	12	554
Total 112 countries excl China and India	20	341
Least developed countries	23	138

Source: IFAD (1992)

19. It is worth mentioning youth, young men and women separately, even if they may be members of the households already counted, since these may suffer from disguised unemployment within the rural household, where they would in other circumstances have moved on to their own landholding, or may be openly unemployed in market centres, rural towns or in cities, due to lack of income-earning opportunities.

III.E Refugees and Displaced Persons

20. Finally, the category of refugees and displaced persons, whose numbers are more closely specified in Part Three, Chapter Two, are quite often faced by lack of access to resources of any kind.

**CHAPTER TWO
RURAL SMALL-SCALE INDUSTRIES AND POVERTY ALLEVIATION**

I. THE INCOME SUPPORT SYSTEM OF RURAL REGIONS

21. It seems no doubt obvious to the point of absurdity, to state that the object of rural development is to provide assistance to the rural poor. However, development programmes adopting a narrow definition of 'rural small-scale industry' without taking the entire employment and income context of a rural dweller or household into account, might in fact be promoting a sector of industry rather than the sector of the population the measure is meant to assist.

22. A rural household often depends on many factors and various types of employment for its survival. What is considered to constitute rural industry, depending on what statistics are engaged for their definition, might well exclude types of work which are vital to the survival of a rural dweller or household.

23. Any development strategy must be comprehensive, and must therefore take a comprehensive view of income sources for the rural poor. In other words, the object should be to promote those industries which already provide or could become a source of employment for the rural poor.

24. These activities and enterprises, as will soon be seen, might not necessarily have directly to do with what are strictly defined as 'rural', i.e. agricultural or farming activities, or, in fact, be manufacturing industries, or even be located directly in an area classified as rural.

25. This chapter provides a view of the employment 'support system' of a rural region, and offers working definitions for activities engaged in by or offering potential employment for the rural poor.

II. A FRAME OF REFERENCE FOR RURAL SMALL-SCALE INDUSTRY

26. In this section we will be both distinguishing between and demonstrating linkages between different types of rural industry. We will clarify two seeming paradoxes:

- i. Some industry directly related to agriculture might not be conducted in a strictly rural location;
- ii. Some industry with little direct bearing on agricultural activity might be conducted in the rural sphere and pertain to the survival of the rural population.

27. We will proceed by offering general terms for discussing industry, and then move toward defining categories of rural small-scale industry.

II.A Scale

28. First of all as regards scale, small- and medium-scale industry may be defined on the basis of either employment or capital (i.e. inputs) though for reasons of data availability, especially, numbers employed are most often used. The boundaries

selected in terms of numbers employed vary widely, however. The following figures represent a typical classification:

- 0 - 9: micro-enterprise (enterprises in this category are usually concentrated in the range 0 - 4).
- 10 - 49: small-scale industry or enterprise.
- 50 - 99: medium-scale industry or enterprise.
- 100 and over: large-scale industry or enterprise.

29. 'Small-scale industry' is sometimes taken to encompass micro-enterprise establishments as a sub-category. The above categories are based solely on the criterion of scale, and may be rural or urban.

30. Distinctions are often made between small-scale enterprises (SSEs), and small-scale industrial enterprises (SSIEs).

31. Rural industry may be either small- (including micro), medium- or large-scale. Rural small industrial enterprises are referred to specifically as RSIEs.

II.B Rural Industry as a Category

32. The following points are offered for purposes of clarification:

- i. The term 'rural industry' refers only to location;
- ii. Rural industry is a broader category than rural agro-industry because it will embrace industries not linked to agriculture.

II.C Agro-Allied Industry

33. Agro-allied industry may also be small, medium or large scale. It may be divided into:

- i. agro-based industry and
- ii. agro-oriented industry.

II.C.1 Agro-based Industry

- i. This includes the agricultural processing industries and other forward linkages from agriculture, livestock and fisheries.
- ii. Forest-based industries are sometimes also included under this heading but should probably be included separately as resource-based industry, along with those derived from mining and from quarrying, such as the production of bricks and tiles.

II.C.2 Agro-oriented Industry

34. One may also look at the possibilities for agro-oriented industry which refers here to backward linkages from agriculture, associated with the manufacture of agricultural inputs, such as animal feed or fertiliser, and agricultural implements, including their repair.

II.C.3 Summary

35. A large part of rural industry is agriculture-based or natural resource-based. Clearly, the place to start in assessing opportunities for new rural industries which might be developed, and existing ones which might be expanded, is the local resource base. This will emerge quite strongly in this paper.

36. It should be emphasised that many agro-based or agro-oriented industries will be best produced in large scale units and in large towns. They will not necessarily be located in the rural areas themselves and not be 'rural' industries at all, despite their direct linkage with agriculture. This issue of location will be returned to presently.

II.D Non-Farm Activities

37. In trying to estimate the importance of rural non-farm enterprises, statisticians have collected data relating to rural household income, separating this into farm and non-farm income, the latter derived from non-farm activities.

II.D.1 Off-Farm vs Non-Farm Income

38. Frequently confusion arises between 'off-farm income' and 'non-farm income'. While the former could include income from wage employment on other people's farms, non-farm income should include only income from self-employment outside farming or wage employment outside agriculture or other primary activity.

II.D.2 Non-Farm Activities vs Auxiliary Agricultural Production

39. Furthermore, there is sometimes ambiguity regarding what is subsumed under the heading of non-farm activities. For example, frequent reference is made to the positive experience of the Grameen Bank in Bangladesh in extending credit for non-farm activities. The activities supported in fact included cow-fattening, fishpond cultivation and gardening, which would not fall under this heading. Though they use only very little land, they are better described as 'auxiliary agricultural production', as they derived from intensification of farm activities. They may well constitute the most viable and useful activities to be assisted.

II.D.3 The Significance of Non-Farm Income for the Survival of Poor Rural Households

40. As Tables 5 and 6 show, rural households depend to a very large extent on non-farm as well as farm income; the former often accounting for more than 40 per cent of the total. Rural household viability depends almost as much, in many cases, on non-farm activities as on farm activities, and for the poorest households the dependence may be greater.

**TABLE 5: SHARE OF NON-FARM INCOME IN
TOTAL RURAL HOUSEHOLD INCOME, 5 COUNTRIES**

Country	Year	Percentage
Northern Nigeria (3 villages)	1974	28
Sierra Leone	1974	36
Taiwan Province of China	1975	43
Thailand	1976	43
Korea	1980	34

Source: 'Size Distribution, Structure and Determinants of Personal Income Among Farmers in the North of Nigeria' (PhD dissertation, Cornell University). Government of Taiwan, Taiwan Farm Income Survey of 1975 (Taipei: Joint Commission for Rural Reconstruction, 1976). World Bank, Thailand: Rural Growth and Employment (Washington, 1983). Government of Korea, Report on Results of Farm Household Survey (Seoul: Ministry of Agriculture and Fisheries, 1981). Taken from Kilby (1986).

II.D.4 The Significance of Non-Manufacturing Activities for the Survival of Poor Rural Dwellers

41. What is often forgotten is that a large part of non-farm income consists of trade, transport, services, including catering, and other non-manufacturing activity. The share of manufacturing in total rural employment is only 9 per cent in the selected countries (Table 6), manufacturing accounting for 25 - 29 per cent of non-farm rural employment.

II.D.5 Summary: A Working Definition for Non-Farm Employment

42. Non-farm employment is defined as consisting either of part-time or full-time household or cottage industry conducted in or near the household, or of employment in independent small enterprises, located in rural market centres or towns.

TABLE 6: SHARE OF NON-FARM ACTIVITIES AND MANUFACTURING IN RURAL EMPLOYMENT, SELECTED COUNTRIES

	Year	Share of non-farm activities	Share of manufacturing	Share of manufacturing in non-farm employment
		%	%	
Bangladesh	1983/4	33.5	7.7	23.0
India	1981	19.0	6.5	34.2
Indonesia (Java)	1980	37.9	9.5	25.1
Malaysia	1980	49.3	10.5	21.3
Nepal	1977/8	N/A	14.0	-
Pakistan	1982/3	32.3	9.4	29.1
Philippines	1982	31.9	7.0	21.9
Sri Lanka	1981	45.8	8.4	18.3
Thailand	1983	N/A	5.4	-
Mean value (Asia)		36	9	25
Kenya	1970	28.0	-	-
Sierra Leone	1976	19.0	7.6	40.0
Zambia	1980	22.3	2.7	12.1
Columbia		23.0	7.6	33.0
Mean Value (10 countries)		31	9	29

Source: Islam (1987) and Haan (1989)

II.E The Location Issue

43. As indicated above, the term rural small-scale industry begs the question of what is 'rural'. Since development plans and action programmes frequently assert the desire specifically to promote rural industry, and consequently limit eligibility for assistance to enterprises which fall under this head, this is of some importance.

44. A UN definition specifies as 'rural towns' have those with populations up to 20,000 people, and this has been adopted by others: however, a recent report takes as RSIE that which is located in towns below 20,000 in size or in bigger towns 'if these retain the characteristics of smaller towns'⁴.

⁴ UNDP/GON/ILO/UNIDO, 1988

II.E.1 Limits of Location as a Defining Category

45. Recent work by multilateral organisations on such widely divergent countries like Viet Nam, Niger, Nepal and Uganda shows that small enterprises in even relatively large urban centres retain close relationships with the surrounding rural areas, which serve as suppliers of raw materials and markets for part of their output.

46. In considering this in relation to poverty alleviation, we should note that there is a danger in focusing too narrowly on specific target groups defined in part by location.

II.E.2 Rural Region Support Systems

47. Market centres and rural towns develop important symbiotic relationships with their surrounding rural hinterlands. They are both necessary to the development of the rural economy and thus to poverty alleviation. Their simultaneous development may be the best means of reducing rural-urban migration to the cities. Moreover, rural area poverty is very easily transferred to rural town poverty if development is slow.

48. The interdependency between rural areas and enterprises located in urban areas assumes a variety of forms:

i. Households with Divided Employment

It should be noted that in many LDCs, African and Asian, households are divided between rural and urban employment, husbands or other members of the family obtaining employment in small and informal sector enterprise in urban areas. This makes the definition of a 'rural household' more difficult. Many so-called 'female-headed households' are better described as 'divided households', obtaining both urban income (through remittances) and rural income, while households headed by single or divorced women may be substantially poorer. In the former case, evidently, the promotion of SSI in rural towns may be important in maintaining rural household viability.

ii. Micro-enterprise Agglomerations

a. With regard to location, even in the case of informal sector micro-enterprises, there is a strong tendency for these to form clusters or agglomerations in urban centres, presumably due to perceived externalities in coming together. Within each agglomeration, subsidiary clusters incorporating several hundred small establishments may be specialised in particular activities, such as metalworking or furniture-making. Thus even in respect of very small enterprises, there may be an efficiency argument favouring location within an urban area, albeit economically interdependent with the surrounding area;

b. Such development can be beneficial to the rural population, including the poor;

- c. It is often quite easy for rural consumers to find their way into the towns, using fast and cheap local transport;
- d. Producing goods at low cost in the most favourable location may suit consumers by turning the rural-urban terms of trade in their favour;
- e. There is scope for trade between rural and urban informal sectors;
- f. Beyond this, the town informal sectors, these clusters particularly, may be the best vehicle for introducing and developing appropriate technologies and products for use in the rural economy;
- g. One would expect these, indeed, to be the source-point of the appropriate technologies which it is considered might alleviate the problems of the rural poor.

II.E.3 Summary

49. It follows, therefore, that dogmatic adherence to boundaries of interest as defined by location should not be maintained, and that the rural economy should be seen as combining interdependent rural and urban areas.

50. It bears repeating in this regard, that non-farm employment may consist either of part-time or full-time household or cottage industry conducted in or near the household, or of employment in independent small enterprises, located in rural market centres or towns.

II.E.3.1 SSEs vs. SSIEs

51. A further traditional distinction needs to be reconsidered. As mentioned above, we may refer generally to SSEs (small-scale enterprises) or specifically to SSIEs (small-scale industrial enterprises). The former includes enterprises in trade (wholesale and retail), catering (hotels, cafes, bars, restaurants) and services (including transport), as well as other sectors such as mining and construction. Non-manufacturing SSEs may account for 70 - 85 per cent of the total, and those concerned with trade as much as 50 per cent in some cases.

52. Hence if we are concerned with creating employment, promotional programmes will often need to be wider, and be appropriate to the different requirements of each sector.

II.F Data and Definitions

53. Most efforts to formulate proposals for the development of rural, small-scale or cottage/household industry or enterprise as a whole encounter a general lack of the required statistical information. What has been collected often suffers from failure to make or follow clear definitions or distinctions as above, sometimes rendering the data unusable or misleading.

54. Often, surveys are based on enterprises found at market centres and leave out dispersed rural manufacturing activities, particularly those based on non-agricultural resources in

forestry, fishing or construction. Household enterprises will usually be omitted or seriously underestimated.

55. For these reasons estimates of non-farm employment and income based on household survey data generally diverge from those based on enterprise surveys. International agencies can make a contribution by bringing these problems to the attention of national and international statistical services so they can be taken account of in formulating data collection plans.

III. THE PRESENT CONDITION OF RURAL SMALL-SCALE INDUSTRIES

56. A view of the present situation of rural industries offers insight into the role they play and their potential for poverty alleviation, and the problems they confront. Both their advantages and problems provide a basis for recommendations for support measures.

III.A Micro-Enterprises

57. A striking feature of both urban and rural SSEs, manufacturing and non-manufacturing is the predominance of micro-enterprises. A recent review commenting on the composition specifically of RSIE, notes that "the overwhelming bulk of enterprises employ less than 5 persons, with less than 10 per cent in the small industry category, defined here as with 5 - 25 employees"⁵. The data presented in Table 7 equally show the bulk of employment being provided either by medium- or large-scale firms with 50 or more employees, or by micro-enterprises.

III.A.1 Expansion of the Sector Through Quantity vs Size

58. If we focus on the substantial micro-enterprise component of manufacturing and other informal sector activities, a feature which has been observed is that employment in the sector expands very largely through an increase in the number of micro-enterprises, still employing no more than 2 or 3 persons, rather than through any increase in size of existing establishments, the sector representing, in effect, a form of self-employment.

59. Different data indicate similarly that micro-enterprises generally do not expand over the years⁶. Thus a 1980 update of a survey of manufacturing micro-enterprises enumerated in 1974 found that none of the establishments in the villages (in Northern Nigeria) had expanded at all, 13 per cent of those in rural towns had, and 31 per cent of those in urban centres had taken on more workers. This indicates some growth of firms, but in urban areas only.

60. In Nepal, during the 1970s, it was actually estimated that the average employment per micro-enterprise had declined, from approximately 3 to 2 persons, probably associated with the fact that the number of micro-enterprises had almost doubled, and their MVA increased by some 78 per cent. The great majority of

⁵ UNDP/GON/ILO/UNIDO, 1988

⁶ Liedholm and Parker, 1989

these enterprises were located in villages or small rural towns⁷.

61. Apart from the generally low rates of 'graduation' of informal sector establishments to larger scale enterprises, they also exhibit a quite low survival rate, many disappearing within a few years of having been established.

**TABLE 7: EMPLOYMENT IN INDUSTRY
ACCORDING TO SIZE OF FIRM**

Country		GNP per capita (US\$ 82)	Employment (%) according to size of firm		
			Micro (0-10)	Small (10-49)	Large (50+)
India	1971	260	42	20	38
Tanzania	1967	280	56	7	37
Kenya	1969	390	49	10	41
Indonesia	1977	580	77	7	16
Zambia	1985	640	83	1	16
Philippines	1974	820	66	5	29
Columbia	1973	1460	52	13	35
Republic of Korea	1975	1910	40	7	53

Source: Liedholm and Mead (1987)

⁷ UNIDO, 1991

III.A.2 Growth Potential in Size for Micro-Enterprises

62. While the majority of micro-enterprises do not grow in size, small-scale industrial enterprises do exist which have emerged from their ranks. This appears to have happened to a significant extent in Asia, and in India particularly (Table 9), where 65 per cent of a sample of firms now employing 11 or more employees started as micro-enterprises⁸.

63. This is not so much the case in Africa⁹, though the Nigerian figure is nearer to that of, for example, the Philippines, reflecting the weaker dichotomy between formal and informal sectors in that country.

64. Despite the observation above that the individual micro-enterprises for the most part do not grow in size, it is still possible for employment in the sector based on one or two-person establishments to expand in impressive fashion. This is demonstrated in Kenya (Table 10), one of the few countries which maintains a regular statistical series covering informal sector establishments. Over the period 1985-88 employment in small scale manufacturing establishments grew at an annual average rate of 15 per cent.

TABLE 8: ORIGINS OF MODERN SMALL- AND MEDIUM-SCALE PRIVATE MANUFACTURING FIRMS IN SIX COUNTRIES

(11 employees or more)

Region/ Country	Year	No. of Firms in Sample	% Originated as Micro (< 10 employees)	% Beginning with 11 or > employees
Africa				
Nigeria	1965	64	43.7	56.3
Sierra Leone	1975	42	30.1	69.9
Rwanda	1987	28	10.7	89.3
Botswana	1982	20	20.0	80.0
Asia				
India	1979	244	65.6	34.4
Philippines	1978	47	48.9	51.1

Source: Adapted Haan (1989) from Liedholm and Parker (1989) p 26.

⁸ In rural Thailand 'town industries' averaged 5-7 workers per establishment, according to one survey (Akrasanee et al, 1983, p 107).

⁹ See also World Bank, 1987

**TABLE 9: RECORDED EMPLOYMENT, INCLUDING
SMALL-SCALE ENTERPRISES, KENYA, 1985-88**

	1985		1988 (a)		Annual rate of growth 1985- 1988 (%)
	('000s)	(%)	('000s)	(%)	
All Sectors					
Public and private wage employment	1174.4	82.2	1311.0	79.1	3.6
(Private sector only)	(599.8)	(42.0)	(650.1)	(39.2)	(2.7)
Small- scale ent'prises	254.5	17.4	346.2	20.4	11.1
Self- employed & family workers	33.4	2.3	43.9	2.6	9.6
Total	1462.0	100.0	1701.1	100.0	5.2
Manu- facturing					
Public & private wage employment	158.8	78.5	170.3	72.0	2.2
(Private sector only)	(123.6)	(61.1)	(132.7)	(56.1)	(2.3)
Small- scale ent'prises	43.5	21.5	66.1	28.0	15.0
Total, not incl self- employed & family workers	202.3	100.0	236.4	100.0	5.3

Source: CBS, Economic Survey, 1989

(a) Provisional

III.B Informal Sector Expansion: Evolution or Involution?

III.B.1 Productivity

65. Discussion of the urban informal sector has raised the question whether the expansion of the sector in terms of numbers employed represents evolutionary or 'involutionary' development, that is, absorption of increasing numbers but at diminishing marginal productivity as more and more compete within a limited market.

66. The same question may be put regarding non-farm employment within the rural areas and rural market centres. The figures referred to above for Nepal imply diminishing marginal product in this case certainly.

III.B.2 Possible Implications of Increasing Numbers in Non-Farm Employment

67. The fact that the numbers engaged in non-farm activities within the rural areas have been increasing, if not accelerating, are indisputable: this reflects increasing population growth and developing land scarcity, increasing labour participation rates, particularly female, and low rates of labour transfer into the large-scale formal industrial and service sectors.

III.B.3 The Productivity Question

68. While the expansion of the non-farm sector is taken by some as evidence of its progress, it may only reflect increases in labour supply to the sector rather than demand and productivity within it. It has been warned that the employment created by rural industry could be generated at exceedingly low levels of productivity¹⁰.

69. An involutionary process would result if rural non-farm employment were severely demand-constrained. A number of empirical studies of the rural industrial sector in Bangladesh have come out with optimistic prognoses in this regard¹¹. Their analysis is open to question, however¹². It is clearly of some importance that much more empirical work be carried out in different countries on income elasticities for rural industrial products, before attempting to reach conclusions on these issues.

IV. THE CASE FOR RURAL SMALL-SCALE INDUSTRY PROMOTION

70. Having demonstrated the significance of rural small-scale industry for rural populations and identified problems these industries confront, it is time to indicate specifically the ways in which RSIE can address the needs of the rural poor.

¹⁰ Saith, 1992, pp 7-8

¹¹ Osman and Deb, 1986; BIDS/RISP, 1981; Rahman, 1986

¹² Saith, 1989, pp 48-52

IV.A RSIE: Practical Advantages

71. The case for rural small-scale industry promotion as a means of dealing with rural poverty is rather obvious:

- i. Such industry is invariably labour-intensive and capable of providing employment in the rural areas for the poorest sections, also helping to reduce out-migration;
- ii. It may be geared to provide income-generating activities for specific target groups. Non-farm activities are especially important for woman-headed households and afford other women greater economic independence;
- iii. Non-farm activities, including manufacturing, can reduce seasonal poverty;
- iv. New technologies may reduce labour drudgery among rural households;
- v. Rural industry increases the supply of cheap, 'appropriate' goods affordable by the rural poor, just as the urban informal sector provides goods catering for low-income urban consumers, including goods related to basic needs provision such as rural shelter;
- vi. Non-farm activities are equity-enhancing, helping to even up disparities in rural incomes by providing employment specially for the landless and near-landless.
 - a. There is evidence that in many countries, particularly in Asia, the share of non-farm income in total household income increases inversely with the size of the farm holding (Table 10).
 - b. It should be noted that elsewhere, and this is true in some African countries certainly, the relationship may be more U-shaped, larger landholders having more capital also to invest in non-farm enterprises.
 - c. For the same reason those with little or no land may be more likely to enter wage employment, including low-paid agricultural wage employment, rather than take up self-employment. Saith (1992) has shown that as regards self-employment, the position is less clear than advocates of the simple inverse relationship generally allow.
- vii. However, a general tendency is for rural households as a whole to support themselves from a combination of farm and non-farm income, with the latter playing an important role across the board.

