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STRATEGIES FOR STIMULATING POVERTY-ALLEVIATING GROWTH IN THE RURAL NONFARM ECONOMY IN DEVELOPING COUNTRIES

Steven Haggblade, Peter Hazell and Thomas Reardon

Environment and Production Technology Division

International Food Policy Research Institute
2033 K Street, N.W.
Washington, D.C. 20006 U.S.A.

and

Rural Development Department

The World Bank
1818 H Street N.W.
Washington, DC 20043

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EXECUTIVE SUMMARY

The rural nonfarm economy (RNFE) accounts for roughly 25 percent of full-time rural employment and 35-40 percent of rural incomes across the developing world. This diverse collection of seasonal trading, household-based and large-scale agroprocessing, manufacturing and service activities plays a crucial role in sustaining rural populations, in servicing a growing and modern agriculture, and in supplying local consumer goods and services. In areas where landlessness prevails, rural nonfarm activity offers important economic alternatives for the rural poor.

Widespread economic liberalization during the 1990s has opened up rural nonfarm economies as never before -- to new opportunities and to new threats. In some instances, liberalization has benefited large numbers of small rural nonfarm enterprises. In other cases, rapid exposure to external competition has simply steamrollered the poor. Given the large scale of rural nonfarm activity, given its importance to the rural poor, and given the startlingly rapid new dynamics under way, policy makers can no longer ignore the RNFE as they have so often in the past.

Highly diverse and heterogeneous, the RNFE offers opportunities for the rural poor as well as the rich. Poor rural households frequently seek economic refuge through distress diversification into low-skill nonfarm activities such as basket making, weaving, pottery, small-scale retailing and seasonal labor migration. Simultaneously, their more affluent neighbors participate in a dynamic cadre of more sophisticated, high-productivity activities including mechanical milling and skill-intensive private services such as schooling, health care, rural telecommunications and transport. Large agroprocessing firms, exporters,

wholesalers and retailers operate in close proximity with legions of much smaller firms that serve as ancillary assemblers, retailers and even as very small-scale direct competitors.

Locationally, rural nonfarm activities frequently congregate in rural towns and small regional centers. They cluster regionally as well – in silk regions, leather-working centers, sugar processing areas and basket-making zones – due to concentrations in raw material supply, seasonal labor release from agriculture, proximity to key transport or water resources, or sometimes simply as a result of historical accident. Complex processing and commercial networks link clusters of like rural firms with urban exporters, input suppliers and competitors.

Because of this broad sectoral diversity – from farm input supply to agroprocessing, manufacturing, transport, construction, wholesaling, retail commerce and personal services – no line ministry holds clear responsibility for the RNFE. Because supply chains for any given rural nonfarm activity traverse broad geographic space -- from rural areas to market towns and regional or export centers – promotional activities in any given subsector will require intervention across many overlapping and adjacent administrative jurisdictions. As a result, the RNFE has largely remained a stepchild of government, donor and NGO promotional efforts. Administratively, no one agency assumes responsibility for the welfare and growth of the RNFE.

Three key groups currently intervene in the rural nonfarm economy – large private enterprises, non-profit promotional agencies and governments. Large modern corporations take investment, procurement and marketing decisions that powerfully shape opportunities in the rural nonfarm economy throughout much of the Third World. More frequently than governments, in many instances, these private firms initiate sweeping changes in the rural

nonfarm economy. In the wake of world-wide trends towards economic liberalization, from the 1990s onward, these forces of global integration and change have swept ever more powerfully across the rural nonfarm economies of the developing world. At the same time, on largely equity grounds, a plethora of non-profit and government agencies operate promotional programs aimed at stimulating rural nonfarm activities for the rural poor. As they operate their promotional programs, socially motivated agencies now increasingly converge with profit-oriented corporations in the newly liberalized rural economies of the developing world. The lion and the lamb now meet face to face.

After reviewing these sometimes complementary and sometimes conflicting efforts, this paper suggests three guiding principles for policy makers interested in ensuring equitable growth of the RNFE. Given the bewildering diversity of activities, firm sizes, locations and administrative jurisdictions, no standard elixir will prove appropriate in all instances. Even so, three broad principles will permit identification of cost-effective interventions across a broad diversity of specific settings.

First, identify key engines of regional growth. The typology suggested in this paper provides one way of identifying key opportunities in resource-poor areas, in rapidly growing zones and in regions with unexploited economic potential.

Second, focus on subsector-specific supply chains. This framework enables a systematic search for cost-effective interventions by identifying large numbers of like firms facing similar opportunities or constraints. It provides a tractable means for regional planners of prioritizing infrastructure requirements and for tracing commodity flows across space. It ensures a focus on final markets and enforces the necessary link between evolving consumer requirements and the supply system that must meet them. By situating where the

rural poor operate in the alternative vertical supply chains that connect large and small firms together, this approach highlights competitive and complementary relationships as well as specific opportunities and threats confronting the rural poor.

Third, build flexible institutional coalitions. Rather than creating expensive new integrated bureaucracies, interveners must find ways to work across the existing patchwork of private and public agencies that currently exist. Depending on the commodity subsectors selected for review, a coalition of key stakeholders may include government regulators, technical institutes, industry associations, key private sector participants, donors or NGOs. In this model, any interested party can initiate action. As they have many times in the past, a broad variety of prime movers can assemble working coalitions from among the vested interest groups operating in any given subsector and location.