TABLE 10: SIZE OF LAND HOLDING AND RELATIVE IMPORTANCE OF NON-FARM INCOME IN TOTAL HOUSEHOLD INCOME

Country	Size of Holding	Non-Farm Income Share in Total Household Income (per cent)
Korea (1986)	0.0 - 0.5	73
	0.5 - 1.0	49
	1.0 - 1.5	35
	1.5 - 2.0	26
	2.0 - +	19
Taiwan (1979)	0.0 - 0.5	67
	0.5 - 1.0	58
	1.0 - 1.5	48
	1.5 - 2.0	40
	2.0 - +	33
Ecuador (1974)	0.0 - 1.0	40
	1.0 - 2.0	22
	2.0 - 10.0	14
	10.0 - 100.0	10
	1000.0 - +	9
India (1970/71)	landless	62
	0.0 - 1.0	34
	1.0 - 4.5	21
	4.5 - 10.5	11
	10.5 - +	3
North Arcot, India (1982/83)	0.0 - 0.1	35
	0.1 - 1.0	23
	1.0 - +	20
Northern Nigeria (a) (1974)	0.0 - 0.99	55
	1.0 - 1.99	29
	2.0 - 2.99	24
	3.0 - 3.99	14
	4.0 - 4.99	17
	5.0 - +	26

Source: IFAD (1992)

(a) Non-farm income estimated by deducting agricultural wage income (1.8 per cent of total earnings) from reported 'off-farm' income.

IV.B RSIE: Economic Advantages

72. The general economic advantages of rural small-scale industries may be stated as follows:

- i. As a component of the rural informal sector, they are able to provide a range of goods competitively at a lower cost than the large scale sector;
- ii. New technologies in agro-processing or other small industry can be applied to increase labour productivity and release labour for more productive alternative uses;
- iii. They can dovetail with agricultural activities and utilise slack season labour which has no opportunity cost;
- iv. Incomes from non-farm activities can serve as insurance against fluctuations in farm income and even extreme drought and thus have additional security value;
- v. Being in great measure resource-based, rural industries are strongly consistent with comparative advantage. This also involves linkages with other sectors, particularly agriculture, fisheries, forestry and building materials production;
- vi. They provide incentives to save, for purposes of investment, and help to retain savings in the rural areas;
- vii. They increase the availability of 'incentive goods', with possible positive effects on production.

V. CONCLUSIONS

V.A Rural Poverty

1. Poverty is measured most directly by the extent to which proportions of the population are lacking in basic needs, particularly food, shelter, health and education.

2. Rural poverty target groups include poorer smallholders, the near-landless and landless, pastoralists, certain 'ethnic indigenous' groups, small/artisanal fishermen, refugees, women-headed households, and youth. The poverty of these groups is most directly connected with lack of access to resources.

3. In viewing the circumstances which at once constitute and exacerbate poverty, it is evident that an effective strategy for poverty alleviation incorporates measures and activities which aim to improve these circumstances.

V.B The Role of Rural Small-Scale Industry in Poverty Alleviation

1. Rural households generally tend to support themselves through a combination of farm and non-farm income, with the latter playing an important role across the board.
2. There is a comparatively low rate of 'graduation' in size among micro-enterprises but the sector expands through an increase in the number of establishments.
3. Rural small-scale industry is labour-intensive, and can be geared to specific target groups.
4. Rural small-scale industry can provide a range of goods at a lower cost than the large-scale sector.
5. Rural small-scale industry can play a role in supporting technical changes in smallholder agriculture, which is critical for offsetting the effects of rapid population growth on farm size.
6. Rural small-scale industry can contribute to basic needs directly as well as through generating income and purchasing power, by:
 - a. economising labour to release it for income generation elsewhere;
 - b. raising productivity in agriculture;
 - c. creating income-earning opportunities outside it.

VI. RECOMMENDATIONS

1. In addressing the question of how rural small-scale industry can contribute to rural poverty alleviation, the entire employment context of the rural poor needs to be taken into consideration.
2. A large part of rural industry is agriculture-based or natural resource-based. Clearly the place to start assessing opportunities for new rural industries which might be developed, and existing ones which might be expanded, is the local resource base.
3. In order to effectively promote and exploit the inter-sectoral linkages which constitute the economic base of a rural area and the income network of the rural poor, it is necessary to evaluate what kinds of activities are encompassed by the designation 'rural industry'.
4. Certain industries, even those with a direct link to agriculture, are carried out in places not strictly defined as rural. The rural economy should be seen as combining interdependent rural and urban areas.
5. A major portion of non-farm income for the rural poor comes from non-manufacturing activity. Therefore it would be a mistake to limit promotional strategies to strictly manufacturing industries.

6. Non-farm employment should be viewed as consisting either of part-time or full-time household or cottage industry conducted in or near the household, or of employment in independent small enterprises, located in rural market centres or towns.

7. The aim of promotional measures should be to maximise employment in efficient rural non-farm activities through a mix of rural industry types.

8. The successful promotion of rural small-scale industry is dependent upon the creation of an 'enabling environment'. This points to the need for a comprehensive, integrated approach, coordinating inputs at the policy level, the institutional level, and the enterprise level.

**PART TWO
MEASURES AND METHODS**

**CHAPTER ONE
MEASURES FOR THE PROMOTION OF RURAL SMALL-SCALE INDUSTRY**

INTRODUCTION

73. In the previous chapters, we demonstrated the importance of small-scale industry for rural poverty alleviation. The purpose of this chapter is to present general measures for the promotion of rural small-scale industry. In order to provide a comprehensive, coordinated strategy at the policy, institutional and enterprise levels, these recommendations are aimed at identifying and redressing policies and measures which are disadvantageous to rural small-scale industry and proposing alternatives,, and will be presented in terms of macro-policy, supply-side measures, and demand-side measures.

I. THE IMPORTANCE OF THE ENABLING ENVIRONMENT

74. The development of rural and small scale industries depends upon coordination between and consistency among:

- (a) the overall policy framework in the country;
- (b) specific measures adopted for rural industry promotion;
- (c) policies towards the agricultural sector and other parts of the resource base.

I.A A Critical Balance

75. Most commonly promotion programmes for SSI have comprised a variety of supply-side measures, offered independently or as a package: credit, industrial estates providing infrastructural facilities, entrepreneurship development, skills training and so forth, aimed at removing different perceived constraints on the production side.

76. In recent years, partly as a result of unfavourable experience with many of these components, it has been realised that supply-side initiatives on their own may be ineffective in the absence of favourable demand-side conditions and of macro-economic policies which provide the 'enabling environment' for small-scale rural enterprises. This observation will be addressed at length in the ensuing discussions.

II. MACROECONOMIC POLICY

II.A. Biases Favouring Large-Scale Industry

77. In many LDCs, most major policy instruments favour large rather than small-scale production.

78. Large-scale capital-intensive industry is often foreign-owned, utilizing imported technologies. This large-scale manufacturing sector tends to exhibit substantial excess capacity and can exert influence and pressure to secure protection and

other support measures, including the duty-free importation of capital goods and other advantages as listed below.

II.A.1 Underutilisation of Local Resources

79. Such industries do not use local materials to the same extent as rural small-scale industry, and thus generate fewer linkages. The adoption of 'turn-key' technologies also reduces the possibilities for subcontracting to SSEs.

II.A.2 The Problem of the 'Missing Middle'

80. Policy biases favouring capital-intensive industry has been to produce, in Africa particularly, a bimodal structure in manufacturing with some large modern factories, albeit with excess capacity, probably, and vast numbers of micro-enterprises, with very little in between. This phenomenon in Africa has been described as the problem of the 'missing middle'¹³.

II.B Toward a 'Neutral' Environment

81. Governments should move toward an unbiased, 'neutral' policy environment, one which does not adversely affect any particular sector of industry, and one which is consistent at macro and sectoral levels. Policies regarding imports (tariffs, quotas etc), tax, interest rates, credit, and technical and marketing support, need to be re-evaluated in this regard.

II.B.1 Imports vs Domestic Capital Goods

82. As just mentioned, capital goods are frequently importable duty-free, encouraging capital-intensive methods. This also inhibits the development of domestic capital goods production, which might well have been in part at least small-scale and rural-oriented. Opportunities in this direction are discussed presently. Lack of domestic capital goods production makes it difficult to develop different technologies appropriate to local requirements or linkages between different sectors of the economy.

II.B.2 Tariff Policy

83. Tariff policy can have another type of negative impact on RSIE because of the way in which goods are sometimes classified, following conventions that are more appropriate to industrial countries. Thus Sierra Leone imposes a 25 per cent tariff on outboard motors and on sewing machines, as though these were consumer goods, rather than capital equipment for fishing and tailoring, while Burkina Faso applies a 72 per cent duty on hand tools, under similar assumptions¹⁴. Clearly this poses a serious impediment to the self-supporting efforts of rural dwellers.

II.B.3 Tax Policy

84. Tax policy can exert a similar bias through special depreciation provisions which have the effect of subsidising the

¹³ World Bank, 1987

¹⁴ Haggblade et al, 1989

cost of capital. Such provisions are common in Africa but are also important in Asian countries such as Thailand and the Philippines. Such provisions in the Philippines reduced the user cost of capital by some 50-70 per cent¹⁵. The negative repercussions of the measures, particularly as pertains to the population under the poverty line, have been the reduction of employment in non-exporting firms by some 35 per cent, and in exporting firms by 7 per cent.

II.B.4 Interest Rate Policy

85. Interest rate policy can add still more bias in the same direction. Formal sector interest rates in developing countries are generally fixed at standard levels within a range of, perhaps, 8-16 per cent, irrespective of the level of inflation or the real scarcity of capital. Thus real formal sector interest rates may even be negative. Recent data for 25 countries showed a mean real rate of interest in the formal sector of only 3 per cent compared with 57 per cent in the informal sector, over 100 per cent in the case of Africa (Table 11).

TABLE 11: INTEREST RATES IN THE FORMAL AND INFORMAL SECTORS OF DEVELOPING COUNTRIES

	Informal Sector (%)		Formal Sector (%)	
	nominal	real	nominal	real
Africa (6 countries)	114	108	9	3
Asia (10 countries)	37	28	12	4
(incl Viet Nam)	(48)	(20)	(30)	(2)
L America (9 countries)	64	54	13	2
Mean, 25 countries	67	57	11	3

Source: Derived from Haggblade et al (1986)

86. The effects of low interest rates can be said to exacerbate the immobility of the poor, exercising a negative impact on their ability to obtain credit or even to accumulate savings.

II.B.4.1 The 'Cheap Credit Paradox'

87. Where the rate of interest is maintained at an artificially low level like this, the effect is to produce a dualistic capital market in which bank credit is rationed out amongst large-scale private or public enterprises, leaving rural

¹⁵ Bautista, 1988

and other small-scale enterprise to depend entirely on personal savings or expensive informal sources. This is referred to as the 'cheap credit paradox', under which low rates of interest result in non-price rationing of investible funds, with most cheap credit concentrated in relatively few large loans¹⁶.

II.B.4.2 The Erosion of Savings

88. Low rates of interest have a more general regressive effect on income and asset ownership since financial institutions must in turn pay even lower rates on savings deposits, again often negative in real terms. This hurts small savers and acts as a 'tax' on financial savings, reducing their capacity to accumulate funds for the purchase of non-financial assets¹⁷. These small savers will include small farmers, potential rural entrepreneurs, and rural households generally.

II.B.5 Overvalued Exchange Rates

89. Overvalued exchange rates also subsidise capital by cheapening imported capital goods relative to labour. In 1983, out of 28 developing countries, exchange rates were overvalued by 10 per cent or more in 22 (18 out of 19 in Africa, the Caribbean and Latin America) and by more than 40 per cent in 8 out of 28¹⁸. Such rates also discriminate against exports, which are generally agricultural or are products of labour-intensive RSIE, including processing. Reduced agricultural growth and incomes will affect demand-linked RSIE and retard the development of still more rural linkages.

90. Several country studies of the negative effects of such policies have been carried out, for instance in Thailand, the Philippines and Tanzania¹⁹. As in the case of interest rates, where exchange rates are permitted to diverge sharply from the equilibrium rate, available foreign exchange tends to be allocated on a rationing basis, which favours large private or parastatal enterprises who can make application to the Central Bank or even apply pressures to it. Due to difficulties in obtaining either foreign exchange or actual import licenses, small-scale and micro-enterprises may fail to secure vital imported materials or parts, affecting their capacity to produce domestically or for export.

II.B.6 Technical And Marketing Support

91. Provision of market information, technical advice and other support and assistance in the establishment and maintenance of an enterprise are also biased in favour of medium or large enterprises. Such assistance, whether from government officials, development agencies or commercial institutions, is generally more readily available to large enterprises in metropolitan areas than to RSIE in the districts.

¹⁶ Von Pischke and Adams, 1980

¹⁷ Lycette, 1984

¹⁸ Haggblade et al, 1986

¹⁹ Stewart, 1989

92. In the area of technology, large units have a further advantage in being more able to invest in research and development, as well as being able to adopt ready-made technologies from abroad. Small-scale enterprises are not in the same position to develop technology for themselves within the enterprise. The appropriate technologies have often not been developed abroad and, to the extent that new technologies have been identified and introduced elsewhere, mechanisms for international dissemination of this knowledge are weak or non-existent.

III. LAND REFORM

III.A.1 Distribution of Agricultural Assets and Incomes

93. Apart from the level of agricultural assets and incomes, their distribution is also important. Highly inequalitarian land ownership structures and incomes, with mass rural poverty, are not likely to generate the rural purchasing power which is the driving force underlying non-farm activities.

94. As stated previously, the rural as well as the urban informal sector generally produces goods and services for the mass of low-income consumers. This means that not all agricultural development strategies are equivalent as regards the promotion of non-farm incomes. As an example, the appropriateness of the strategy being pursued in Malawi was questioned in the early 1980s²⁰, this strategy giving some emphasis to large scale sugar and tobacco estates rather than to smallholders, in a situation of fairly widespread rural poverty, affecting the domestic market for industrial goods.

95. The distribution of agricultural assets and income effect rural purchasing power in a variety of ways. The amount of agricultural wage employment will be a direct function of the degree of inequality in landholding. Increased rural stratification, increasing the number of landless, is likely to result in an increase in low-paid agricultural wage labour. In Kenya, for instance, the rural household category of divorced or separated women was found recently to have little by way of income from self-employment (or remittances) and to constitute one of the bottom rungs in the rural labour force as the cheapest agricultural labour²¹.

96. There are also implications for situations of rapid population growth in which the sizes of farm holdings are diminishing, sometimes equally rapidly. There is an evident possibility here of a malign sequence of diminishing farm plot sizes, reducing cash income per head, and thus purchasing power, in turn decreasing non-farm income by reducing the demand for RSIE goods and services.

97. If instead the development of RSIE, producing agricultural capital goods of different kinds and helping to remove processing and labour constraints, were to raise agricultural productivity and incomes, even in such situations

²⁰ UNIDO, 1983

²¹ IFAD, 1990

a benign scenario involving progressive interaction between the sectors might be achieved.

III.A.2 Land Reform and Development of the Non-Farm Sector

98. It follows again that promotion of the rural non-farm sector should not be seen as a substitute for or means of avoiding land reform, particularly if the objective is to reduce rural poverty. In some circumstances, land reform could, indeed, be a precondition for vigorous growth of the non-farm sector and for development of strong inter-sectoral linkages. In order to reach the rural poor, specifically, an overall strengthening of the rural economy is required, paying close attention to relations between sectors and activities, which are likely to be maximised within a relatively egalitarian economy as well as one exhibiting agricultural growth.

IV. SUPPLY-SIDE MEASURES

IV.A CREDIT AND FINANCE

IV.A.1 The Perception of Credit as a Primary Constraint

99. The first thought of governments or development agencies when deciding upon small industry promotion is to offer credit. The question of credit is, however, more complex than it appears on the surface. The following is an analysis of factors which need to be considered when formulating financial assistance measures.

100. The presumption of credit as a constraint derives particularly from incontrovertible evidence of heavy dependence by micro-enterprises on personal savings supplemented by loans from friends and relatives, with negligible credit from commercial banks or government sources.

101. Numerous surveys which ask micro-entrepreneurs directly what they consider the main constraints on their operation or expansion to be, the answer is almost invariably and overwhelmingly credit. For example, credit and capital have been reported as the greatest perceived needs of small business owners in Haiti, Sierra Leone and Nigeria²². Numerous surveys in Kenya have found similar responses.

IV.A.1.1 Obstacles to Obtaining Credit

102. In Asia, more than Africa, expensive informal sector credit through urban and rural moneylenders may be available. Thus, according to data collated from different sources, the percentages of initial finance secured by small enterprise from own savings or relatives were Bangladesh 75 (1980, 11 thanas), Nigeria 98 (1970, 3 states), Sierra Leone 80 (1976, whole country), Tanzania 93 (1968, rural towns) and Haiti 81 (1979, Port-au-Prince). Percentages secured from commercial banks were 1 per cent or less in all cases²³.

²² Chuta and Liedholm, 1979

²³ IFAD, 1992, Table 7.6

103. Obstacles are insistence on collateral or equivalent guarantees; time-consuming and urban-based procedures which are particularly daunting for small enterprises; and perhaps an inherent conservatism on the part of banks, given also the comparative ease of earning bank revenue on large loans. Formal banks have a very limited rural network, especially in Africa, as well as highly centralised loan approval procedures.

IV.A.1.2 Assessing the Need for Credit

104. Despite the a priori reasons stated above for supposing that access to credit must be a major problem for small firms, there is need for caution in making this deduction. Before embarking on evaluating measures for facilitating access to credit, the following two questions need to be asked in any given country situation:

- i. is credit really a limiting constraint on the growth of small enterprise and, if so, to what extent and in what respects?
- ii. Secondly, if some credit would be helpful, what is the most effective way of delivering such credit, using what existing or new mechanisms?

IV.A.1.3 Excess Capacity and its Implications

105. With regard to the potential hidden complexities in the question of the need for credit, the responses of small scale entrepreneurs in questionnaire surveys should not be taken at face value, for a number of reasons.

106. To take one, a more recent publication with reference to Sierra Leone reveals substantial excess capacity or in small scale industry (Table 12), and concludes that "particularly in the rural areas, the existing capital stocks of small scale industries in Sierra Leone were generally not fully utilised"²⁴.

107. An examination of Table 12 reveals that the problem of underutilisation of facilities was present in all of the major small-scale industries. The excess capacity varied by major industry, however, ranging from a high of 41 per cent in the blacksmithing industry to only 25 per cent in gara dyeing. Even more striking, however, was the indication that the amount of excess capacity varied by location. In tailoring, for example, there was 45 per cent excess capacity in the villages but only 24 per cent in Freetown. The highest amount of excess capacity was found to exist in rural areas in the other major industries as well. This may be traceable, at least in part, to demand considerations.

²⁴ Chuta and Liedholm, 1985, p 39

**TABLE 12: EXCESS CAPACITY [%] BY SMALL-SCALE INDUSTRY
BY LOCATION, 1974-75**

Industrial Category	Localities				
	Less than 2000	2000-20000	20000-100000	Over 100000	All localities
Tailors	45%	34%	29%	24%	33%
n [2]	14	24	3	8	
Gara	-	15%	31%	18%	25%
n	-	1	3	1	
Carpentry	45%	33%	25%	22%	34%
n	9	9	8	3	
Blacksmiths	43%	47%	30%	-	41%
n	8	4	3	-	
Baking	-	41%	32%	30%	34%
n	-	6	7	6	
Others	38%	44%	27%	43%	36%
n	9	16	19	5	
Weighted grand mean					35%

[1] For definition of excess capacity measures, see text

[2]n = number of cases: includes both randomly and purposively sampled firms

Source: Chuta and Liedholm (1985)

IV.A.1.4. Rural Investments in Urban Areas

108. With regard to the development of rural small industry in Kenya²⁵, a substantial net flow of savings from rural to urban areas has been observed, based in part on savings societies, which might have been expected to provide loans for rural investment if rural enterprises looking for finance were able to offer a favourable return. This indicates an availability of capital, and points to the need to closely assess rates of return in the rural industrial activities being promoted.

109. These findings are rather serious for rural industry promotion in general and support measures discussed here relating to demand-led development of RSIE, exploitation and development of inter-sectoral linkages, and introduction of new technologies, rather than reliance on supply-side measures.

IV.A.2 Financing for RSIE

110. Notwithstanding these provisos, there does appear to be scope for a balanced, enterprising approach to the provision of credit and/or finance to rural small-scale enterprises.

IV.A.2.1 The Role of Commercial Banks

111. It seems desirable to involve commercial banks in rural credit distribution. It should not be ignored, however, that part of the reluctance of commercial banks to extend credit to small enterprises reflects a quite appropriate assessment of the real costs of making large numbers of small loans, both basic administration costs per loan and special supervision costs associated with the extra risks of lending to entrepreneurs not well known to the banks and who lack collateral. The Industrial Finance Corporation of Thailand, for instance, would be typical in arguing that 'the high cost of administering small loans is inconsistent with its profit obligations'²⁶, this despite its status as a development bank.

112. To induce commercial banks to become involved in a positive way, three approaches may be adopted, singly or in combination:

- i. transactions costs can be reduced by making use of intermediaries in the form of non-governmental organisations, whose activities at the local level in identifying and screening potential loanees can be spliced on to the commercial system;
- ii. banks' margins may be increased by allowing a higher rate of interest on small or unsecured loans, or making available a special, subsidised loan fund to the banks, reserved for small enterprise loans;
- iii. banks' risks can be reduced by providing credit guarantees or insurance.

IV.A.2.2 Small Short-Term Loans

113. Programmes for extending small short term loans of \$50-150 at market rates of interest to groups and individuals to cover working capital have been successfully implemented in Indonesia and in Latin America²⁷. The best known scheme for extending rural credit without insistence upon collateral, to landless householders, particularly women, is the Grameen Bank in Bangladesh.

114. A number of Asian and African countries have begun to follow the experience of the Grameen Bank and experiment with adaptations of its approach. It should be kept in mind that the circumstances and manner in which the GB was initiated and has been developed are rather particular and also that it has not altogether dealt with the problem of high administrative and supervision costs for small loans. Nevertheless these attempts

²⁶ Akrasanee et al, 1983

²⁷ Haan, 1989, p 24

at replication need to be followed and analysed closely. Experience so far appears mixed.

IV.A.2.3 The Role of NGOs

115. It has recently been suggested that credit for RSIE and small industry generally should be made available in as decentralised a form as possible, making more use of non-bank financial intermediaries where possible²⁸. As just indicated, these are generally well represented at the local level and have a comparative advantage relative to the commercial banks in having closer knowledge of individual loanees' circumstances and thus in identifying and screening candidates. An advantage which they share with the banks is of not being viewed by producers as part of government.

116. Reliance on NGOs does not immediately solve all problems, however. Very often, because of having independent sources of funding, they disguise rather than reduce loan administration costs. Where, as is usual, economic objectives are secondary to social objectives, as for instance in providing for youth employment, an efficient, economic approach may not be adopted. Moreover their staff may lack experience in relation to economic activities, being trained rather in social and community work. Nevertheless the cooperation and division of labour indicated between banks and NGOs does offer the genuine possibility of reducing risks and supervision costs and needs to be explored in the context of each situation.

IV.A.2.4 The Role of Groups

117. An important ingredient in the Grameen Bank success has been its use of groups (in the GB case groups of five people, either male or female groups) to serve as mutual guarantors (the group being responsible in case of individual default), thereby reducing supervision costs. This principle could and should be applied to groups of artisan-entrepreneurs and workshop-enterprises within informal sector manufacturing.

IV.A.2.5 SLAs

118. It should be possible also to encourage savings and loan associations (SLAs) or group savings associations, which are widespread in Africa and Asia, to become more involved in short loans for business purposes, including manufacturing, rather than consumption loans of various kinds. One form of these is the Rotating Savings and Credit Associations (RoSCAs), in which loans are paid out to each member in turn and which essentially constitute a system of pooled savings.

119. SLAs also reduce lender's risk by selecting only members in which the group has confidence, and could reduce borrowers' transactions costs involved in travel time and loan request preparation. Their potential, particularly in relation to productive investment, has been very largely neglected by researchers and policy-makers. They have particular potential for women as a target group and are discussed more fully here in a later section.

IV.A.2.6 Credit Guarantee Schemes

120. Credit guarantee schemes in which government or donor funds are used to offer a degree of insurance to commercial banks or other credit agencies are being introduced in a number of countries. An advantage of these is that they involve only 'lubricating' commercial lending institutions rather than replacing them in making loans to SSEs, and need only involve actual use of funds to the extent that there is incomplete repayment by clients. They have underused potential in respect of rural women, in particular.

121. Simply providing guarantees, however, does not deal with the problem of screening clients and of the risks of lending to large numbers of small entrepreneurs; nor does it guarantee, for this reason, that commercial banks will respond to the incentive provided. Thus the credit insurance scheme in Indonesia, ASKRINDO, under which all loans to small borrowers were guaranteed by government to the extent of 75 per cent, led to heavy government financial losses, while a Credit Guarantee Scheme in Malaysia, under which banks were to provide unsecured loans to small industries up to M\$ 30,000 and to reserve 5 per cent of their loan portfolios for agricultural loans, was still not able to reach a sufficient number of small borrowers²⁹

IV.B SMALL-SCALE INDUSTRY DEVELOPMENT ORGANISATIONS (SIDOs)

122. The most common response of governments in the past, as they have come to realise the need for some kind of development effort in respect of small scale or rural industry, has been to establish what might be described as 'general purpose' small industry development organisations (SIDOs) or SMIDAs (small and micro-industry development agencies). They are general purpose in the sense of combining, for example, infrastructural provision through industrial estates, extension and a credit component.

IV.B.1 The Constraints of an Unfavourable Environment

123. While some of these have certainly made some progress, their general performance has been disappointing. The most important reason for this, undoubtedly, is that the macro-economic framework within which the organisations operate have not been consistent with a strategy in which small industry promotion can play a major role, major incentives and other policy instruments being heavily weighted in a contrary direction, towards large-scale enterprise.

IV.B.2 Centralisation

124. In addition, the organisations tend to be centralised and bureaucratic, and to exhibit a strong urban bias, focused as they are at a limited number of points where industrial estates have been established.

IV.B.3 Sustainability

125. A substantial element of subsidy is often involved and the programmes are usually highly dependent on donor funding,

²⁹ Choudhury, 1988, p 58

with problems therefore of sustainability. They are usually government or parastatal-organised, without direct involvement by commercial banks or non-governmental organisations, leading on to common difficulties from non-repayment of loans, arising out of the assumption by borrowers that government funds can be treated as grants³⁰.

IV.B.4 Re-orienting SIDOs

126. What is needed rather than an institution centred on distributed fixed-location estates is a more efficient and effective organisational set-up designed to promote small-scale urban and rural manufacturing enterprises comprising a wide range of different types, concerned with the panoply of possible policy measures towards SSI, including technology and promotion through NGOs, and involved at both national and district levels.

IV.C INDUSTRIAL ESTATES

127. Many small-scale industry promotion programmes, following the pattern of setting aside 'industrial areas' for the benefit of larger enterprises, have centred upon the establishment of industrial estates. This has been the case in Anglophone African countries such as Nigeria, Kenya and Tanzania particularly.

IV.C.1 Urban Models and Rural Contexts

IV.C.1.1 The Question of Location

128. Part of the rationale for the provision of industrial areas for medium or large scale factories is a locational one, a means of attracting firms to locate in the country or region concerned or to stimulate investment by national entrepreneurs who might otherwise be unwilling to venture capital.

IV.C.1.2 The Question of Appropriate Facilities and Rent

129. By and large the problems of rural industry and urban informal sector enterprises are different, and it is not surprising that policies of establishing rural industrial estates on the urban model in the hope of stimulating local development in backward regions have mostly failed. Furthermore, because of their fixed locations - unrelated to the distribution of specific resources - they are not obviously suited to agro-industries or resource-based industries generally, except to the extent they provide access to scarce land, power or water supplies.

130. Nor have they generally been well-designed to meet the needs of micro-enterprises: workshop design has been inappropriately fancy for the needs of the informal sector, leading to unrealistic rent levels; common facilities are often provided with an inappropriate advanced level of equipment, leading to a low degree of utilisation; and the estates have often been inappropriately located, ignoring the need for proximity to markets. This was very much the experience in Kenya

³⁰ UNDP/GON/ILO/UNIDO, 1988, p xxi

for example, where small estates formed the basis of a Rural Industrial Development Programme (RIDP) in the later 1970s.

131. In Malaysia estates developed with reference to large enterprises may be utilised also by the largest of the SSEs. However no provision is made for the very small establishments, "often the ones in most need of assistance as they usually operate in unsatisfactory makeshift structures on land which is rented at high rents with no security of tenure"³¹.

IV.C.1.3 Summary

132. What emerges is that it is essential to design provision of this type separately to suit each category of industry, for large, medium and micro-enterprises.

IV.D AGGLOMERATIONS

133. Very often there is spontaneous development of 'informal sector' agglomerations of workshops and enterprises of different kinds. A recent mission to Kenya has identified these as a potential major vehicle for promotion of the sector³².

IV.D.1 A Widespread but Little Noted Phenomenon

134. Despite the extensive literature on the informal sector, little or no comment has been made regarding the tendency of informal sector producers to cluster in this way, in cities but also in rural towns, sometimes in their hundreds, though it is a phenomenon common to Africa, Asia and Latin America. The fact that this clustering is spontaneous, and very often divided according to particular trades and specialisations, is indicative of externalities perceived by small producers, just as externalities lead to concentrations of large enterprises.

IV.D.2 Advantages Offered by Agglomerations

IV.D.2.1 Facilitating Production and Sales

135. Within these clusters, small groups or associations could be specifically encouraged to develop as spontaneously as possible, on the basis of mutual trust. These might bring advantages, including some hitherto the preserve of large enterprises, such as trade discounts on purchases of materials, bulk orders from wholesalers or from institutional buyers such as schools (a major disadvantage of large number of small, independent producers is their inability on their own to fulfil such orders, especially of standard design and quality), receipt of sub-contracts from large firms, collective savings schemes, and so on.

136. Where small estate facilities are appropriately designed and located to accommodate clusters of 'informal sector' manufacturing establishments, a particular advantage which has

³¹ Choudhury, 1988, p 60

³² IFAD, 1990

emerged, in Kenya and Tanzania for example, is that dealers and other customers come to the cluster to make purchases, attracted by a concentration of workshops providing competition and choice of products.

IV.D.2.2 **Facilitating New Product and Technology Dissemination**

137. Agglomerations could make the task of dissemination of new products and technologies much easier, since once introduced within the cluster, a demonstration effect is likely to be effective in productivity or market terms. Once introduced in large agglomerations in rural towns, an innovation is then likely to be more widely diffused among more dispersed rural producers.

IV.D.2.3 **On-the-Job Training**

138. Their existence is likely to facilitate also the development of apprenticeship schemes: indeed they could provide a very useful environment for training within a market environment. More generally, they could provide for articulation of the felt needs of small producers, negotiating on infrastructural requirements, licensing arrangements, problems of harassment, and even national policy instruments where large enterprises presently have substantial influence.

IV.D.3 **Examples**

IV.D.3.1 **Chambres de Meti ers**

139. Some countries have already moved in this direction. In Francophone West Africa, for example, Chambres des Meti ers have been established in a number of countries. Sectoral small producers' groups were initiated in Mali, Togo and Rwanda, starting with urban areas, in 1982³³. In Rwanda 71 grassroot associations had been organised, 8 intermediate trade federations and a confederation (KORA) in the capital, Kigali. These had negotiated for formal recognition, and an end to police raids, initiated collective savings schemes to provide credit (in Kigali the movement established its own bank), set up raw material schemes and organised training along the lines of established apprenticeship schemes. A major (46 per cent) increase in incomes among the involved micro-entrepreneurs in Kigali is reported. It has been commented that:

"the participatory approach has proved more effective than the traditional spoonfeeding methods, not only because its effects are more durable and the activities it launches can be continued by those directly concerned, but also because the cost per beneficiary is lower and hence the returns on investments are higher".³⁴

³³ Maldonado, 1989. This project was conducted under the auspices of ILO.

³⁴ Maldonado, 1989, p 82

IV.D.3.2 Equipment Production Clusters, Pakistan

140. With reference to Pakistan, where irrigation and mechanisation equipment production is based in the large enterprise sector, a complementary development among RSIE has been documented, organised in clusters, both large and small, in the prosperous agricultural areas of Punjab and the North West Frontier Province, producing agricultural tools and machinery³⁵. As already noted, repair and service workshops for tractors and other equipment are even more widespread, constituting an important backward linkage from agriculture.

IV.D.4 Measures for Assisting Agglomerations

141. With respect to subcontracting from LE to SSE and RSIE, it has been argued that information exchanges are likely to be more effectively operated by industry associations than extension agencies³⁶. Where no previous organisational basis exists, however, some catalytic intervention is likely to be desirable.

142. For micro-enterprises allocation of land for construction of own structures may be appropriate, where land is scarce. A particular advantage of providing simple lockable premises for rent or progressive purchase is that they directly assist the large proportion of 'open air' establishments and more generally allow enterprises to economise scarce funds, using the limited amount they have for working capital, without the problems of repayment associated with cash loans.

143. The importance of infrastructure for rural agglomerations is discussed below.

IV.E INFRASTRUCTURE

IV.E.1 Stemming the Migration of Rural Industries to Urban Areas

144. In a comment on the high concentration of agro-industries in urban areas, it has been argued that in Asia there has been migration of rural and agro-industry, especially of large enterprises, to the urban areas, as a result of the lack of adequate infrastructure in rural locations³⁷. China is taken as a major example of the adoption of a strong, positive strategy in this regard, achieving effective dispersal of industries to rural areas through the development of township enterprises.

IV.E.2 Appropriate Infrastructure

145. Industrial estates are often seen as a means of providing electricity and other infrastructural needs of large or small industry. These might be less suitable for rural industry, which is usually dispersed. Where agglomerations and

³⁵ UNDP/GON/ILO/UNIDO, 1988, p 32

³⁶ UNDP/GON/ILO/UNIDO, 1988, p xxii

³⁷ Choudhury, 1988, pp 39-40

clusters form, it would be appropriate to improve services in these areas - water, power and sewerage, and communication, for instance.

IV.E.3 Rural Electrification

146. Here rural electrification, which makes electric power widely available, is clearly important, and particularly important if it is desired to eliminate special disadvantages which rural industry has compared with urban. The development of metal workshops in rural Asia in particular has been assisted by rural electrification. Even here there are major differences between countries: thus in 1975 just over 26 per cent of rural households in the Philippines were supplied with electricity, compared with almost total coverage in Taiwan³⁸. In Africa coverage would have been 1 or 2 per cent at the most.

IV.F TECHNOLOGY AND PRODUCT DEVELOPMENT AND DISSEMINATION

IV.F.1 Raising Agricultural Productivity by Upgrading Rural Technologies

147. In discussing the macro-policy environment affecting large and small industry it was mentioned that for different reasons research and development is likely to be very much biased towards, if not limited to, large-scale enterprise.

148. It is urgent that measures be taken to redress this balance, because of the interdependence between agriculture and rural industry development. While the latter is directly dependent upon the level of agricultural development and incomes, agricultural productivity can be raised by upgrading rural technologies, with the help of rural industries, particularly as rural population density increases. The productive reciprocity of this relationship is particularly critical for the rural poor.

149. Rural technologies here relate to a number of rural sectors - agriculture and livestock production and processing, energy (e.g. biogas), transport, construction and the production of domestic hardware and other utensils, all of which offer possibilities for rural-based SSI production. A first need, in each economy, is to assess the possibilities existing for the development of appropriate technologies.

IV.F.2 Identifying Activities with Potential for Technological Upgrading

150. More generally, it is important, once macroeconomic biases against the expansion of small-scale industries are removed, that the small enterprise sector is able to respond, so that the boundary between what is produced in larger and in smaller enterprises is shifted in favour of the latter sector, to widen its scope. A question is how best to achieve some degree of technological upgrading of the sector to secure such a response.

³⁸ Stewart, 1989, p 82

151. Not all rural manufacturing activities have much potential for upgrading. It is a matter of selecting those sectors which have the greatest potential. For example, the manufacture of metal products, if linked to agricultural development, has potential for expansion and diversification.

IV.F.2.1 Identifying Promising Markets

152. One important factor in determining which activities would be worth upgrading, is, of course, the market. For example, the development of furniture making, other forms of carpentry, and handcrafted items in general, appears closely linked to quality: while rural market demand for rough, low quality items may become saturated, improvement in product quality and design can allow enterprises to tap into upscale markets otherwise served by urban factory production. This raises the question, again, of training and extension related to improvement of products.

IV.F.3 Examples of Successful Appropriate Technology Application

153. Discussion of the need for appropriate technologies for labour-abundant countries and research into usable appropriate technologies themselves is in at least its third decade. The number of 'success stories' is not as great as would have been hoped, although, according to a recent reviewer, "there are, of course, many"³⁹.

IV.F.3.1 Upgrading the Basic Standard of Living

154. The review mentions the "hundreds of thousands of increasingly inexpensive handpumps" which "have made life infinitely better for poor people in dozens of countries" and "similar numbers" of cheap latrines which have had a major impact on health, together with fuel-efficient stoves (including a Zimbabwean and a Kenyan model), improved bakers' ovens, low-cost cement and other inexpensive, durable building materials, improved potter's wheels, and fishing boats⁴⁰. Specifically, staple food processing equipment for use by women in rural villages is discussed in a later section.

155. In the area of energy, one can point to a project which has installed 10,000 photovoltaic pumps in Egypt, Sudan, Mali and the Philippines⁴¹. Biogas technology combined with use of briquetted agricultural wastes has so far made only limited headway outside China, where it is of considerable importance in the rural areas, and India. In India, however, the number of

³⁹ Smillie, 1991

⁴⁰ Smillie, 1991, p 6

⁴¹ This project was conducted under the auspices of WB/UNDP.

individual family-size biogas plants has increased from 10,000 in 1974/5 to over 800,000 in 1986/7⁴².

156. Some developments have come about as a result of interested expatriate entrepreneurs such as Parry who, based in Birmingham, UK, developed an improved but hand-operated tile-making machine: within 5 years from 1985 the company's annual sales had risen from 50 to 500, with steady export orders from 20 developing countries.

157. However, a few other cases which have attracted attention have been of indigenous entrepreneurs: one such is a former university technician in Ghana who launched his own company under the name of SIS Engineers, initially making small wooden items, such as T-squares, tripods, and rulers, but eventually began to produce complete saw-benches and then wood-turning lathes for sale to woodworkers in Anloga. The following claim has been made:

"The circular saw bench and the wood turning lathe were to the woodworkers in Angola what the Spinning Jenny was to the eighteenth-century British textile industry. Within five years the area had been transformed from a place where carpenters and sawyers produced very basic furniture, into an area half a mile long where lathes and power saws worked from dawn until well after dark. Products which had once been exclusive to large-scale formal sector producers were now being made by micro-entrepreneurs".⁴³

IV.F.3.2 Low-Cost Capital Goods and the Informal Sector

158. This last observation identifies this as an example where a shift of the production boundary between large scale and small scale sectors has successfully been achieved.

159. This is an interesting example of the production of low-cost capital goods within the informal sector. Further examples can be given of such innovations developed entirely through rural craftsmen's independent initiative. Thus local manufacture of a millet mill (excluding the motor) by a village craftsman was observed in Morry Laye Village, Senegal, which was substantially cheaper than the imported version and had the major advantage of being able to process wet grain, satisfying the locally favoured taste⁴⁴. In Kenya, similarly, a recent mission was surprised to find informal sector production of substantial tea processing machinery (again excluding the motor), using local inputs⁴⁵.

⁴² Carr, 1991

⁴³ Smillie, 1991, p 40

⁴⁴ UNIFEM, 1988, p 44

⁴⁵ IFAD, 1990

IV.F.3.3 Dissemination of Product Ideas

160. These are comparatively isolated cases, however, and the challenge is to introduce such products to a more substantial section of producers. It is quite possible that a much wider range of custom-built rural capital goods could be produced within the informal sector in market centres as well as in urban areas.

161. In no country, it would appear, is there any institutionalised search capacity established with the directive of finding items which could be simply copied but produced more cheaply, using local scrap and other materials. This leaves a particular gap in African countries where the light engineering industries are very much less developed, for various reasons, than in Asia.

IV.F.4 Identifying Appropriate Technologies

162. While regional circumstances and possibilities will vary, there also exists an international 'shelf' of appropriate technologies from which it is sensible to draw first. For this purpose individual countries need to set up a search capability, that is a domestic institutional mechanism, with international back-up, capable of identifying possibilities and testing their relevance and adaptability to local requirements. There are just a few appropriate technology institutes in the developing countries, and these are often peripheral, for reasons of staffing and finance.

IV.F.5 Infrastructures for Information Dissemination

163. Once the products to be manufactured have been identified, the next task is to secure their effective production, that is, the dissemination of new productive opportunities. Again, in most countries little or no institutional infrastructure exists for the dissemination of technological knowledge to support small scale industry production.

IV.F.5.1 Rural Industrial Extension Services

164. This is in direct contrast with what is attempted towards peasant producers through agricultural extension and, in the area of welfare support, through community development. As has been noted, there are very few examples of rural industrial extension services⁴⁶. The useful experiences with agricultural extension services could be applied to rural industry. As in the case of the latter, of course, it is important that the service has a directly useful, practical 'message' to offer.

IV.F.5.2 Market Approach

165. It has been suggested that a 'market approach' to appropriate technology dissemination be adopted, under which the

⁴⁶ Carr, 1989

introduction of new technologies takes place via the producers of the equipment or product⁴⁷. Small-scale entrepreneurs here are provided with designs and technical assistance during initial production runs, as well as credit, assistance in marketing, etc. Extension using the market approach could be based on agglomerations or clusters of informal sector producers.

IV.G TRAINING AND ENTREPRENEURSHIP

166. 'Entrepreneurship' may be said to encompass two distinct elements:

- i. the ability to perceive profitable business opportunities;
- ii. the capacity to coordinate and control the work which is being done⁴⁸.

167. The usefulness of training with entrepreneurship thus defined as its goal, needs to be re-evaluated with regard to the particular needs of RSIE.

IV.G.1 Management Skills

168. Management skills might not be a priority need for RSIE. The presumed value of bookkeeping for this category of enterprise has been strongly criticised⁴⁹ and there is no evidence that those enterprises which do keep books perform better than others⁵⁰.

IV.G.2 Training Centres

169. It has been observed that training centres, apart from being urban-oriented, also "usually attract, with doubtful results, new entrants rather than those engaged in RSIE"⁵¹. In Kenya young graduates of village polytechnics have actually been found less acceptable to informal sector entrepreneurs as recruits than those without prior training.

170. It is often assumed that unemployment in developing countries is the result of education which de-emphasises practical skills and, conversely, that training in blue-collar skills will lead straightforwardly into opportunities for practising crafts through self-employment. However, rural skills training centres often show overconcentration on one or two blue-collar skills, such as carpentry, leading to local market saturation.

⁴⁷ Haan 1989, p 56

⁴⁸ Haan, 1989, p 36

⁴⁹ e.g. Harper, 1988

⁵⁰ McKenzie, 1989

⁵¹ UNDP/GON/ILO/UNIDO, 1988, p xix

IV.G.3 Informal Apprenticeship Systems

171. It would be useful to build on what is already in place, by promoting existing informal apprenticeship systems which exist - but are not evenly developed - in all countries and play a key role in skill formation. Evidence shows that the proportions of SSE proprietors who had themselves been apprentices were 78 per cent in Jamaica, 52 per cent in Honduras, 28 per cent in Egypt, 25 per cent in Bangladesh and 90 per cent in Sierra Leone⁵².

172. The above does not imply the adequacy of informal apprenticeship systems. Their effectiveness is subject to the limits of what the master craftsperson him- or herself knows. Moreover, with apprentices often leaving at the end of the training period, frequently to set up in direct competition with the owner, there are disincentives to the provision of such training which may not be compensated by fees charged.

IV.G.4 The Formal Sector as a Training Ground

173. Many of the most successful small entrepreneurs in developing countries learned their skills as formal sector employees before deciding that there were opportunities in self-employment or small enterprise, while those engaged in trade have through their dealings observed shortages or gaps which presented opportunities for manufacturing. This indicates the advantage of a broad policy toward SSEs, encouraging trade and other non-manufacturing SSEs also.

IV.G.5 Training for Entrepreneurs

174. As regards skills training for the individual entrepreneur, this should have a clear objective and preferably be focused on a specific product or technique which has demonstrated potential. Both entrepreneurial and apprenticeship training may need to be complemented by credit provision measures for the purchase of relevant equipment or tools.

175. What is important is to secure the right macroeconomic framework or 'enabling environment' under which small enterprises can thrive, as already discussed. Identification of product possibilities and their dissemination, particularly through SSE 'clusters', represent more direct intervention. This involves entrepreneurs perceiving opportunities through a 'demonstration effect'.

⁵² Fisseha, 1985

V. DEMAND-SIDE PROMOTION MEASURES

V.A PRODUCT RESERVATION SCHEMES

176. Product reservation schemes represent a demand-side intervention, in that the available market is specifically set aside for the benefit of the small scale or household sector. Their use in India for the protection and promotion of such industry has been extensive, and indeed the number of items reserved for small scale industry production in India was considerably increased during the second half of the 1970s.

177. This policy could hold particular significance for the rural poor, and can be supported on income distribution grounds, even at some cost in terms of efficiency, particularly where substantial numbers of people are already dependent for employment or supplementary income on the activities involved.

V.A.1 Potential Problems

178. The absolute exclusion of other enterprises here is artificial. It is likely to prevent organic growth of enterprises which would otherwise have graduated out of the protected category and create a lopsided industrial structure, with very little between the large enterprises at one end and household/cottage workshop enterprises at the other, accentuating the problem of the 'missing middle' referred to earlier. Even the social benefit has been questioned in the Indian case, with reference to the textiles, sugar and light engineering industries⁵³.

179. In general, more positive policies towards household industries are needed, based on efficiency and competitiveness.

V.B SUBCONTRACTING

180. Another demand-side initiative, more capable of playing a significant role in a dynamic industrial development strategy, is the encouragement of subcontracting. This can be considered with reference both to household industry and small industry development.

181. In Thailand, subcontracting to households is widely practiced in some rural areas, particularly around Chiang Mai and in certain specific trades: silk and cotton weaving, ready-made garments, furniture-making, and wood carving. Parent firms in the towns provide materials, sometimes tools and equipment, and pay on a piecework basis.

V.B.1 Advantages of Subcontracting

182. The advantages to the workers are that they are able to work at home, utilising spare time between other activities, including farming, and are provided with working capital.

⁵³ Little, Mazumdar and Page, 1989

183. If the skills required for the activity concerned already exist, substantially, in the region, it will obviously be much easier for potential contractors to find suitable producers for this kind of dispersed production rather than establishing its own factory production line.

184. Subcontracting may be helpful to household producers in securing market outlets in urban areas, especially, and even more in securing export markets for their products. Contractors may have a role, moreover, in product identification or development, identifying products which might sell in overseas markets or new designs which would develop sales.

V.B.2 Cooperative Groups and Associations

185. In some cases it may be useful for households to form themselves into cooperative groups or associations to facilitate dealings with contractors or communication with extension officers in relation to production techniques or product design and quality. An example where such an approach might be relevant is honey production in Kenya where there is wide potential, but development even for the national market, quite apart from the international one, has been handicapped by poor quality and the absence of approved national qualities.

V.B.3 Assessing the Appropriateness of Subcontracting to Household Industry

186. Subcontracting of production to household industry, however, should not be seen as a general prescription. Its appropriateness depends on local circumstances, on the identification of particular products and on household skill capacities. Further discussion of the issues is included in the chapter relating to women in rural industry below.

V.B.4 Subcontracting to Small-Scale Enterprises

187. Subcontracting to independent small-scale enterprises is of a somewhat different nature and is much more extensive, particularly in urban areas. It has played and continues to play a significant role in Japanese industry but positive examples in other countries, for example the garment industry in the Philippines, carpet production in Pakistan, rattan furniture in Indonesia and shibori silk production in Korea, all these in rural areas, may be cited⁵⁴. Its possibilities in other countries have generally been neglected and call for further investigation.

188. China has gone furthest in organised decentralisation of production into the rural areas through the so-called 'one dragon' relationship between urban and rural industrial enterprises, where the 'head' is located in the city and 'body' in rural township enterprises. Here the urban enterprises provide raw materials and product designs to township enterprises

⁵⁴ Nanjundan, 1989, p 54

within the same sectors, while the latter carry out the required processing against a processing fee⁵⁵.

V.B.5 Subcontracting and Infrastructure

189. Subcontracting appears to be a potentially quite important mechanism for facilitating the dispersal of suitable industries into the rural areas. It might, though not necessarily, be dependent upon the existence of good rural infrastructure, particularly roads, without which the costs of decentralised production would be excessive, and electric power (depending on the nature of the production process). Again associations of producers are likely to be helpful, and specifically clusters of producers in one location.

VI. RECOMMENDATIONS

VI.A POLICY MEASURES

1. A country's overall policy framework, specific measures adopted for rural industry promotion, and policies toward the agricultural sector and other parts of the resource base need to be coordinated to ensure consistency.

2. Governments should move toward an unbiased, 'neutral' policy environment, one which does not adversely affect any particular sector of industry.

3. Priority should be given to the removal of those measures which impose serious constraints on small-scale industry, with an eye to redressing, among other things, in Africa particularly, the problem of a bimodal structure of micro- and large-scale manufacturing enterprises, with a 'missing middle' with respect to small-scale industry.

4. Policies regarding imports (tariffs, quotas etc), tax, interest rates, credit, and technical and marketing support, need to be reevaluated in this regard.

5. Import policies favouring capital goods need particular attention for their negative effect on domestic capital goods production.

6. Special measures should be considered for capital goods such as outboard motors and sewing machines, which are essential to RSIE, including and especially micro-enterprises.

7. Tax, interest rate and exchange policies subsidising the cost of capital, should be assessed for their potential negative impact on employment, access to credit, and income and asset ownership for the rural poor.

⁵⁵ Choudhury, 1988, p 51

VI.B Land Reform

1. As the distribution of agricultural assets and income affect rural purchasing power and therefore both the possibility for partaking in non-farm activities and for purchasing their products, land reform measures should be considered for their impact on RSIE development, particularly in regions affected by increasing stratification, and correspondingly, increasing numbers of landless people.
2. Agricultural development strategies emphasizing large-scale estates rather than smallholders, need to be re-thought.

VI.C SUPPLY-SIDE MEASURES

VI.C.1 Credit and Finance

1. There is a need for caution in assuming that capital is the principal constraint for rural small-scale enterprise. The causes of excess capacity in RSIE, where appropriate, should be examined in this regard.
2. As a substantial net flow of savings from rural to urban areas has been observed in some places, indicating the availability of capital, favourable rates of return for rural enterprises need to be displayed to siphon that flow back toward rural investments.
3. It seems desirable to involve commercial banks in credit distribution. Incentives may be provided to banks in the form of higher interest rates for small or unsecured loans, special, subsidised loan funds, credit guarantees, and the loan applicant identification and screening services of NGOs.
4. In addition, groups of artisan-entrepreneurs and workshop-enterprises can facilitate access to credit by serving as mutual guarantors.
5. Savings and loan associations and group savings associations should be encouraged to mobilize more savings and to become more involved in short loans for business purposes.
6. Programmes for extending small short term loans at market rates of interest have been successfully implemented in Asia and in Latin America. However, the attempts in different countries to establish programmes along the principles of the Grameen Bank in Bangladesh, need to be analysed closely. Experience so far appears to be mixed.
7. Credit guarantee schemes should be examined for their potential with regard in particular to rural women.

VI.C.2 Small Industry Development Organisations (SIDOs)

1. The conventional structures and functions of SIDOs need to be replaced by a more efficient and effective organisational set-up designed to promote a number of different types of small-scale urban and rural manufacturing, concerned with the panoply of possible policy measures toward SSI, including technology and promotion through NGOs, and involved at both national and district levels.

VI.C.3 Agglomerations vs Industrial Estates

1. Agglomerations have demonstrated potential as a major vehicle for the promotion of the informal sector in rural areas. For RSIE, it is appropriate to improve the general infrastructure of the area, and services in agglomerations of workshops. The commercial needs of enterprises, as well as costs and benefits, must be carefully assessed in the planning of industrial estates.

VI.C.4 Upgrading Infrastructure

1. The improvement of rural infrastructure in LDCs should be a primary consideration for RSIE development strategies. The possibilities for simplifying daily work, upgrading production methods, gaining access to materials and markets, and thereby the opportunities for increasing income and purchasing power, are affected in particular by the state of the roads, access to communication and electricity.

2. Improving the infrastructure of a rural area would also help stem the migration of rural entrepreneurs to urban areas.

VI.C.5 Technology and Product Development and Dissemination

VI.C.5.1 Technological Upgrading

1. It is urgent that policy biases gearing research and development toward large-scale industries be redressed, because of the interdependence between agriculture and rural small-scale industry development. While the latter is directly dependent upon the level of agricultural development and incomes, agricultural productivity can be raised by upgrading rural technologies, with the help of rural industries, particularly as rural population density increases.

2. For the rural poor, the first priority is to improve the basic standard of living. The examples of successful appropriate technology application in rural areas, resulting in the introduction of such items as handpumps, latrines, and stoves, should be studied for their potential applicability in other regions and circumstances.

3. Areas with potential for technological upgrading in the micro-enterprise sector of manufacturing need to be identified. The metal products sector, for example, if linked to agricultural development, has potential for expansion and diversification.

VI.C.5.2 Identifying and Disseminating Appropriate Technologies

1. The possibilities for producing low-cost capital goods in the informal sector, demonstrated by individual cases of independent innovation by small scale entrepreneurs, should be pursued.

2. An institutionalised search capacity should be established with the directive of finding items which could be simply copied but produced more cheaply, using local scrap and other materials. A domestic institutional mechanism should be capable of identifying possibilities among an international 'shelf' of appropriate technologies, and testing their relevance and adaptability to local requirements.

3. To address the lack of institutional infrastructure for the dissemination of knowledge to support RSIE production, the useful experiences with agricultural extension services should be applied to rural industry.

4. Information exchanges should be developed as a means of promoting subcontracting between large firms and RSIE.

VI.C.6 Training and Entrepreneurship

1. Skills training for the entrepreneur should have a clear objective and preferably be focused on a specific product or technique which can be perceived by entrepreneurs as yielding concrete results.

2. More emphasis should be placed on the promotion of existing informal apprenticeship systems.

3. Both entrepreneurial and apprenticeship training may need to be complemented by credit provision mechanisms for the purchase of relevant equipment and tools.

VI.D DEMAND-SIDE PROMOTION MEASURES

VI.D.1 Product Reservation Schemes

1. Should product reservation schemes for the benefit of RSIE be considered, the absolute exclusion of other enterprise groups should be avoided, as this can have a detrimental effect on the organic growth of enterprises which would otherwise have graduated out of the protected category, thus further exacerbating the problem of the 'missing middle', the group of enterprises between micro- and large-scale industries.

VI.D.2 Subcontracting

1. Subcontracting has a significant role to play in development strategies, and should be considered with reference to household industry as well as other types of RSIE.

2. The advantages of subcontracting to skilled rural workers in favour of establishing a factory production line, should be made known to potential employer companies.

3. In some cases it may be useful for households to form themselves into cooperative groups or associations to facilitate dealings with employer companies or communication with extension officers.

4. Examples of rural small-scale industry subcontracting and urban-rural subcontracting relationships, such as those operating in China, Indonesia, Korea, Pakistan and the Philippines, should be studied for their wider applicability.

CHAPTER TWO DEVELOPING INTER-SECTORAL LINKAGES

INTRODUCTION

190. In the opening chapters of this report, the significance of inter-sectoral linkages for poverty alleviation was emphasized. The following is a discussion of the mechanisms of those linkages, and strategies for setting them in motion.

I. THE SIGNIFICANCE OF INTER-SECTORAL LINKAGES

191. A close relation exists between agricultural production and incomes and the performance of the rural small scale enterprise sector. Indeed, the levels of agricultural production and incomes principally determine the demand for manufacturing goods produced by small scale industries and employment opportunities in trade and services.

192. Here we can distinguish between:

- (a) backward and forward linked RSIE, either processing agricultural products or using products of the natural resource base, and
- (b) demand-linked RSIE which depend on the level of agricultural and overall incomes.

193. There is potentially an important two-way process: development of RSIE may provide a dynamic element in agricultural growth through the provision and dissemination of new technologies and the removal of processing or labour constraints, while an increase in agricultural incomes stimulates the demand for RSIE.

194. To determine the potential for developing inter-sectoral linkages and facilitating the productive reciprocity indicated above, two factors need to be examined:

- i. linkages already in place;
- ii. the present state of rural purchasing power.

II. IDENTIFYING LINKAGE STRUCTURES

II.A. Agricultural Intensification

195. The type of agriculture and degree of agricultural intensification is a large determining factor for linkages. Direct input-output linkages with agriculture may be either agro-oriented (backward) or agro-based (forward). These can be quite rich: in Pakistan, for instance, agro-oriented industries, including fertilisers, tractors, agricultural implements, threshers, tubewells and surface pumps, accounted for 10 per cent of the total value of manufacturing output in 1986-7.

196. Agro-based industries include grain-milling, sugar manufacture, leather tanning, juice extraction, fruit processing,

beverage-making, fish processing, guar gum and tobacco products⁵⁶, accounting for some 40 per cent of manufacturing output.

197. Regarding agro-industry in Pakistan, India and Malaysia, it has been observed that all types of agro-industries - not just small scale - constitute a basic segment of manufacturing industry in all three countries⁵⁷. Within the total, there is obviously substantial opportunity for small-scale and rural industries.

II.A.1 Agricultural Linkages in Africa

198. Backward production linkage effects in less developed countries are in general substantially lower than the forward linkages from agriculture: in Kenya they have been estimated at less than half and in Zambia less than 7 per cent⁵⁸. This reflects the very low level of agricultural technology in Africa as a whole. In Kenya, for instance, the Rural Household Budget Survey of 1981-2 showed that only 12 per cent of rural households owned even a plough.

II.A.2 Agricultural Linkages in Asia

199. In Asia, there is widespread use of irrigation pumps, for example, while the transport sector in the form of trucks and buses, is more developed, generating an elaborate network of metal and welding workshops throughout the rural areas. It is observed that 'in Bangladesh, even in small villages, they employ a remarkable number of lathe machines, drilling bores and electrical welding equipment, representing an enormous potential for further development of small enterprises⁵⁹.

II.B The Significance of a Strong Agriculture for RSIE

200. It follows that the expansion of rural industry in any region must be based on a strong agricultural development strategy, and that the former will not develop without a strong agricultural base. In the case of Africa, it must depend especially on agricultural output growth, together with a progressive increase in the level of agricultural and rural technology. Indeed, a strong agriculture is very much part of the essential 'enabling environment' for rural industry, other elements of which have already been discussed.

III. AGRICULTURAL INCOME AND RURAL NON-FARM INCOME

201. Having obtained an overview of extant agricultural linkages in developing countries, we will now examine the second critical factor for sectoral linkages, namely rural purchasing power. Recent calculations for India have suggested a multiplier of 1.64 between agricultural income and rural non-farm income, a Rs 100 of the former generating an additional Rs 64 of the

⁵⁶ Choudhury, 1988

⁵⁷ Choudhury, 1988

⁵⁸ Haggblade, Hazell and Brown, 1990

⁵⁹ Haan, 1989, p 11

second, 25 per cent of this in the rural areas and 39 per cent in rural towns (Table 13). Data for four contrasted districts of Kenya show value added per person in informal sector establishments to vary widely between districts, reflecting differences in the level of agricultural incomes (Table 14).

III.A. Factors Affecting Agricultural Incomes

III.A.1 Infrastructure

202. Effective rural purchasing power is affected by the density of population and the state of infrastructure, particularly the transport network. In Africa the dispersed settlement patterns with widely scattered homesteads, together with poor road systems, leads to a dissipation of what market exists, and could be expected to substantially reduce the ratio of non-farm to farm income, independently of the latter's level, compared with Asia. The contrast with Pakistan, for instance, is demonstrated by the following description:

"In Pakistan, for example, it is clear that the size and dynamism of the rural small-scale industrial subsector (from which about 10 per cent of the population or about 6 million people earn a living) are attributable to four basic characteristics of the economy. There is a strong and dynamic agricultural base, particularly in the Punjab; there is a long tradition of rural industry; there are local concentrations of population in the most prosperous agricultural areas providing a corresponding concentration of accessible markets for non-farm goods and services; and there is a relatively well-developed transport and trade network (through which, for example, scrap steel from the ship-breaking industry near Karachi is recycled to rural blacksmiths throughout the country"⁶⁰.

III.A.2 Distribution of Agricultural Assets and Incomes

203. As rural purchasing power and therefore RSIE development is contingent in large part on the extent to which rural populations have access to agricultural assets, promotional strategies fostering inter-sectoral linkages need to encourage land reform.

⁶⁰ ILO, 1990, b, p 18

**TABLE 13: RURAL INCOME MULTIPLIERS ACROSS STATES
WITH DIFFERENT AGRICULTURAL INCOME, INDIA**

	Agricultural Income per Agricultural Population 1982/83 (Rupees/ capital)	Change in Non-Farm Income Resulting from One-Rupee Increase in Agricultural Production		
		Rural Areas	Rural Towns (a)	Rural Areas & Rural Towns
Punjab/ Haryana	2560	0.34	0.59	0.93
Karnataka/ Gujarat	1130	0.24	0.40	0.63
Madhya Pradesh/ Bihar	730	0.18	0.28	0.46
All India average	1100	0.25	0.39	0.64

Source: Hazell and Haggblade (1990)

(a) Rural towns are localities between 5000 and 10000 in population.

**TABLE 14: VALUE ADDED IN RURAL INFORMAL SECTOR
ESTABLISHMENTS IN 4 DISTRICTS OF KENYA, 1986**

District*	Mean No. of persons engaged	Gross output per establishment (KShs) per month	Mean value added per est'ment (KShs) per month	Value added per person engaged (KShs) per month
Nyeri	1.50	14401.5	3092.3	2062
Meru	2.06	12936.0	2491.3	1209
Siaya	1.86	10453.7	892.4	480
Uasin Gishu	1.825	9152.0	1026.7	563

* The minimum wage outside Nairobi/Mombasa in June 1987 was KShs 589.

Source: Ng'ethe et al (1989)

IV. STRATEGIES FOR DEVELOPING INTER-SECTORAL LINKAGES

IV.A Integrated Agro-Industry Initiatives

204. Different strategies have been put forward which emphasise inter-sectoral linkages. Some recent studies have argued strongly for an approach based on 'integrated agro-industrial development'⁶¹. While such an approach appears by definition attractive, its real content and practicability needs to be carefully assessed.

IV.A.1 New Crops and Activities

205. The introduction of a new crop or activity presents interesting possibilities. Here crop production, processing, and marketing arrangements may need to be introduced together since, on the one hand, small producers cannot be expected to take up the crop if they do not immediately see where or how it can be processed or marketed and, on the other, processors cannot be expected to invest in productive capacity without reasonable assurances that adequate throughput will be forthcoming.

206. This kind of intervention may be most appropriate where an export market has to be secured or developed simultaneously with increasing output, perhaps in fruit and vegetable production or in handicrafts, though an integrated approach could apply to an entirely domestic activity such as fish production, processing and marketing.

IV.A.2 Regions with Diverse Crops

207. This kind of integrated approach has also been applied to a range of crops within an agricultural region. An example put forward is that of the Farmers Organisation Authority (FOA) in Malaysia, based on 202 farmers' cooperatives and 1039 agro-based cooperative societies, involving a diverse range of activities from crop production to small scale processing. Although the FOA was mainly involved in supplying inputs and marketing produce, it had success with a limited range of programmes related to agro-based enterprises, and it is asserted that this 'brings out the importance of the linkages from production through to processing and distribution necessary to ensure the development of viable small scale enterprises'⁶².

208. While it would be unwise to assume replicability of this experience in other countries and situations, it does offer an example of more systematic development of small scale processing industry, organised on a participatory basis.

⁶¹ See various references to publications by the Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP), particularly those by Rao (1988) and Choudhury (1988).

⁶² Choudhury, 1988, p 73

IV.A.3 EXAMPLES

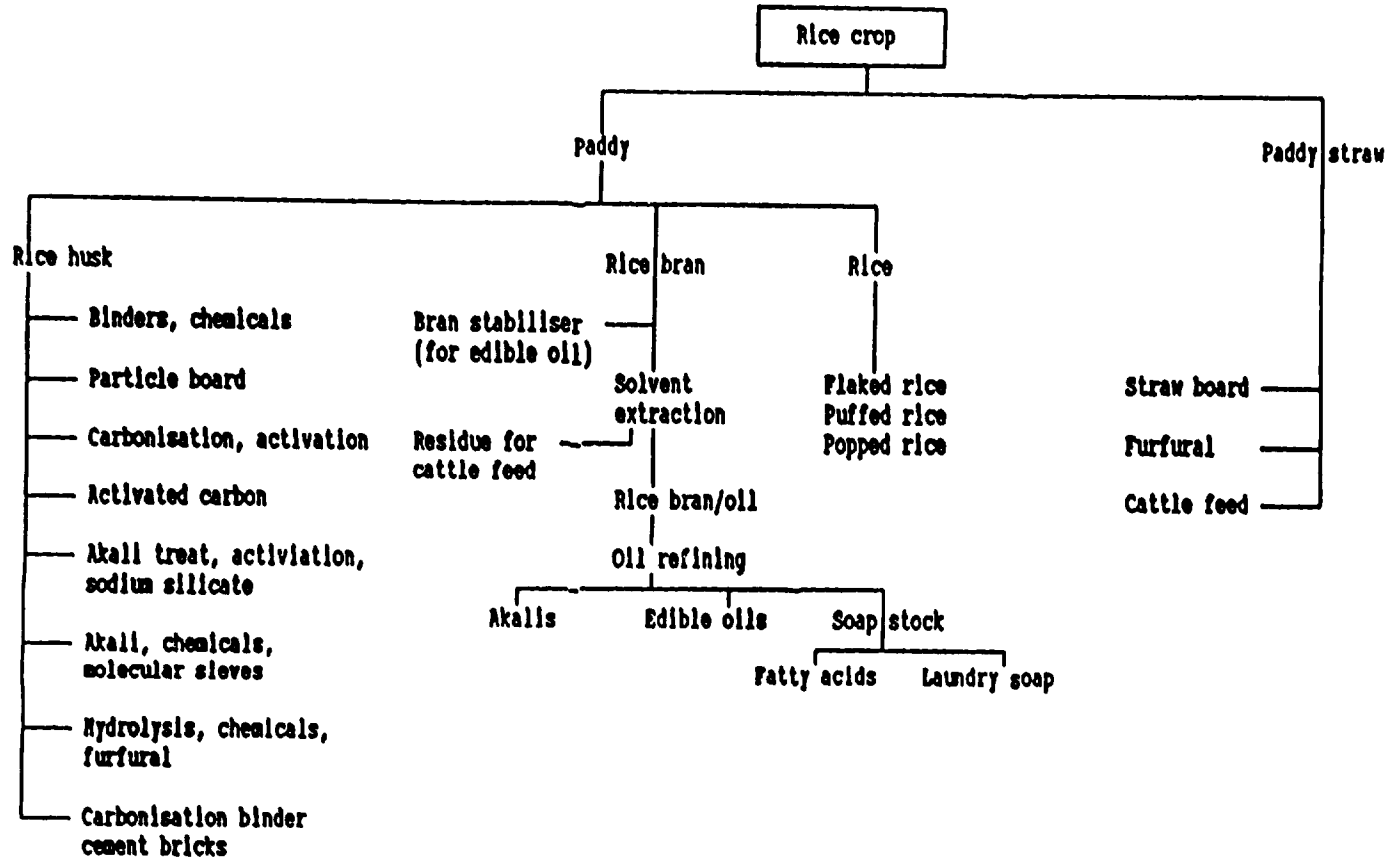
IV.A.3.1 Agro-Based Industries, India

209. The promotion of agro-based industries in rural areas formed part of the Seventh Five-Year Plan in India. Some of these (pickles, spices, dals, bread, biscuits, pastry, rice-milling, confectionery, groundnut and rape seed oil, sago and flour) were reserved for the small-scale sector. A more positive policy has been the involvement of District Industries Centres at the district level in the promotion of resource-based agro-industries, supported by District Rural Development Agencies concerned more widely in rural development programmes.

IV.A.3.2 An Agro-Industrial Complex for Rice

210. A schematic outline of a fully-fledged 'agro-industrial complex' based on rice (Figure 1) is displayed on the following page⁶³. This indicates potential linkages but leaves out the question of economies of scale, size of local markets, and other factors determining economic feasibility, and which might make production preferable in urban locations. Nevertheless, the chart does indicate the possible extent of linked industries and activities for similar situations. The feasibility of rural location of linked industries can be considered at the same time.

Figure 1: Integrated agro-industrial complex for rice



Source: Rao (1988).

IV.B The filière approach

211. Another approach emphasising linkages is that of the filière. This diverges from planning, policy-making and promotional effort, whether directed towards agriculture or industry, which is based on a horizontal perspective. An example of linkages established horizontally would be a small-scale industry development organisation (SIDO) covering a broad range of small scale industries which have no connection other than size.

212. In contrast, the filière approach incorporates a 'vertical' perspective, following the 'filière' or 'thread' from the production of basic natural resource inputs through a whole series of possible linked industries, from the raw materials stage to possible multiple final products.

213. While sectoral planning divides the national economy into broad tranches, such as the agricultural sector, the filière is focused on a much thinner chain; thus filières may be established, for example, for:

- wood-based activities (tree planting, sawmilling, charcoal production, building poles, ox-carts, furniture-making, paper manufacture);
- metal products, including agricultural equipment;
- for livestock (embracing, for instance, animal feed, cattle rearing, meat-processing and leather industries);
- fish production, processing and marketing;
- housing.

214. The filière approach is designed to highlight possible complementarities between manufacturing and agricultural production, as in contract farming for example, and between large-scale and small-scale industries.

215. It offers further safeguards by identifying resource needs and dangers affecting small scale industry and rural household activities.

216. Furthermore, the approach provides a vehicle for incorporating national level policies into district or area planning, and identifying situations in which the small scale, the rural and specific target group interests may be disadvantaged.

217. By means of example, a housing/construction filière is discussed in the next chapter.

V. RECOMMENDATIONS

1. To determine the potential for developing inter-sectoral linkages, and for facilitating the productive reciprocity in rural areas between agriculture and rural small-scale industries, two major factors, namely existing linkages,

and the purchasing power of the rural population, must be taken into consideration.

2. In particular, many African countries suffer from weak backward linkages due to the level of agricultural and rural technology, and command urgent attention as regards the participation of RSIE in strengthening agricultural development.

3. As rural purchasing power and therefore RSIE development is contingent in large part on the extent to which rural populations have access to infrastructure and to agricultural assets, promotion strategies fostering inter-sectoral linkages need to encourage infrastructure development and land reform.

4. Examples of 'integrated agro-industry' initiatives, emphasizing linkages such as production, marketing and distribution, should be examined for their wider applicability, for example, to fish, new crops or a range of crops in one area.

5. The possibility for integrating a 'vertical' strategy such as the filière approach should be explored, as it traces potential inter-sectoral linkages emanating from specific natural resource bases, and in so doing, highlights possible complementarities between manufacturing and agricultural production, and identifies resource needs, and situations, created for example by policies, in which specific target group interests may be disadvantaged.

CHAPTER THREE RURAL HOUSING AND CONSTRUCTION AS A FOCUS FOR LINKED ACTIVITIES

INTRODUCTION

218. In this chapter, we will now discuss a specific example of an industry, namely housing, in terms of promoting productive inter-sectoral linkages.

I. RURAL HOUSING CONSTRUCTION AND POTENTIAL LINKAGES

219. In assessing possibilities for promoting rural industry and non-farm activities, one important connection is seldom made: that with rural housing and construction. Surveys of rural small-scale enterprise generally show woodworking, metalworking and sometimes masonry among other activities such as tailoring and shoe repair. In fact woodworking (carpentry), metalworking and masonry are to an important degree linked to housing and construction in the rural areas and market centres. And a focus on housing and construction, covering also municipal and other buildings, may be a more effective means of developing the separate activities of carpentry and metalworking.

II. RURAL HOUSING AND POVERTY ALLEVIATION

220. A rural housing and construction programme can be justified as a component of poverty alleviation policies both in

terms of the consumer good provided and the employment it generates. Housing or shelter is a basic need, linked directly also with health, poor housing and sanitation being perhaps the most important cause of poor family health in many countries. It is considered also to have important direct effects on labour productivity, providing economic as well as social justification.

221. It might be argued that a rural housing programme could not itself serve as a 'leading sector' because the consumer demand for housing is limited by the level of incomes. In fact such a programme could operate to maximise local demand linkages for artisans of different types and for a wide variety of construction materials and producers thereof. Leakages of demand into imports would be reduced and demand diverted from the products of the large scale, urban sector in favour of local goods.

222. Housing, and rural construction generally, is a resource-based industry, so that backward linkages inevitably extend through a number of stages back to the extractive industry level. There may be further linkage effects into local skills development, for instance in metalworking and light engineering. Positive rural construction policies are important also as a basis for the planning of low-income settlements and rural growth centres as stimuli for rural development, involving more general externalities.

223. In discussing the scope for rural small-scale industry promotion, it was indicated that the main constraint is generally on the demand side, with non-farm activity a direct function of rural purchasing power as determined especially by incomes in agriculture. As a result, supply-side measures such as training more carpenters and metalworkers may be unproductive. Programmes centred on rural housing and construction can provide a further basis for a demand-led approach.

II.A Addressing Basic Needs

224. Rural housing and construction is commonly neglected absolutely and relative to urban low-cost housing initiatives and to rural industry initiatives, which almost always omit direct reference to the sector. One reason is that rural housing is generally assumed to be covered by the 'traditional' system as part of non-monetary output. There is, in fact, widespread ignorance in most countries regarding the state of rural housing and of commercial construction activities in the rural sector.

II.B The General State of Rural Housing

225. An admittedly old comment that "the bulk of rural people .. about 750 million of them .. constituting the poorest among the poor of the world, live under leaky, makeshift, wormy roofs .."⁶⁴ may not be outdated except as regards the numbers affected. It should be emphasised that widely varying situations exist with respect to housing quality, even between different parts of the same country, due especially to different local construction material availabilities. This makes it more important, however, that these needs be systematically assessed in each place.

226. While squatter slums in the urban areas provide a compelling argument for priority, urban and rural housing programmes are not simple competing alternatives: as argued above, rural housing (and construction) is important for rural development and welfare, and a useful component in a rural development strategy. The scale of the problem makes a participatory, community-oriented approach mandatory, and its solution not just a matter of resource allocation.

II.C Rural Housing as a Source of Employment

227. Rural housing and construction is both local resource-intensive and labour-intensive, and thus an important potential source of rural employment. It can specifically assist poverty categories such as the landless, rural youth, and women and children, who are commonly engaged in low-technology brick production and other construction-related activities⁶⁵. The fact that construction activities can be made to dovetail with the seasonal cycle in agriculture means that they can be taken up to supplement agricultural incomes, particularly by those with the least land.

II.D Credit for Rural Housing

228. The possibilities for using a rural housing programme to pursue a demand-led approach to the promotion of artisan industry in the countryside stem particularly from the extension of consumer credit for house construction, additions and improvements. Such credit is also a requirement for targeting benefits to the lowest-income groups. While house mortgages are commonplace in developed countries, with loans spread over decades, no equivalent exists in developing countries outside narrow formal sectors, and certainly not for the rural poor. In fact, housing is a major area in which the rich and urban are subsidised through government or company provision of housing or housing allowances and low real rates of interest on housing loans.

II.E Rural Credit and Thrift Societies

229. In many countries rural credit and thrift societies have shown themselves to be a very effective means of mobilising savings from the poor themselves, especially when targeted towards periodic major items of consumer expenditure such as this. The adoption of an 'evolutionary' or step-by-step approach to rural housing improvement can bring action here within the ambit of even very poor households, and provide a strong incentive to save, and even to work. By providing their own labour or supervision and utilising informal sector artisans and

⁶⁵ A study of resource-based industrial development in Malawi (UNIDO, 1983) found that more than 15,000 people, particularly women and children, were engaged in low-cost brickmaking activities, using off-peak labour, and contributing to the improved attractiveness of not only houses but community buildings in the rural areas. In 1981 some 400 small-scale brickmaking units were producing, by the simplest labour-intensive methods, about 70 million bricks per annum, compared with only about one million machine-made bricks, the latter accounting for less than one and one-half per cent of the combined total.

enterprises, households can make good use of even small loans for the purchase of building materials and labour.

230. A house-related thrift group is also well suited to dealing with the irregular income-earning patterns of most low-income workers, particularly seasonal sales income from agriculture and windfalls due to price fluctuations, permitting temporary surpluses to be put to good use. This can also help to retain rural monetary surpluses and to reduce their tendency to leak towards the urban sector through transfers or expenditure on urban goods.

II.F Encouraging the Small-Scale Informal Sector

231. As indicated above, rural house construction is just a part of the rural construction industry as a whole. Within both rural and urban construction, there is a strong case for encouraging small-scale production units and 'informal sector' entrepreneurship. As others have pointed out, small-scale enterprises are more related to the shelter needs of the low-income population and 'ideally suited to operate in the self-help and low-income housing sector'⁶⁶.

II.G Local Materials vs Imports

232. Large-scale construction enterprises are usually highly dependent on imported inputs and too high-cost for the majority of the population even in urban areas, while small-scale units use local materials to a much greater extent.

233. According to one estimate, the net import cost of building materials by developing countries in 1982, for example, was \$35 billion⁶⁷. In 1984 many African countries were still importing as much as 60 per cent of their building material requirements⁶⁸, much of this unrelated to the needs of the majority of the population.

II.H Backward Linkages

234. Backward linkages from small-scale enterprise house construction generates further RSIE or even cottage industry production of building materials. Substantial cottage industry production in Asian countries has been documented:

"In the Philippines, for instance, cottage industries produce bamboo, bricks and roofing materials on a substantial scale. In Indonesia, small-scale building-materials industries in both rural and urban areas (mostly unorganised labour-intensive cottage industries, run in traditional ways) produce clay bricks, tiles, cement products, lime, bamboo, timber elements, stone, gravel, sand and pozzolana-lime blocks. In Sri Lanka, small-scale and traditional production units produce bricks, country

⁶⁶ UNCHS, 1989, p 11

⁶⁷ UNCHS, 1988

⁶⁸ UNCHS, 1984

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tiles, sand and lime, supplying more than 35 per cent, by value, of the total building materials in the country".⁶⁹

III. APPROPRIATE TECHNOLOGIES IN RURAL HOUSE CONSTRUCTION

235. Rural housing can also stimulate linked activities such as construction materials production using labour-intensive appropriate technology methods. Such methods applied locally can adumbrate nationally to major savings of foreign exchange for imported construction materials and in use of scarce capital funds. Research on low-cost housing and construction materials and techniques has been going on for several decades now and it is worth asking just how far this has taken us in terms of immediately implementable technologies.

236. Available information on this is extremely piecemeal and we can only give a few additional examples. With respect to building blocks, research in India on low-cost binders has been successful in leading to the establishment of small and mini-plants for cement production producing rice-husk-ash cement and progress has been made with lime/lime-pozzolana production units. Fly-ash and soil-cement blocks (fly-ash is an industrial waste made from coal), with reduced import content, have been successfully introduced in a low-cost housing development in Lusaka. As part of a rural housing improvement project in Busia, Kenya, technical training was provided to artisans and women's groups in the production of stabilised soil-cement blocks and fibre-cement roofing tiles. The blocks, which could be retailed at half the price of stone or concrete blocks, apparently rapidly gained popularity in the area⁷⁰. Fibre-concrete roofing technologies have been introduced in a number of countries, and appear to have been quite widely adopted in Malawi, for example⁷¹.

237. The consensus, however, is that dissemination from research institutes remains comparatively limited and it is even asserted that the technologies are "almost nowhere being used on any successful scale"⁷². Reasons suggested for this include adherence to inappropriate building standards, large-scale production interests, and lack of a market-oriented approach by the research institutes, as well as inherently more genuine limitations such as cost, affecting the possibility of replication outside the institute or project area.

IV. A RURAL HOUSING/CONSTRUCTION FILIERE

238. The 'filière' approach to planning described earlier is quite appropriate to national planning and policy-making with regard to housing and construction. A national housing filière separating into urban and rural components would require a holistic appreciation of the housing and construction sectors involving:

⁶⁹ UNCHS, 1990, p 16

⁷⁰ UNCHS, 1989, p 16

⁷¹ UNCHS, 1988, p 24

⁷² UNCHS, 1989, p 11

- income and demand in the urban and rural sectors;
- distribution of promotional effort between the two;
- choices and perhaps complementarities/linkages between large-scale and small-scale production units in building or building-materials production;
- incidence of taxes and subsidies as between large and small units;
- special regard to the needs of informal sector and cottage industry producers.

IV.A Identifying Constraints and Opportunities

239. This approach is well-designed to identifying present and potential constraints as well as opportunities and choices at different points.

240. The quality of rural housing is very much a function of locally available materials. Opportunities may take the form of designing or introducing appropriate technologies and products suitable for low-income populations in particular rural areas. Training needs at different points will emerge and be identified for action.

IV.B Combined Approaches: Maximizing Possibilities for Linkages

241. There are important advantages in combining a vertical perspective such as the filière offers, with the area-based, 'horizontal' perspective of small-scale rural industry organisations which take scale as the criterion, covering a wide range of different small-scale manufacturing activities rather than linked sets of activities and production units.

V. POLICIES AND ACTIONS FOR RURAL HOUSING AND CONSTRUCTION

242. It is evident that considerable potential exists for expanding rural non-farm activities that are linked directly or indirectly to rural housing and construction, with benefits to the rural poor both in terms of basic needs provision and in terms of employment and income generation.

V.A Collecting Data

243. An initial handicap is lack of data: accurate and reliable information on the actual shortage and condition of rural housing in each of the developing countries is generally not available, while information on the rural small scale and informal sector construction industry is excluded from both surveys of large scale sector construction and surveys of rural small scale industries, which are often limited in coverage to market centres and towns.

V.B Assessing Affordability

244. In order to redirect housing and construction efforts at least partially towards the rural low-income population, a prerequisite is a proper assessment of the demand structure and

an assessment of costs in relation to affordability. This evidently requires the adoption of non-conventional and innovation methods, including step-by-step 'evolutionary' approaches. Even incremental house improvement programmes require careful judgement. It is reported that a loans programme for rural housing improvement in Busia District, Kenya, found that even small loans could be an 'impossible burden' for the beneficiaries, due to very low and declining incomes⁷³.

V.C The Enabling Environment

245. The importance of an 'enabling environment' for the development of small scale industry was emphasised above. First, the kind of biases in macro-economic policies which have affected small-scale industry development in general have existed also in the construction sector, and should be reconsidered.

246. In relation to rural housing/construction, a basic component of a supportive environment would be the identification of a wide range of the raw materials required by local entrepreneurs, self-help builders and building cooperatives through land-use maps pinpointing suitable deposits or (wood) species, and the grant of access to these.

247. Innovative methods of disseminating information to those small scale producers already engaged in production who may particularly lack the means of acquiring such information or action on it may be needed.

248. Measures for granting concessionary rights may need to be simplified.

249. For renewable resources, measures to encourage local small-scale private commercial production may be needed. Once low-cost building materials in the locality are identified and available, substantial progress may then be possible on a self-help basis, supported only by the judicious injection of credit to supplement own savings mobilised by groups or associations of producers.

VI. CASE STUDIES: LOW-COST HOUSING PROGRAMMES

VI.A THE MALAWI RURAL HOUSING PROGRAMME

250. The preparatory phases of this programme were initiated in 1981, with substantial operations commencing in 1985/6. The programme has since generated a great deal of international interest. In 1986 the programme won the World Habitat Award given by the British-based Building and Social Housing Foundation. It has also been cited for its contribution to the United Nations International Year of Shelter for the Homeless.

251. The aim of the programme was to assist rural families to improve their housing conditions, using affordable, low-cost building materials. To achieve this, three objectives were set for the first, preparatory phase of the programme:

⁷³ UNCHS, 1989, p 16

- i. the development and improvement of indigenous building materials;
- ii. the development of low-cost construction techniques and simple house designs capable of extension in stages;
- iii. the training of local artisans in the production of improved local building materials and their use in house construction, and their subsequent establishment as independent entrepreneurs in either house construction or building materials production.

252. A critical component was the provision of loans to rural families from a Revolving Fund, established with government and later UNCDF and UNDP funds, with a subsidiary credit scheme providing small business loans to the artisans trained under the programme.

VI.A.1 Features of the Programme

VI.A.1.1 Principal Low-cost Building Materials

- hand-made sisal-cement roofing sheets and tiles.
- improved sun-dried mud blocks for internal walls.
- hand-made concrete grills and door frames.
- ant/damp-proof metal strips.
- waterproof cement paint.

VI.A.1.2 Specific Construction Techniques

- paved brick floor slab construction instead of mass concrete.
- combination of sun-dried mud block and burnt brick wall construction.
- mud mortar joints and sisal fibre/dambo sand wall plaster.
- application of concrete grills in window openings and wire nails instead of hinges for window shutters.
- use of gum poles on load-bearing cross walls instead of sawn timber and trusses.
- fixing roofing sheets and tiles with hook wires instead of screws.
- applying waterproof paint on sundried mud block walls and fair-faced brick wall finish.

VI.A.1.3 Features of Basic House Design and Construction

- they should take account of the traditional living patterns and behaviour of the community;
- they should be simple and easy for local builders and the families themselves to build, and make maximum use of locally available materials;
- they should be amenable to a step-by-step approach involving successive additions as money becomes available ('the house that grows'), starting with a 20 metre square room and store, with provision for a further living room, bedroom(s) and verandah.

Extras include a small water storage tank and improved brick pit latrine (VIP). According to the number of

additions the price range is from US \$250 to \$725 (with three bedrooms and a kitchen).

VI.A.2 House Loans

253. House loan recipients are expected to construct their own houses, following basic training by RHP centre staff members, or to employ local builders and artisans, who are also offered training in the recommended techniques.

VI.A.3 House Improvement Loans

254. Under the credit scheme, any rural household may apply for a house improvement loan covering basic building materials of any kind, up to a maximum (in 1988) of MK 1000 (US \$400). Repayment is over 10 years with a one-year grace period and 12 per cent rate of interest. A 10 per cent deposit is required. No collateral is necessary and the house is not under pledge, repossession being considered socially impractical in Malawi. Loan repayments are collected through the ordinary postal agencies of the national Post Office Savings Bank (POSB).

VI.A.4 Business Loans

255. Artisans applying for business loans must have been trained under the Rural Housing Programme training scheme and be recommended by the Technical and Credit Divisions of the RHP. In order to facilitate training and technology diffusion RHP centres were established.

256. There have been some areas of weakness:

- i. there has been a high rate of staff turnover, and too much use of untrained personnel, especially at the lower level;
- ii. there have been problems of supply in respect of required building materials;
- iii. most importantly, the credit/financial accounting arrangements have been rather loose. A 1989 evaluation mission identified a basic lack of an accounting system as a fundamental problem. Loan collection is left to the Post Office, which sends only delayed and often incomplete information to RHP regional and district officers, who need to go out to locate loanees at their homes, something which is severely constrained by lack of transport. If this were available, administration costs of checking and administration would be high. Thus not much pressure is put on people to repay. It is surprising, perhaps, that repayment of amounts due was as high as 67 per cent at the end of 1988. By this time loans of MK 1,700,000 (\$680,000) had been approved and MK 790,000 (\$316,000) disbursed, only a small proportion of this was due for payment. Consideration is being given to the organisation of groups as vehicles for credit distribution, which should facilitate collection.

VI.A.5 Summary

257. The programme has successfully demonstrated that decent rural housing can be provided at a reasonable cost in a low-income country and within impoverished rural areas. The number of benefiting families is anticipated to exceed 2500 in 1992. It has been extended to all 24 districts of Malawi. Already by mid-1988 200 people had been trained in the application of construction techniques.

TABLE 15: FAMILIES BENEFITING UNDER MALAWI'S RHP

Year	No. of benefiting families
1984	13
1985	78
1986	300
1987	400
1989	750
1990	1500
1991	2000
1992 (est)	(2500)

VI.B Housing Association for Antyodaya ('the poorest of the poor') Families, Vedchli Intensive Area Scheme, Velod District, Swat, Gujarat, India

258. This programme provides a concrete example of a housing assistance programme incorporated into an integrated rural development programme aimed at employment generation and income-augmentation for the target group.

259. The programme has been targeted towards a specific underprivileged poverty group, demonstrating that a housing-related programme can be effective even in a particularly challenging area. Velod is populated predominantly by a tribal population, accounting for about three-quarters of the people in the district, while in Swat even in 1971 a third of the population was landless⁷⁴.

260. The housing programme was based upon a system of credit and thrift societies, Gram Rachna Trusts, which were formed in 24 out of 40 villages in the Velod taluka, to collect savings for housing improvements. Two NGOs were involved in a major way, one in planning and implementation and one in funding. Under the scheme, loan entitlement was proportional to a family's accumulated savings according to a 'savings x 4 rule'.

261. This community approach was highly successful, 90 per cent of beneficiaries repaying regularly in one village cited as

⁷⁴ UNCHS, 1986

an example⁷⁵, despite the low level of incomes and the absence of any fixed repayment schedule, the village organisations providing an apparently effective self-regulating mechanism. Specific additional benefits derived from bulk purchase of tiles for roofing, and a village brickmaking component which generated useful income as well as producing bricks at 60 per cent of the market price.

VI.C Land-buying Companies in Mathare Valley, Nairobi

262. Mathare Valley is a famous uncontrolled settlement in Nairobi. Although this is an urban programme, it shows the advantages and power of self-help and community-based approaches within the non-formal sector which could apply also in rural areas.

263. The approach is based on local squatter-area residents forming land-buying companies, which then mobilise financial resources for home construction on the acquired plots. The companies have become a major form of housing delivery in the area: under one company as many as 7000 low-cost housing units were constructed within a year. For the most part the companies allocate plots to their members who, in turn, mobilise resources for building their own dwellings, upgrading the building over time. The members may carry out the construction work themselves or hire informal sector artisans.

VI.D Mathare North Site-and-Service Scheme, Nairobi

264. In the area provision was made to allocate 1500 serviced plots to local squatters. A number of designs for dwellings were prepared by the Housing Development Department of the Nairobi City Commission and loans issued for the acquisition of building materials. What is interesting is that the project generated its own informal building materials market, with petty traders dealing mainly in gum-poles, transported from neighboring areas but also districts as far away as SW Kenya. To procure supplies of the main walling material, residents often hire lorries from petty entrepreneurs who have established transport businesses within the project site, or buy directly from suppliers moving around the sites with lorries loaded with stones or sand. The project generated employment for lorry drivers, loaders and stone-dressers, as well as artisans.

265. Success appears to have been based on the satisfaction of a strong need and an appropriate response, the use of informal sector suppliers, and freedom of action by the house owners within a framework of light controls. These elements could be applied in the rural context and would be even more appropriate there where, due to dispersed locations and low incomes, top-down planning is even more difficult to apply.

VI.E The Million Houses Programme, Sri Lanka

266. In this programme, the government provided serviced land, loans, technical information and training, while most families employed local semi-skilled labour to assist with house construction, or contracted out the work to local small-scale construction companies. A large proportion supplied the building

⁷⁵ UNCHS, 1986

materials themselves and hired labour. There was a useful employment generation effect in that the skilled artisans themselves took on more helpers as required, these also gaining experience in house construction⁷⁶. This provides an example of a demand-led approach to employment generation centred upon housing as a focal point.

VII. CONCLUSIONS

1. An initiative such as a rural housing programme should be explored for its potential for providing a much-needed commodity as well as providing employment, and necessitating a participatory, community-oriented approach, encouraging linkages with woodworking, metalworking, masonry, and the production of construction materials from natural resources. In this connection, the formation of rural thrift and credit societies should be encouraged.

⁷⁶ UNCHS, 1989, p 13

**PART THREE
REACHING THE MOST NEEDY**

**CHAPTER ONE
WOMEN IN HOUSEHOLD AND RURAL SMALL-SCALE INDUSTRY**

INTRODUCTION

267. Women cannot be said to be a 'category' of the poor, because they cut across all groups of impoverished peoples. In every group, they constitute in large part the poorest of the poor. Women often confront the severest restrictions for taking survival into their own hands, such as cultural gender biases, and constraints on time. It cannot be more evident that endeavors toward poverty alleviation must be concerned specifically with conditions affecting women, and with finding measures for addressing them.

268. Yet, in terms of women's income-generating projects as a whole, it has been pointed out that very few project documents include even a rudimentary feasibility study of the activities to be promoted, while most evaluation reports 'provide only superficial and partial analysis on income-generating components'⁷⁷.

269. This chapter proposes practical measures for developing the resources and addressing the needs of women.

I. THE ROLE OF NON-FARM ENTERPRISE

270. Rural small-scale industry is of considerable importance to rural women in developing countries, providing a supplementary source of income for, on average, an estimated 50 per cent of women engaged in agriculture⁷⁸. In Asia and Africa, food processing, garments and crafts (including the products of basic household items such as mats and baskets) are amongst the most common activities. In Africa, beer-brewing is also very widespread, and in some places brick-making is an important additional, seasonal source of income.

II. CONSTRAINTS ON WOMEN'S INVOLVEMENT IN INCOME-GENERATING ACTIVITIES

271. Women are subject to a number of specific constraints affecting their involvement in income-generating activities. These refer to location, marketing, labour, technology, social and cultural factors, education and skills, and access to credit.

272. The locational factor which stems from the difficulty of working away from the household or village is a considerable one. It should not be underestimated, considering the real opportunities for RSIE involving women.

⁷⁷ Soares, 1991, p 1

⁷⁸ UNDP/GON/ILO/UNIDO, 1988, p xxii

III. HOUSEHOLD INDUSTRY

273. A sub-category of rural industry is household or cottage industry, carried out actually in the home. A substantial proportion of women's participation in rural small-scale industry is to be found in this category, and much, though not of course all, of household industry is conducted by women.

274. Because of the significance of household industries for women's income, all concerned with rural industry development are urged to focus attention onto their potential and the constraints they confront.

III.A Characteristics of Household Industry

III.A.1 Resource Base Orientation

275. A feature of household industry, as can be seen with respect to Thailand (Table 16) is that much of it is resource-based, important activities in this case including the processing of agricultural products, bamboo products, mat-making and silk and cotton weaving. A similar picture is evident in Kenya (Table 17).

TABLE 16: NUMBER OF FARM HOUSEHOLDS REPORTING SPECIFIED NON-FARM ENTERPRISES IN N AND NE THAILAND, 1982

	Household reporting activity (N = 424)	
	Number	% of households
Noodles	30	7.1
Ox carts	6	1.4
Silk weaving	43	10.1
Cotton weaving	65	15.3
Wood products	17	4.0
Bamboo products	93	21.9
Hand tools	36	8.5
Processing agric products	109	25.7
Cement products	3	0.7
Mat making	62	14.6
Pottery	20	4.7
Bricks	12	2.8
Lacquerware	2	0.5
Other products	50	11.8
Commerce	54	12.7
Services	60	14.2

Source: O Kiatying - Ungsulee (1981)

**TABLE 17: INVENTORY OF RURAL
NON-FARM ACTIVITIES, KENYA 1977**

Activity	Per cent involved	
	households %	population %
Total resource extraction	12.1	13.0
Wood cutters etc	3.7	3.5
Hunters	2.6	1.3
Fishermen	2.2	5.2
Other	3.5	3.0
Mfre of food, beverages, tobacco	22.3	16.4
Pombe brewing	13.4	7.7
Dairy products	2.3	1.4
Other drinks	2.1	1.4
Tobacco products	1.7	1.8
Other food etc	2.7	3.1
Mfre of plant & animal fibre products, apparel	12.4	10.9
Reed, rush & sisal products	5.7	5.1
Weaving, knitting etc	3.1	2.2
Tailoring	1.2	2.4
Other products	2.3	1.2
Mfre of wood products	14.0	11.5
Charcoal making	6.1	4.0
Gourds and calabashes	2.7	2.2
Furniture	1.5	1.6
Building poles	1.3	1.4
Other wood products	2.3	2.3
Pottery products	1.7	1.1
Mfre of metal products	1.2	1.0
Construction	4.6	5.2
Wholesale/retail trading	9.3	10.9
Repairing (vehicles, bicycles, machinery, furniture, household utensils, shoes, clothing, watches)	5.4	7.8
Total Transport etc	4.1	3.7

Bus, taxi & transport operators	2.3	1.9
Water carriers	1.0	0.9
Other transport etc	0.8	0.9
Accommodation, food and beverage services	4.6	5.7
Financial and business services	1.2	0.1
Community, social & personal services	5.2	10.8
Traditional healers	2.1	2.5
Other community services etc	5.9	8.3

Source: CBS, IRS National Household Survey, 1977

III.A.1.1 The Issue of Resource Availability

276. Resource availability is therefore an important factor. A survey carried out in Thailand⁷⁹ found shortages of wood, reeds, clay, charcoal and yarns affecting variously the production of ox-carts, silk, cotton, wood crafts, bamboo products, mats, pottery and bricks.

III.A.1.2 Local vs Imported Supplies

277. Basic inputs into household industry belong to two categories:

- i. local natural resources;
- ii. agricultural production and supplies imported from urban areas.

278. Planning for the development and processing of natural resources should be coordinated with the potential and needs of household industries in the area, thus promoting inter-sectoral linkages and mutual support among rural industries.

III.B Disadvantages of Home-Based Work: The Potential for Exploitation

279. Home-based workers are in a hyper-competitive labour market and are dispersed and difficult to organise. The 'putting out' system in particular has displayed distinct exploitative tendencies.

280. A study of rural carpet weavers in Turkey reveals that earnings per weaving day in workshop production, independent household production and under the putting-out system were

⁷⁹ Charsombut, 1983

respectively TL 675, 434 and 307. Earnings under putting out thus amounted to only 45 per cent of the first figure⁸⁰.

281. At the same time daily earnings from weaving were not far short (about 90 per cent) of the alternative wage rate, and wage work was plentiful in any case in only 8 per cent of the villages surveyed. It is possible, therefore, for home-based activities to contribute in an important way to rural household viability and to poverty alleviation. It is important to investigate and monitor the conditions under which any such system operates to ensure fairness and eliminate abuses.

III.C Advantages of Home-based Work

282. The advantage of home-based work is, of course, that it can be combined with agriculture, and dovetailed seasonally to accommodate agricultural labour allocations, and with domestic obligations.

283. A study on weaving, for example, reveals important contributions to subsistence. Weaving work in the non-agricultural season limited indebtedness, allowed purchase of agricultural inputs and provided a hedge against crop failures.

284. Divorced or widowed women often lose rights to land and become dependent on weaving: female-headed households as a whole on average secured half the level of agricultural income per adult. Young women in landless households are often full-time weavers, "supporting their households through weaving", whilst most young men are unemployed⁸¹.

285. The contribution to poverty alleviation is demonstrated by the fact that the share of weaving income in total household income was highest for the lowest income category (49 per cent), falling systematically to 28 per cent in the highest income category. Women weavers with children under 5 produced annual outputs 30 per cent greater than those without.

286. Secondly, weaving permitted household accumulation in many cases. The existence of two or more full-time weavers was decisive in enabling accumulation to take place: accumulated funds could be used to purchase cultivable land, or to buy the agricultural equipment needed to become a sharecropper, or even to buy a truck or minibus for business purposes. Weaving was therefore "not necessarily associated with rural poverty and rural proletarianisation"⁸².

IV. HANDICRAFT INDUSTRY

287. The above is an example of home-based industry which is based, not only on materials in this case, but on labour-intensive skills applied to a craft product. The household or small workshop mode of production has specific opportunities compared with factory production in relation to

⁸⁰ Berik, 1987

⁸¹ Berik, 1987, p 63

⁸² Berik, 1987, p 67

craft goods. For this reason handicraft production has been singled out in different countries as a means of augmenting rural incomes, particularly among near-landless households.

IV.A The Marketability Bottleneck

288. The most common problem has been marketability, success depending usually on access to export markets or at least a major local tourist market. In the absence of such access, projects centred on promoting crafts have not generated interesting levels of income or achieved significant coverage of target populations. In a number of cases, following active investigation and promotion, specific products have been found to have good export market potential. Prior assessment of this potential should, however, be a prerequisite for launching even pilot projects.

289. This underlines the necessity of a comprehensive approach to assistance strategies. Improving technology and production skills are clearly not sufficient on their own, and need to be combined with aspects of marketing, including product development with regard to market trends.

V. LOCAL RESOURCE-BASED ACTIVITIES

290. The advantages for rural women of agriculture-related and local-resource based activities are clear. Being tied to the household, however, will aggravate marketing problems and reduce access to markets outside the local area. Special assistance in the area of marketing is likely to be required.

V.A Auxiliary Agricultural Production

291. Where obvious opportunities for village or household-based manufacturing by women do not exist, it may make more economic sense to concentrate on what might be called 'auxiliary agricultural production'.

292. These are agricultural activities which use very little land, such as intensive vegetable production, stall-fed cattle, pigs or poultry, aquaculture or beekeeping. Such activities may be of particular relevance to the target group of the near-landless or to women-headed households which are handicapped in relation to extensive agriculture with its heavy labour demands.

293. In dry or semi-arid areas, local purchasing power may well be insufficient to sustain manufacturing activities, which may be further handicapped by distance from markets, whereas activities such as goat-rearing can contribute to improved family subsistence and provide some cash income, as well as being in line with labour availabilities and expertise.

294. Interest in promoting possible manufacturing activities should not therefore divert attention from exploring possibilities of agricultural intensification and income-generation in these areas.

V.A.1 Examples

V.A.1.1 Production Credit Project, Nepal

295. By way of example, in the Production Credit for Rural Women Project in Nepal, though the profit margin in weaving was found to be low, a reasonably good income was obtainable in goat raising, while vegetable production was also a major activity⁸³.

V.A.1.2 Jaunpur, India

296. In a project for female-headed households in 4 villages in Jaunpur, India, goat rearing and pig production were found, similarly, to offer important sources of income as well as liquid assets for sale in times of distress, while potential was identified in the areas of beekeeping, rabbit rearing and fish farming⁸⁴.

V.A.1.3 The Brazilian Northeast

297. The encouragement of goat-rearing, supported by cactus fodder production (yet another inter-sectoral linkage possibility), was recommended as an important component of a survival strategy for the rural poor in the Brazilian Northeast, one of the poorest areas in the world, which is subject to droughts approaching Sahelian proportions⁸⁵.

298. This was likely to make a much more substantial impact than rural industry in terms of numbers of poor rural households assisted in a dry region where a substantial proportion of the population is affected, and purchasing power which might support rural industry is low.

VI. THE ROLE OF TRADE AND SERVICES

299. It is an essential fact that manufacturing accounts for only a portion of rural non-farm activities as a whole. Therefore it is a critical factor for all development efforts that flexibility be maintained both in attitude and approach toward identifying potentially viable income generating activities.

300. Trade and services, including catering, account for larger proportions. In the case of women, trade is a particularly important component in many cases, in all regions of the developing world. In reference to Africa, for instance, it is observed that "rural women are traders almost everywhere. In some West African countries up to 80 per cent of the labour force in all trade is female; rates for fish traders can be even higher"⁸⁶.

⁸³ Soares, 1991

⁸⁴ ILO, 1989, p 3. This project was conducted under the auspices of SEWA.

⁸⁵ Livingstone and Assuncao, 1987

⁸⁶ FAO, 1984a

VI.A Flexibility in Credit Schemes

301. It is noteworthy that in Bangladesh under the Grameen Bank, one of the most widely canvassed rural development projects, with substantial women's participation, a large proportion of credit disbursed to beneficiaries, mostly landless or near-landless, was for intensive livestock activities or trade, rather than manufacturing. As a general policy, it is absolutely correct to allow credit for distribution across the range of activities which appear to provide good economic rates of return, whether these are in manufacturing or non-manufacturing, and where the activities are able to provide the basis for repayment.

VII. COMBATTING MARGINALISATION

302. While many non-farm activities are marginal in nature, in other situations they can make a considerable difference to household income. Thus a rural survey of Begumganj, Bangladesh, found that women participating in rural industries received on average an annual income equivalent to US\$ 237, comparing very favourably with a per capita national income in Bangladesh in that year of \$ 140, while the average monthly expenditure of such households on nutritious food items was very much higher than for other families⁸⁷.

303. Ironically, some projects geared specifically to women have reinforced their marginalised position. Some women's projects, particularly for young women, have focused on rather peripheral activities, tie-dye, for example, in some African countries. These often provide quite marginal incomes for a comparatively small group of people.

304. It seems much preferable to 'mainstream' women by:

- i. adopting major programmes which benefit both men and women, such as garment making or rural construction;
- ii. by adopting policies and programmes which benefit women in large numbers and significant activities, such as food processing.

VIII. ECONOMISING WOMEN'S TIME

VIII.A Labour Availabilities

305. Attempts to promote new manufacturing activities among rural women may fail if they are not consistent with household labour availabilities and in particular do not take account of the multiple roles played by women, each generating their own labour demands. Collection of basic information on labour availabilities should be a prerequisite for any new project.

VIII.B Economising Time by Identifying and Addressing the Most Basic Needs

306. Since many women currently spend 2 or 3 hours a day each on fuel gathering and water collection, as well as on domestic food processing, quite apart from the demands of

agricultural production, it may be that measures to ensure fuel supplies or reduce distances to water should be considered before anything else.

VIII.B.1 Fuel

307. Introduction of new sources of energy such as biogas, producer gas and solar energy is an obvious possible solution in the first case. Partial success has been achieved in a few countries and efforts in this direction need to be redoubled and factors affecting replicability carefully considered. The fact that developments are mostly still limited to the experimental stage after a considerable lapse of time reflects the minimal amount of backing, national and international, that these efforts, often left to NGOs, have had. More concerted and, above all more systematic and coordinated efforts are needed by the national and international agencies, if any breakthrough is to be made. An international workshop to review progress and consider the possibilities for and obstacles to practical implementation of new energy technologies is called for.

VIII.B.2 Water

308. With respect to water supplies, it may be commitment to people-oriented rural development that is lacking, rather than new technologies. Thus in the Brazilian Northeast, commented upon earlier, the rural population has been left for decades during the constant dry periods and droughts to scratch around for water supplies, using dug wells and other means of their own, while huge government expenditures have been devoted to the construction of immense dams not well designed to provide for rural needs⁸⁸.

VIII.B.3 Village Storage Facilities

309. While improved village storage facilities are important and should be an integral part of any rural housing programme, if successful they are also likely to have a major effect in economising women's time. A recent pilot project for developing on-farm storage in Western Kenya claimed to have reduced post-harvest losses of maize by as much as a third⁸⁹. Since women are heavily involved, and in a labour-intensive way, in maize-growing for subsistence as well as sale, such losses also represent a quite major wastage of female labour, affecting availability for other activities. This project, subsequently adopted on a wider national basis, is also interesting for having pursued a filière approaching by generating linkages through the small-scale growing of trees for building poles and the training of artisans for the construction of model stores. Improvement of village storage structures has been a useful component of many rural development programmes in different countries in Africa (Cameroon) Asia (India, Pakistan) and Latin America (Peru).

VIII.C Choosing Appropriate Technologies

310. The upgrading of technologies needs to be approached with great care, for not all labour-economizing devices are

⁸⁸ Livingstone and Assuncao, 1992

⁸⁹ The project was conducted under the auspices of USAID.

ultimately useful. In some circumstances the introduction of new technologies may have negative distributional consequences. Thus the introduction and spread of Engleberg mills, replacing traditional manual rice hullers (dhekis) in Bangladesh, destroyed the only means of earning a living open to large numbers of landless women relying on this for part-time wage work⁹⁰. Clearly it is important to assess the possibility of distributional consequences of this type in advance.

VIII.D Economising Time and Promoting Income-Generating Activities

311. These time economies are of value in themselves for reducing drudgery, thus improving the quality of life. Whether they result in non-farm activities being taken up or expanded obviously depends on a variety of factors.

312. It has been suggested that the most favourable circumstances are where women are already engaged in a successful income-generating activity or where ongoing activities exist in the village⁹¹. Thus in a project in the Baguineda region of Mali, labour economies resulting from the introduction of mechanised grain milling allowed a number of women to take up green bean production for export, previously carried out exclusively by male producers⁹². In a different situation, in Burkina Faso, where there were not the same opportunities, less than 30 per cent used the time to take up additional income-generating activity, and this mostly in petty trading.

313. Thus the imagination of project planners should turn itself to potential activities, keeping in mind the economic and practical advantages of those which seek to address the needs of the people meant to produce them, and which concentrate, correspondingly, on local resources.

IX. APPROPRIATE TECHNOLOGY AND FOOD PROCESSING

314. The most obvious area in which new technologies might be introduced to the benefit of women is in the widespread daily business of food processing, where inefficient pounding methods have been traditional and where grinding mills have been shown capable of saving 2 or 3 hours a day of women's time. A hydraulic press can reduce the time spent pressing grated cassava from 1-6 hours using traditional methods to 1-2 minutes; an Agrico palm pounding machine can reduce the time pounding palm kernels from 5-6 hours to 40 minutes for equivalent loads, and a centrifugal palm kernel cracker can reduce time spent crushing 10 kg of palm kernels from 3-6 hours to 1.5-2 minutes⁹³.

IX.A The Role of Groups

315. A major factor limiting the introduction of these technologies relates to their effective scale of operation, which

⁹⁰ UNIFEM, 1988

⁹¹ Herzog, 1986, p 11

⁹² Herzog, 1986

⁹³ ILO, 1984

precludes their employment by individual households and requires group organisation or control by individual larger entrepreneurs.

316. Women's groups have very evident advantages as a vehicle for delivery assistance. In processing activities, where economies of scale exist, women have not found it difficult in most rural societies to work effectively as a group. This obviously permits the participation potentially of all women villagers, including those with fewer assets and less income.

317. Groups also allow women to circumvent intra-household obstacles to independent pursuit of economic activity, and can permit technical and other progress to be made in respect of those sectors such as food production, processing and marketing or the raising of small stock in which women are the main participants.

IX.B Examples: Women's Groups and Food Processing Projects

IX.B.1 Coconut Oil Processing, Ghana

318. In a pilot project for women's group processing of coconut oil in Nsein, Ghana, using a diesel-engined copra grater, output per person-day increased sevenfold compared with the traditional method, and members' incomes were increased by 50 per cent, part of which could be re-spent in oil production development⁹⁴. However, initial capital required was \$ 320,000. This was secured by village group members' contributions from savings, supplemented by a private loan. The group divided itself into a number of separate groups of 5-20 women for actual use of the machine.

IX.B.2 Gari Processing, Ghana

319. A very similar example is described of a women's group pilot project in Antoa, Ghana, for gari processing using SIS diesel-powered equipment⁹⁵. This reduced processing time for all the stages from peeling to grating by two-thirds, while producing a more satisfactory product, but investment costs were 90 times as great as the traditional process.

320. As in the previous case, it was observed here that the mechanisation of processing permitted expansion of agricultural production by those involved, and even by non-members who were able to pay to have their cassava processed. Here members were able to market gari locally and transport quantities to market centres in the region. This demonstrates the very great potential value of replacing inefficient, time-consuming traditional processing of staple foodstuffs while at the same time raising different questions regarding the possibility of stable, effective organisational forms of ownership and operation.

IX.B.3 Palm Oil Processing, Ghana

321. Again, a TCC mechanical pounder for palm oil processing was introduced via a women's group at Essam, Ghana, in 1984, and

⁹⁴ ILO, 1987c

⁹⁵ ILO, 1987b

proved very effective and manageable by the group. Labour time for pounding was reduced by two-thirds. Investment costs, however, were 20 times the traditional method⁹⁶.

IX.C Technologies Involving Smaller Economies of Scale

IX.C.1 Fish Smoking, Ghana

322. Not all such technologies involve substantial economies of scale. Improved KAGAN ovens for fish smoking were introduced in 1984 in 4 locations along the Ghana coast, which could be operated by groups of just 2 or 3 women and involved investment costs just 3 times those of the traditional process. The new oven required just one-twentyfifth of the labour input per ton compared with the old method⁹⁷.

IX.C.2 Animal-Powered Mills, Senegal and Burkina Faso

323. Trials with animal-powered cereal mills in Senegal and Burkina Faso began in 1984⁹⁸. Larger diesel-powered grinding mills were likely to exhibit excess capacity if introduced to some of the smaller villages in the area, and there was also a problem of the level of charges where villagers were relatively poor. Animal-powered mills, in contrast, had very low operating costs and were affordable by most rural women and were found to develop heavy customer demand. Since individual women were able to use their own animals in fulfilling their requirements, they were able also to enjoy a degree of independence in running the facilities without reference to the men in the village, and much wider access to mechanised milling was achieved.

IX.C.3 Sorghum Milling, Botswana

324. A somewhat similar appropriate scale issue appears in sorghum milling in Botswana, where the Rural Industries Innovation Centre designed and developed an intermediate-sized sorghum de-huller, of a scale which would be suitable for adoption by smaller villages. Following its introduction in 1980, it achieved a significant response, 36 having been sold by 1985, with another 11 ordered⁹⁹. Savings of 4 person-hours a day in processing line are reported, but nothing regarding the organisational side of mills which are designed to satisfy whole-village requirements.

IX.D Promoting Appropriate Technologies

325. Given the rather dramatic savings in labour productivity achievable in these examples, clearly capable of replication in a wide range of food processing situations in different countries, it is important to ask why the different types of equipment in question have not become the norm. In the case of specially designed appropriate technologies, the existence of a 'missing link' between designers and manufacturers

⁹⁶ ILO, 1985a

⁹⁷ ILO, 1985c

⁹⁸ Herzog, 1986

⁹⁹ UNIFEM, 1988

has been suggested, with manufacturers skeptical about embarking on production of devices not yet established in the market: 'as a result, many equipment prototypes of potential benefit to the rural people have never left the laboratories'¹⁰⁰.

326. Many of these items of equipment are not difficult to fabricate and could be produced in rural informal sectors. As indicated earlier, there are cases of informal sector entrepreneurs independently fabricating their own processing machinery for sale. Again, systematic assessment is required at the national level of what real, marketable opportunities exist, followed by a much more active promotion of their production and distribution through the informal sector.

IX.E Summary: Mechanised Food Processing

327. In many cases, as demonstrated, economies of scale associated with the introduction of mechanised processing methods will require either cooperative or capitalistic organisation, even if in both cases all villagers can benefit as consumers. It does not appear to have been systematically investigated as to whether this has proved an obstacle, and more generally there appears to be little systematic follow-up over a period of years. It is suggested that regular reviews of potential and experience with new technologies, covering technical, economic and organisational aspects, as well as distributional effects, be carried out through appropriately-designed regional institutions which should have strong national government support and involvement. Such institutions could serve as vehicles for the injection of expertise from the appropriate international agencies. More R & D and stronger dissemination efforts should be applied where improved technologies, including hand-operated equipment, can be managed by individual women or small groups.

X. WOMEN'S GROUPS AND CREDIT AND THRIFT SOCIETIES

328. Most encouraging has been progress in the area of credit and thrift societies. These have evolved in many cases from a strong foundation of traditional Rotating Savings and Credit Associations (ROSCAs) which have existed for a long time in many different countries in different continents.

329. The advantages are manifold:

- i. They serve as mechanisms for mobilising savings, as well as channelling credit, providing incentives to save because of the opportunities thrown up for useful 'lumpy' consumer or investment expenditures;
- ii. They are suitable for the poorest subsets within the community, because the principle is one of combining savings to generate an investment or social fund. Through the procedure usually adopted of group guarantees (the group as a whole guaranteeing repayment of loans to individuals) the problem of lack of collateral, even land, among the poor especially is circumvented;

- iii. Groups can be used by aid agencies who may offer credit guarantees to banks or manufacturers and wholesalers providing trade credit;
- iv. Where high costs of small loans administration have been a major reason for lack of interest by formal sector lending institutions to become involved in small loans distribution, particularly in rural areas, they offer a mechanism for lowering administration costs.

X.A The Repayment Record

330. Rural women appear to be particularly conscientious when it comes to savings procedures and meeting repayment schedules, and seldom default on repayment. The repayment rates achieved of 95 - 100 per cent are in marked contrast to the majority of small enterprise loan schemes¹⁰¹. It is worth making brief reference to some examples which will support this assertion on repayment discipline but also bring out certain other common features or tendencies.

X.B Examples

X.B.1 Women's Group Development Project, Bangladesh

331. The Women's Group Development project in Bangladesh¹⁰², was specifically directed towards female-headed households and, using a savings and loan revolving fund, was able to achieve repayment rates of 90-100 per cent.

X.B.2 Progreso, Peru

332. Progreso¹⁰³, a microenterprise credit programme in the barrios on the outskirts of Luna, although obviously a peri-urban rather than a rural programme, made more than 40,500 loans over a five year period to some 3500 microentrepreneurs, more than half women, and 1978 groups, 80 per cent women, and achieved repayment rates, without imposing collateral requirements, of about 95 per cent in both cases¹⁰⁴. However, the loans, in the range of \$ 50-100, were mostly for working capital and, in the case of women, included a high proportion for the purposes of trade.

X.B.3 Perwari Cooperative, Western Sumatra

333. One of 27 women's cooperatives in Western Sumatra, mostly credit and savings cooperatives, Perwari is located in Bukitinggi in the highlands. It is of some interest as a younger women's cooperative. Each member makes an initial savings contribution of Rp 5000, and subsequently monthly contributions of Rp 1000, and is entitled then to credit up to a maximum of 3 times her accumulated savings. The society is self-run, administration costs are low, and repayment rates up to 1989 were

¹⁰¹ Mavrogiannis, 1991, p 56

¹⁰² This is a BSCIC-FHH project.

¹⁰³ This programme was started by Accion Comunitara Peru.

¹⁰⁴ Otero, 1987

97 per cent¹⁰⁵. A limitation is the level of funding, limited to short term credit, usually repayable in 10 monthly instalments, and useful therefore only for working capital. Most of the members are described as small traders, using loans, other than consumption loans, for trade rather than manufacturing.

X.B.4 Fedecredito, El Salvador

334. The Federation de Cajas de Credit (Fedecredito) in El Salvador is interesting, again, for its success in extending credit, in collaboration with a government agency, to some of the poorest households in the country, 86 per cent of whom are specified as women¹⁰⁶. The 'grupos solidarios' conform to the standard model for such groups by providing joint guarantees for individual loans, a group representative collecting weekly payments from members for collection by the Credito agent. Though the women involved are an evident target group for poverty alleviation, operating tiny, home-based businesses providing over 50 per cent of the household's income, high repayment rates are being attained.

X.B.5 Credit for Shops, Kenya

335. An illustration of the capacity of women's group organisation to serve the purposes in really low income-group situations is offered by a current project in Central/North Kenya at Wamba in a semi-arid pastoral area¹⁰⁷. Pastoralist women here successfully established dukas (shops) in a remote pastoral area on the basis of credit from wholesale distributors in Wamba secured by a credit guarantee. Despite the apparently unfavourable circumstances and lack of both formal education and experience of commerce by the pastoralist women, 100 per cent repayment rates were being achieved, with particularly important benefits from the use of the dukas for the commercial distribution of animal vaccines.

X.C Summary: Women's Groups and Credit

336. From the examples cited above, there seems to be no question that women's groups constitute a viable and widely successful vehicle for reaching poor rural women, for addressing problems of intra-household distribution, and for targeting specific vulnerable sections such as female-headed households and young women.

337. A limitation is the level of savings and credit which can be mobilised, which is generally low. However, a group's access to funds can be substantially expanded if supporting agencies can offer credit guarantees to allow them to acquire further fixed or working capital.

338. A related comment is that the groups are generally able to provide only for working capital and that this is more often for trade than for rural industry as such (excluding village food processing as described earlier) or for establishing new

¹⁰⁵ Mavrogiannis, 1991

¹⁰⁶ Lycette, 1984

¹⁰⁷ IFAD, 1990. This is a GTZ-assisted project.

projects. An immediate question which should be considered in all cases is whether more progress could be made in incorporating rural industry projects among group-supported activities. Hopefully, once a sound organisation has been established, its scope can be broadened in such directions. This is likely to be easiest where rural industrial activities are being carried on by a significant number of households already. A particular requirement, certainly, would be to train more women as credit officers in order to develop such possibilities.

XI. RECOMMENDATIONS

XI.A Women and Poverty

1. As women cut across all groups of impoverished people, and often count among the poorest of the poor, endeavors toward poverty alleviation must be concerned with examining and addressing conditions specifically affecting women.

XI.B Addressing Constraints on Women's Involvement in Rural Enterprises

1. The specific constraints on women - including location, marketing, labour, technology, social and cultural factors, education and skills, and access to credit - should serve as a point of departure for identifying and/or creating viable income generating activities.

2. The 'locational factor' in particular, which stems from the difficulty of working away from the household or village, signals the need for identifying activities within those borders.

XI.C Household Non-Farm Enterprise

1. The promotion of household industries should command particular attention in rural industrial development strategies, because of their significance for women's income.

2. Home-based workers are particularly vulnerable to exploitation; promotion schemes and subcontracting arrangements need to be monitored to ensure fairness and eliminate abuses.

XI.D Handicraft Industry

1. The household or small workshop mode of production offers specific opportunities in relation to craft goods. Successful handicraft promotion needs to combine the improvement of technology, production and design skills with aspects of marketing, including product development with regard to market trends, and access to the targeted markets.

XI.E Local Resource-Based Activities

1. Even if women are involved in conveniently located activities, being tied to the household will aggravate marketing problems and reduce access to markets outside the local area; therefore special marketing assistance is likely to be required.

XI.F Auxiliary Agricultural Production

1. Agricultural activities using very little land, such as intensive vegetable production and rearing of certain types

of animals, should be considered particularly for the near-landless and woman-headed households.

XI.G Non-Manufacturing Activities

1. Because manufacturing accounts for only a portion of rural non-farm activities as a whole, it is important not to exclude non-manufacturing activities for development considerations, and to allow credit for distribution across the range of activities which have good economic rates of return.

XI.H Combatting Marginalisation

1. Women should be 'mainstreamed' by adopting major programmes which benefit both men and women, such as garment making or rural construction, and by adopting policies, programmes and specific activities which benefit women in large numbers.

XI.I Economizing Women's Time

1. Since many women spend 2 or 3 hours a day each on fuel gathering and water collection, as well as on domestic food processing, measures to ensure fuel supplies, reduce distances to water, and facilitate the processing and storing of food, should be priority considerations.

2. A review of the possibilities for and obstacles to practical implementation of new energy technologies is called for.

XI.J Food Processing

1. The most obvious area in which new technologies might be introduced to the benefit of women is food processing.

2. Given the considerable savings in labour productivity achievable with new food processing technologies, it is important to ask why the different types of equipment have not become the norm.

3. Many of these items of equipment are not difficult to fabricate and could be produced in rural informal sectors. Systematic assessment is required at the national level of what real, marketable opportunities exist, followed by a much more active promotion of their production and distribution through the informal sector.

4. As a major factor limiting the introduction of those technologies relates to their effective scale of operation, in some cases precluding their employment by individual households, either group organisation or control by individual larger entrepreneurs will be required.

5. With respect to projects involving the promotion of group organisation around new food processing technologies, there appears to be little systematic follow-up over a period of years. It is suggested that regular reviews of potential and experience with new technologies, covering technical and organisational aspects, be carried out through appropriately-designed regional institutions which should have strong national government support and involvement. Such institutions could serve as vehicles for

the injection of expertise from the appropriate international agencies.

6. More R & D and stronger dissemination efforts should be applied where improved technologies, including hand-operated equipment, can be managed by individual women or small groups.

XI.K Women's Groups, Savings and Credit

1. Women's groups should be promoted, as they have a number of very evident advantages in bringing assistance to women, with the progress of credit and thrift societies particularly encouraging. They should be used particularly to reach the poorest sub-sets within the community.

2. Supporting agencies should offer credit guarantees to enable groups to gain access to further fixed or working capital, in order to expand upon the savings and credit they have been able to mobilize.

3. As groups have generally been able to provide only for working capital, and this often for trade rather than rural small-scale industry as such, possibilities for incorporating rural industry projects among group-supported activities should be investigated.

4. More women should be trained as credit officers in order to develop such possibilities.

**CHAPTER TWO
REFUGEES IN DEVELOPING COUNTRIES AND
RURAL SMALL-SCALE INDUSTRY**

INTRODUCTION

339. That refugees face dire poverty and very specific problems is self-evident. Some 14 million people were living in refuge in 1990, with 80 per cent located in developing countries. Their number tripled between 1976 and 1980, and had doubled again by 1990 (Table 18). At present, the number of people seeking and living in refuge world wide is once again on the rise.

**TABLE 18: CHANGES IN THE GEOGRAPHICAL DISTRIBUTION
OF REFUGEES, 1976 - 1990**

	1976	1980	1985	1990
Total (no.)	2772000	8229300	11613300	17209722
Shares (%)				
Africa	43.3	44.5	29.9	34.7
Asia	6.5	28.1	48.8	43.6
S America	4.0	2.2	2.9	7.0
Oceania	1.8	3.8	0.8	0.6
N America & Europe	44.4	21.4	17.6	14.2

Source: UNHCR, Geneva

I. REFUGEES IN DEVELOPING COUNTRIES

340. The distribution of refugees is concentrated in particular countries (Table 19) and regions within countries. Many of these host countries and specific host populations are themselves extremely poor.

I.A The Need for an Area-Based Approach

341. This means that the countries specifically involved, particularly the lowest-income asylum countries, need offsetting development aid and, since helping the target group will require the cooperation of the host country and of local area populations, that aid should be directed to the locality, including local populations, and not confined to refugees as an isolated group.

342. In particular, aid will need to be directed towards expanding infrastructure, both economic and social, to increase absorptive capacity. These considerations, in turn, point to the need for an area-based approach towards the absorption of refugee populations, embracing the whole population in the refugee-affected area.

**TABLE 19: WORLD DISTRIBUTION OF REFUGEES
JANUARY 1, 1991**

	No.	%
Africa	5388968	31.2
Malawi	926725	5.4
Sudan	780000	4.5
Ethiopia	772764	4.5
Somalia	460000	2.7
Zaire	416435	2.4
Guinea-C	325000	1.9
Ivory Coast	272284	1.6
Bwundi	268403	1.6
Tanzania	265184	1.5
Asia and Oceania	638827	3.7
China	287226	1.7
L America & Caribbean	1198880	6.9
Mexico	356400	2.1
Costa Rica	278000	1.6
Honduras	237100	1.4
Guatemala	223377	1.3
SW Asia, N Africa, Middle East	7632799	44.2
Iran	4174401	24.2
Pakistan	3255975	18.9
Europe & N America	2402263	13.9
TOTAL	17261737	100.0

Source: UNHCR, Geneva

II. IDENTIFYING VIABLE INCOME-GENERATING ACTIVITIES

343. There is a critical need to identify suitable income-generating activities for refugee populations, whose presence in the host countries is frequently extended and even permanent. These contribute to easing their adjustment, and to mitigating dole situations resulting in 'donor fatigue'. The question to be considered here is how far once could look to the category labelled 'rural industry' for the appropriate activities.

III. ABSORPTION INTO AGRICULTURE

344. In developing countries as a whole the predominant activity is agriculture. One would expect political dislocation to displace rural populations in particular and, indeed, the profile of refugees is mainly rural, with agricultural backgrounds. One should therefore look first to the agricultural sector for their absorption and to providing refugee families with at least a minimum of land.

345. It would be difficult to absorb an entire refugee population, or even a large proportion, into non-farm activity, due to demand constraints, whereas the same limitation does not apply in agriculture where a household's first concern is the satisfaction of its own basic consumer wants.

346. It is not only that the most immediate need of refugee households is to ensure their own food supplies: their failure to do so could add to an already substantial foreign exchange burden associated with food imports which are increasing in volume in many developing countries, particularly in Africa.

IV. NON-FARM OPPORTUNITIES

347. Apart from basic agricultural activities, it would be important to identify any possible non-farm activities for supplementary income purposes. The guidelines recommended in this report for identifying and promoting employment and income-generating opportunities for the rural poor should be applied to people living in refuge as well.

V. COOPERATIVE MEASURES

348. Local area plans are very often prepared by single bilateral or multilateral funding agencies, in conjunction with national government officials, generally not drawing extensively on knowledge and expertise residing in specialist agencies. In the case of refugee-affected areas where action is needed across a number of fronts relating to farm and non-farm activities, which together will raise the absorptive capacity of the area, there is need for coordination among the relevant agencies under which each can contribute to an agreed assessment of what are feasible and practical short term and long term measures. How best to achieve this coordination at different stages of planning and implementation should be a matter for discussion.

349. Coordination is also needed to influence the distribution of financial and development effort in such a way as to recognise the extra claims of refugee-affected areas. In other cases, where the position is one of ongoing development programmes or projects, there may be need to introduce a specific refugee dimension, perhaps 'piggy-backing' refugee components to existing projects.

VI. Case Study: The Revolving Fund Scheme for Refugees in Eastern and Central Sudan¹⁰⁸

350. This scheme is worth examining as a substantial programme focused on a major area of refugee influx in Eastern

¹⁰⁸ This project was conducted under the auspices of ILO.

and Central Sudan, which had seen 1.3 million refugees from 4 different countries by the end of 1987. The scheme illustrates some of the difficulties encountered by such a programme.

351. The focus of the scheme was a Revolving Fund for the distribution of loans, using the group approach (maximum 20 members). The size of the Fund in 1986, when the first disbursements were made, was US\$ 356,200. 85 per cent of loans were to be distributed to refugees in the settlements for the development of income-generating activities, and 15 per cent among local artisans. In addition a Marketing and Technology Advisory Service, centred on an expatriate advisor, was established to provide advice towards upgrading techniques and products. By the end of 1987, 96 loans had been distributed, with a mean size of \$3862.

352. While successes have been reported¹⁰⁹, particularly in securing substantial increases in income levels in many activities, closer examination of the evidence available suggests a need for caution in formulating conclusions.

VI.A Inherent Problems for Extension Services

353. The programme depended on close supervision of the client groups. The project area is vast, embracing 28 refugee settlements and 6 towns. There were major problems in supervising the activities promoted due to lack of adequate transportation, and it was reported that only one out of five extension officers were mobile in the field. There was also a problem of security for officers carrying sums of money.

354. Distance and other physical factors created difficulties in procuring raw materials, equipment and marketing of finished products while dispersed, small-scale production makes it difficult to achieve economies of scale in supply and distribution. These factors are not likely to be unusual in refugee-affected areas.

**TABLE 20: PROJECTS FINANCED BY
THE REVOLVING FUND**

Small-scale manufacturing	71
(Metal workshops	13
Carpentry	6
Tailoring, embroidery	15
Spinning & weaving	8
Handicrafts	9
Leather, rubber products	10
Other	10)
Services and trade	3
Agricultural production and processing	11
(Grinding mills	5
Other	6)
Animal husbandry-related	11
(Dairy	2
Cheesemaking	2
Sesame oil extraction	2
Other	5)
TOTAL	96

VI.B Operating Costs

355. During the period 1984-86 in the Sudan, capital and operating costs budgeted for the programme amounted to \$1,039,606 compared with a revolving fund of \$ 359,794. Other schemes providing extension services to widely scattered artisans, such as that based on Rural Industrial Development Centres (RIDCs) in Kenya in the mid-1970s, have also exhibited heavy extension costs relative to the turnover of those assisted.

VI.C Coverage of the Target Group

356. While the project period evaluated was comparatively short, the small number of project loans, 96, covering 446 beneficiaries, 1922 including dependents, represents a low coverage of the target group, and compared with 2500 immediate loan applications received and a refugee population of 1.3 million.

VI.D Recovery Rate

357. Although reference is made to an impressive 96 per cent loan recovery rate, this refers only to payments due at that time, amounting to just over 12 per cent of total disbursed loans. Whether the recovery rate was maintained subsequently is unclear.

358. The estimates given for the mean net monthly income of the projects before and after loan receipts of \$ 10,830 and \$ 69,610 respectively are not convincing, particularly if the difference is compared with the mean loan size of \$ 3862.

VI.E The Potential Role of a Rural Small-Scale Industry Scheme

359. The problems discussed above could perhaps be mitigated in part by a coordinated rural small-scale industry development effort. The cultivation of the Doum palm in the Eastern region, for example, seems to show promise¹¹⁰. Since the Doum palm's fibre and wood by-products provide a source of income and employment for, it is stated, as many as 100,000 people, positive interventions here could certainly achieve significant coverage in terms of persons benefitted. The potential for developing activities through inter-sectoral linkages should be explored.

VII. RECOMMENDATIONS

1. Many countries providing asylum to refugees are themselves poor. Therefore aid should be directed to the locality as an area, including local populations, and not confined to refugees as an isolated group.

2. As political dislocation displaces rural populations in particular, and as the predominant activity in developing countries is, generally, agriculture, the agricultural sector should be looked to first for the absorption of refugees.

3. The guidelines recommended in this report for identifying and promoting employment and income-generating opportunities for the rural poor should be applied to people living in refuge as well.

**PART FOUR
CONCLUSIONS AND RECOMMENDATIONS**

**CHAPTER ONE
CONCLUSIONS**

I. Characteristics of Rural Poverty

1. Poverty is measured most directly by the extent to which proportions of the population are lacking in basic needs, particularly food, shelter, health and education.

2. Rural poverty target groups include poorer smallholders, the near-landless and landless, pastoralists, certain 'ethnic indigenous' groups, small/artisanal fishermen, refugees, women-headed households, and youth. The poverty of these groups is most directly connected with lack of access to resources.

3. In viewing the circumstances which at once constitute and exacerbate poverty, it is evident that an effective strategy for poverty alleviation incorporates measures and activities which aim to improve these circumstances.

II. The Role of Rural Small-Scale Industry in Poverty Alleviation

1. Rural households generally tend to support themselves through a combination of farm and non-farm income, with the latter playing an important role across the board.

2. There is a comparatively low rate of 'graduation' in size among micro-enterprises, but the sector expands through an increase in the number of establishments. The presumption should be that rural industry whatever scale contributes positively to the rural economy, directly or indirectly, unless specific detrimental impacts can be identified.

3. More generally, the aim should be to maximise employment in efficient rural non-farm activities through a mix of rural industry types.

4. Rural small-scale industry has a particular role to play in poverty alleviation. Among other advantages, it is labour-intensive, and can be geared to specific target groups.

5. Rural small-scale industry can play a role in supporting technical change in smallholder agriculture, which is critical for offsetting the effects of rapid population growth on farm size.

6. Further, rural small-scale industry can contribute to basic needs directly as well as through generating income and purchasing power, by:

- a. economising labour to release it for income generation elsewhere;
- b. raising productivity in agriculture;
- c. creating income-earning opportunities outside it.

III. The Employment and Income Context of Rural Regions

1. The salient fact emerging from this discussion is that the promotion of rural small-scale industry, particularly with regard to its specific use in poverty alleviation, cannot be dealt with by focusing on a 'rural industry sector' in isolation. Its development, indeed, depends on a number of inter-sectoral linkages.

III.A What Constitutes Rural Small-Scale Industry?

1. In order to effectively develop and promote the inter-sectoral linkages which constitute the economic base of a rural area, and which are the income network of the rural poor, it is necessary to redefine what kinds of activities are encompassed by the designation 'rural small-scale industry'.

III.B Agriculture as the Basis for Rural Industry

1. The most important determinant of rural small-scale industry expansion is the growth of agriculture, together with fisheries and forestry. Among other possibilities, agriculture provides forward linkages, such as processing industries, and backward linkages, associated with the manufacture of agricultural inputs.

2. Much of rural small-scale industry is in fact resource-based. The local resource base is clearly the place to start assessing opportunities for new RSIE.

III.C Locating Rural Industry

1. Certain industries, even those with a direct link to agriculture, as is indicated above, are carried out in towns, or, in other words, places not strictly defined as rural. The rural economy should be seen as combining interdependent rural and urban areas.

III.D The Non-Manufacturing Sector

1. A major portion of non-farm income for the rural poor comes from trade, transport, services and other non-manufacturing activity. As creating employment is a priority for all poverty alleviation strategies, ~~it would be a mistake to focus only on manufacturing SSEs.~~ Promotional activities must therefore take a broader view of what types of industry would be fruitful to promote.

III.E Non-Farm Employment

1. Non-farm employment is defined as consisting either of part-time or full-time household or cottage industry conducted in or near the household, or of employment in independent small enterprises, located in rural market centres or towns.

III.F The Importance of Economizing the Basic Labour Activities of the Rural Poor

Developing non-farm activities may require prior elimination of rural labour constraints calling for the application of new technologies for economising time, particularly of rural women, but covering labour in agricultural production, food processing,

rural energy, financial resources, use of material resources, and transport.

III.G The Relationship Between Agriculture and RSIE

1. In summary, a close relation exists between agricultural production and incomes and the performance of the RSIE sector. Indeed, the levels of agricultural production and incomes principally determine the demand for manufacturing goods produced by small-scale industries, and employment opportunities in trade and services.

2. The main constraint on rural small-scale industry is generally on the demand side, with non-farm activity a direct function of rural purchasing power, as determined especially by incomes in agriculture.

3. This points to an important reciprocal relationship: development of RSIE may provide a dynamic element in agricultural growth through the provision and dissemination of new technologies and the removal of processing or labour constraints, while an increase in agricultural incomes stimulates the demand for RSIE.

III.H RSIE Promotion and the Enabling Environment

1. Macro-economic policies in most LDCs tend to favour large-scale industries, which are located for the most part in urban areas. Therefore RSIE are doubly disadvantaged.

2. The successful promotion of rural small-scale industry is dependent upon the creation of an 'enabling environment'. This calls for a comprehensive, integrated approach, coordinating inputs at the policy level, the institutional level, and the enterprise level.

CHAPTER TWO RECOMMENDATIONS

I. Policy Measures

1. A country's overall policy framework, specific measures adopted for rural industry promotion, and policies toward the agricultural sector and other parts of the resource base need to be coordinated to ensure consistency.

2. Governments should move toward an unbiased, 'neutral' policy environment, one which does not adversely affect any particular sector of industry.

3. Priority should be given to the removal of those measures which impose serious constraints on rural small-scale industry. Policies regarding imports (tariffs, quotas etc), tax, interest rates, credit, and technical and marketing support, need to be reevaluated in this regard.

4. Import policies favouring capital goods need particular attention for their negative effect on domestic capital goods production.

5. Special measures should be considered for capital goods such as outboard motors and sewing machines, which are essential to RSIE, including and especially micro-enterprises.

6. Tax, interest rate and exchange policies subsidising the cost of capital, should be assessed for their potential negative impact on employment, access to credit, and income and asset ownership for the rural poor.

II. Land Reform

1. As the distribution of agricultural assets and income affect rural purchasing power and therefore both the possibility for partaking in non-farm activities and for purchasing their products, land reform measures should be considered for their impact on RSIE development, particularly in regions affected by increasing stratification, and correspondingly, increasing numbers of landless people.

2. Agricultural development strategies emphasizing large-scale estates rather than smallholders, need to be re-thought.

III. Supply-Side Measures

III.A Credit and Finance

1. There is a need for caution in assuming that capital is the principal constraint for rural small-scale enterprise. The causes of excess capacity in RSIE, where appropriate, should be examined in this regard.

2. As a substantial net flow of savings from rural to urban areas has been observed in some places, indicating the availability of capital, favourable rates of return for rural enterprises need to be displayed to siphon that flow back toward rural investments.

3. It seems desirable to involve commercial banks in credit distribution. Incentives may be provided to banks in the form of higher interest rates for small or unsecured loans, special, subsidised loan funds, credit guarantees, and the loan applicant identification and screening services of NGOs.

4. In addition, groups of artisan-entrepreneurs and workshop-enterprises can facilitate access to credit by serving as mutual guarantors.

5. Savings and loan associations and group savings associations should be encouraged to mobilize more savings and to become more involved in short loans for business purposes.

6. Programmes for extending small short term loans at market rates of interest have been successfully implemented in Asia and in Latin America. However, the attempts in different countries to establish programmes along the principles of the Grameen Bank in Bangladesh, need to be analysed closely. Experience so far appears to be mixed.

7. Credit guarantee schemes should be examined for their potential with regard in particular to rural women.

III.B Small-Scale Industry Development Organisations (SIDOs)

1. The conventional structures and functions of SIDOs need to be replaced by a more efficient and effective organisational set-up designed to promote a number of different types of small-scale urban and rural manufacturing, concerned with a range of policy measures toward SSI, including technology and promotion through NGOs, and involved at both national and district levels.

III.C Agglomerations vs Industrial Estates

1. Agglomerations have demonstrated potential as a major vehicle for the promotion of the informal sector in rural areas. For RSIE, it is appropriate to improve the general infrastructure of the area, and services in agglomerations of workshops. The commercial needs of enterprises, as well as costs and benefits, must be carefully assessed in the planning of industrial estates.

III.D Upgrading Infrastructure

1. The improvement of rural infrastructure in LDCs should be a primary consideration for RSIE development strategies. The possibilities for simplifying daily work, upgrading production methods, gaining access to materials and markets, and thereby opportunities for increasing income and purchasing power, are affected in particular by the state of the roads, access to communication and electricity.

2. Improving the infrastructure of a rural area would also help stem the migration of rural entrepreneurs to urban areas.

III.E Technology and Product Development and Dissemination

III.E.1 Technological Upgrading

1. It is urgent that policy biases gearing research and development toward large-scale industries be redressed, because of the interdependence between agriculture and rural small-scale industry development. While the latter is directly dependent upon the level of agricultural development and incomes, agricultural productivity can be raised by upgrading rural technologies, with the help of rural industries, particularly as rural population density increases.

2. For the rural poor, the first priority is to improve the basic standard of living. The examples of successful appropriate technology application in rural areas, resulting in the introduction of such items as handpumps, latrines, and stoves, should be studied for their potential applicability in other regions and circumstances.

3. Areas with potential for technological upgrading in the micro-enterprise sector of manufacturing need to be identified. The metal products sector, for example, if linked to agricultural development, has potential for expansion and diversification.

III.E.2 Identifying and Disseminating Appropriate Technologies

1. The possibilities for producing low-cost capital goods in the informal sector, demonstrated by individual cases of

independent innovation by small scale entrepreneurs, should be pursued.

2. An institutionalised search capacity should be established with the directive of finding items which could be simply copied but produced more cheaply, using local scrap and other materials. A domestic institutional mechanism should be capable of identifying possibilities among an international 'shelf' of appropriate technologies, and testing their relevance and adaptability to local requirements.

3. To address the lack of institutional infrastructure for the dissemination of knowledge to support RSIE production, the useful experiences with agricultural extension services could be applied to rural industry.

4. Information exchanges should be developed as a means of promoting subcontracting between large firms and RSIE.

III.F Training and Entrepreneurship

1. Skills training for the entrepreneur should have a clear objective and preferably be focused on a specific product or technique which can be perceived by entrepreneurs as yielding concrete results.

2. More emphasis should be placed on the promotion of existing informal apprenticeship systems.

3. Both entrepreneurial and apprenticeship training may need to be complemented by credit provision measures for the purchase of relevant equipment and tools.

IV. Demand-Side Measures

IV.A Product Reservation Schemes

1. Should product reservation schemes for the benefit of the RSIE sector be considered, the absolute exclusion of other enterprise groups should be avoided, as this can have a detrimental effect on the organic growth of enterprises which would otherwise have graduated out of the protected category, thus further exacerbating the problem of the 'missing middle', the group of enterprises between micro- and large-scale industries.

IV.B Subcontracting

1. Subcontracting has a significant role to play in development strategies, and should be considered with reference to household industry as well as other types of RSIE.

2. The advantages of subcontracting to skilled rural workers in favour of establishing a factory production line, should be made known to potential contractors.

3. In some cases it may be useful for households to form themselves into cooperative groups or associations to facilitate dealings with contractors or communication with extension officers.

4. Examples of rural small-scale industry subcontracting and urban-rural subcontracting relationships, such as those operating in China, Indonesia, Korea, Pakistan and the Philippines, should be studied for their wider applicability.

V. Developing Inter-Sectoral Linkages

1. To determine the potential for developing inter-sectoral linkages, and for facilitating the productive reciprocity in rural areas between agriculture and rural small-scale industries, two major factors, namely existing linkages, and the purchasing power of the rural population, must be taken into consideration.

2. In particular, many African countries suffer from weak backward linkages due to the level of agricultural and rural technology, and command urgent attention as regards the participation of RSIE in strengthening agricultural development.

3. As rural purchasing power and therefore RSIE development is contingent in large part on the extent to which rural populations have access to infrastructure and to agricultural assets, promotion strategies fostering inter-sectoral linkages need to encourage infrastructure development and land reform.

4. Examples of 'integrated agro-industry' initiatives, emphasizing linkages such as production, marketing and distribution, should be examined for their wider applicability, for example to fish, new crops or a range of crops in one area.

5. The possibility for integrating a 'vertical' strategy such as the filière approach should be explored, as it traces potential inter-sectoral linkages emanating from specific natural resource bases, and in so doing, highlights possible complementarities between manufacturing and agricultural production, and identifies resource needs, and situations, created for example by policies, in which specific target group interests may be disadvantaged.

V.5 Rural Housing and Construction

1. An initiative such as a rural housing programme should be explored for its potential for providing a much-needed commodity as well as providing employment, necessitating a participatory, community-oriented approach, and encouraging linkages with woodworking, metalworking, masonry, and the production of construction materials from natural resources. In this connection, the formation of credit and thrift societies should be encouraged.

VI. Women and Poverty

1. As women cut across all groups of impoverished people, and often count among the poorest of the poor, endeavors toward poverty alleviation must be concerned with examining and addressing conditions specifically affecting them.

VI.A Addressing Constraints on Women's Involvement in Rural Enterprises

1. The specific constraints on women - including location, marketing, labour, technology, social and cultural factors, education and skills, and access to credit - should serve as a point of departure for identifying and/or creating viable income generating activities.
2. The 'locational factor' in particular, which stems from the difficulty of working away from the household or village, signals the need for identifying activities within those borders.

VI.B Household Non-Farm Enterprise

1. The promotion of household industries should command particular attention in rural industrial development strategies, because of their significance for women's income.
2. Home-based workers are particularly vulnerable to exploitation; promotion schemes and subcontracting arrangements need to be monitored to ensure fairness and eliminate abuses.

VI.C Handicraft Industry

1. The household or small workshop mode of production offers specific opportunities in relation to craft goods. Successful handicraft promotion needs to combine the improvement of technology, production and design skills with aspects of marketing, including product development with regard to market trends, and access to the targeted markets.

VI.D Local Resource-Based Activities

1. Even if women are involved in conveniently located activities, being tied to the household will aggravate marketing problems and reduce access to markets outside the local area; therefore special marketing assistance is likely to be required.

VI.D.1 Auxiliary Agricultural Production

1. Agricultural activities using very little land, such as intensive vegetable production and rearing of certain types of animals, should be considered particularly for the near-landless and woman-headed households.

VI.E Non-Manufacturing Activities

1. Because manufacturing accounts for only a portion of rural non-farm activities as a whole, it is important not to exclude non-manufacturing activities for development considerations, and to allow credit for distribution across the range of activities have good economic rates of return.

VI.F Combatting Marginalisation

1. Women should be 'mainstreamed' by adopting major programmes which benefit both men and women, such as garment making or rural construction, and by adopting policies and programmes and cultivating specific activities which benefit women in large numbers, such as food processing.

VI.G Economizing Women's Time

1. Since many women spend 2 or 3 hours a day each on fuel gathering and water collection, as well as on domestic food processing, measures to ensure fuel supplies, reduce distances to water, and facilitate the processing and storing of food, should be priority considerations.
2. Possibilities for and obstacles to practical implementation of new energy technologies should be reviewed.

VI.H Food Processing

1. The most obvious area in which new technologies might be introduced to the benefit of women is food processing.
2. Given the considerable savings in labour productivity achievable with new food processing technologies, it is important to ask why the different types of equipment have not become the norm.
3. Many of these items of equipment are not difficult to fabricate and could be produced in rural informal sectors. Systematic assessment is required at the national level of what real, marketable opportunities exist, followed by a much more active promotion of their production and distribution through the informal sector.
4. As a major factor limiting the introduction of those technologies relates to their effective scale of operation, in some cases precluding their employment by individual households, either group organisation or control by individual larger entrepreneurs will be required.
5. With respect to projects involving the promotion of group organisation around new food processing technologies, there appears to be little systematic follow-up over a period of years. It is suggested that regular reviews of potential and experience with new technologies, covering technical and organisational aspects, be carried out through appropriately-designed regional institutions which should have strong national government support and involvement. Such institutions could serve as vehicles for the injection of expertise from the appropriate international agencies.
6. More R & D and stronger dissemination efforts should be applied where improved technologies, including hand-operated equipment, can be managed by individual women or small groups.

VI.I Women's Groups, Savings and Credit

1. Women's groups should be promoted, as they have a number of very evident advantages in bringing assistance to women, with the progress of credit and thrift societies particularly encouraging. They should be used particularly to reach the poorest sub-sets within the community.
2. Supporting agencies should offer credit guarantees to enable groups to gain access to further fixed or working capital, in order to expand upon the savings and credit they have been able to mobilize.

3. As groups have generally been able to provide only for working capital, and this often for trade rather than rural small-scale industry as such, possibilities for incorporating rural industry projects among group-supported activities should be investigated.

4. More women should be trained as credit officers in order to develop such possibilities.

VII. Refugees in Developing Countries

1. Many countries providing asylum to refugees are themselves poor. Therefore aid should be directed to the locality as an area, including local populations, and not confined to refugees as an isolated group.

2. As political dislocation displaces rural populations in particular, and as the predominant activity in developing countries is, generally, agriculture, the agricultural sector should be looked to first for the absorption of refugees.

3. The guidelines recommended in this report for identifying and promoting employment and income-generating opportunities for the rural poor should be applied to people living in refuge as well.

VIII. The Advantages of an Area-Based Approach to RSIE Promotion

1. The promotion of rural small-scale industry here is seen as part of an overall strengthening of the rural economy, involving the interactions described. This calls for an area-based approach.

2. Relationships of complementarity should be developed between different promotional programmes in the same area: a women's participatory programme, for instance, with a rural housing programme or a programme for producing new products in the informal sector.

3. Area-based development programmes should be planned with an eye to encouraging 'authentic development' based on participation, and sectoral interdependencies within the poor economy, focused directly on poverty alleviation and measuring its success on that basis.

IX. Reaching the Target Group

1. Direct targeting should not be regarded as the only method of reaching the rural poor. Assistance within the rural informal sector should therefore not be limited to 1-2 person micro-enterprises; rather, some of these should be assisted to expand in size and scope. As indicated in Part One, Chapter Two, the quantity of enterprises which succeed in this endeavor, does not constitute any threat to the majority of small units.

2. Promotion of still larger 'modern' rural small-scale industrial enterprises should not be neglected as a constituent part of poverty-focused rural development. These operate in situations of some economies of scale but remain comparatively labour-intensive, contribute as rural-located enterprises to rural surplus retention, often have a number of linkages within

the local economy, and in some cases offer part-time employment which can be important for poor households.

3. One tactic for reaching the target groups is to adopt self-selecting programmes¹¹¹, which exclude the non-poor by offering benefits that are of interest only to the poor. For example, this would include the allocation of funds for developmental and conservational measures in poor regions and districts rather than concentrating them in the highest economic return areas.

X. Summary

1. The key concepts for intervention in poverty alleviation are 'comprehensive' and 'coordinated.' As stated above, this applies to the scope and substance of the industries and activities targeted for promotion, which cannot be treated in isolation from one another.

2. These apply also to the form or framework of the strategy for assistance, which should be consistent at the policy, institution, and enterprise levels.

¹¹¹ World Bank, 1990, p 4

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