Using the flexible institutional model proposed here, we envision a world in which an evolving coalition of interest groups can initiate diagnostic reviews and identify key systemic interventions on behalf of targeted segments of the rural nonfarm population. In an increasingly dynamic and competitive rural environment, intervention by government, NGOs and other equity-oriented groups will frequently prove necessary to cushion transitions and facilitate access by the poor to growing nonfarm market niches. Supported where necessary by such beneficent involvement, a prosperous rural nonfarm economy can contribute to both aggregate economic growth and improved welfare of the rural poor.

Strategies for Stimulating Poverty-Alleviating Growth of the Rural Nonfarm Economy in Developing Countries

Steven Haggblade,[1] Peter Hazell[2] and Thomas Reardon[3]

1. INTRODUCTION

The emergence and rapid expansion of nonfarm activity in rural areas, and in the towns that serve them, becomes a major source of income and employment growth during the economic transformation of a developing country[4] (Box 1).

From a relatively minor sector, often largely part-time and subsistence-oriented in the early stages of development, the rural nonfarm economy (RNFE) becomes a key contributor to economic growth. Because of its frequently small scale, low capital requirements, seasonality and amenability to home-based activity, growth in the RNFE holds important implications for the welfare of women and poor households, sometimes helping to offset inequities that may arise within the agricultural sector.

Since the green revolution first sparked rapid rural nonfarm growth across broad swaths of Asia and Latin America, the RNFE has attracted considerable interest and study. In these settings, rapid agricultural growth provided a powerful motor for stimulating both local and national demand for outputs of the RNFE. At the same time, massive public

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[1] Steven Haggblade is a private consultant working in Lusaka, Zambia and a former IFPRI staff member.
[2] Peter Hazell is Director of the Environment and Production Technology division at IFPRI.
[3] Thomas Reardon is a professor in the Department of Agricultural Economics at Michigan State University.
[4] This paper focuses on developing areas of the Third World. Recent work on the development of underdeveloped areas of North America and Europe remains largely outside our scope of inquiry. Given their very different history, institutional setting, human capital base, location, infrastructure and market opportunities, rural nonfarm deveopment in these areas merits separate treatment. On underdeveloped areas of the First World, see the very interesting work by Rosenfield (2001a,b,c) and others. In transition economies of the Second World, particularly in Eastern and Central Europe, recent detailed empirical work by NRI and others offer a good introduction to issues, opportunities and intervention strategies (Davis, 2001; Davis and Pearce, 2000).

investments in rural infrastructure, initiated and funded to promote agricultural growth, also boosted the supply-side capacity of the RNFE. Yet the RNFE has generally fared less well in zones where agriculture and rural public investment have remained stagnant, as in many resource-poor areas of Asia and across large parts of Sub-Saharan Africa.

While agricultural growth remains a powerful motor of RNFE expansion, trade liberalization and the growing forces of globalization offer new opportunities for many rural regions to capitalize on outside sources of demand for rural nonfarm outputs. At the same time, liberalization has resulted in often rapid "deprotection" of rural nonfarm activity. Greater competition from outside has forced changes in the structure and composition of rural nonfarm activity, many of which have proven inimical to the welfare of the poor. Policies and programs for promoting the RNFE require reassessment and revision given this new and unfolding context. This is the challenge we take up in this paper.

Box 1—Definitions

The rural nonfarm economy (RNFE) includes all rural economic activity outside of agriculture. It includes self-employment, wage employment, full-time, part-time, formal, informal, seasonal, and episodic nonfarm production. Note that nonfarm activity may take place at home, in factories or by itinerant traders. It includes small and large scale activities of widely varying technological sophistication.

Sectorally, we follow standard national accounting definitions. Agriculture includes the primary production of all unprocessed plant and animal products: crops, aquaculture, livestock husbandry, woodlot production, hunting, fishing and forestry (International Standard Industrial Classification (ISIC) Group 1). Nonagricultural production – and hence the RNFE -- includes all other economic activities including mining, manufacturing, utilities, construction, commerce transport, financial and personal services (ISIC Groups 2-9).

Agroprocessing -- the transformation of raw agricultural products by milling, packaging, bulking or transporting – remains a key component of the rural nonfarm economy

Rural includes population concentrations in farms, villages and towns below a threshold that varies in official definitions across countries, but frequently refers to concentrations of 5000 or less. Rural regions also include small towns closely linked to surrounding agricultural areas. Where data permit, we include nonfarm activity in small rural towns, since much nonfarm activity congregates there.

Two related definitions sometimes cause confusion and therefore merit explicit distinction. Many studies have focused solely on rural manufacturing, which they refer to as rural nonfarm industry (RNFI). Since manufacturing (ISIC Group 2) constitutes only one component of total rural nonfarm activity, usually about 25 percent, it forms a small part of the overall RNFE. Likewise, some agriculturally focused studies measure "off-farm" income or employment. By this, they usually mean "off the owner's own farm". Consequently, off-farm income includes wage employment in agriculture earned on other peoples' farms together with nonfarm earnings. Rural nonfarm income (RNFY) earned in the RNFE is thus smaller than total off-farm income by the amount of wage earnings in agriculture.

We begin, in Section 2, by reviewing key features of the long-term structural transformation taking place in the RNFE. Discussion then explores how current forces of market liberalization influence prospects for future growth and future participation by the poor. Section 3 reviews a broad panoply of past intervention efforts. It identifies key actors, key public policy issues and key lessons derived from evaluations of four decades of interventions efforts. The paper concludes by looking forward at promising strategies for future intervention. After reviewing a typology of different settings, in which opportunities and strategies will clearly differ, the paper proposes three guiding principles for developing cost-effective interventions aimed at ensuring buoyant rural nonfarm economies with widespread participation by the poor.

2. DESCRIPTIVE PROFILE OF THE RURAL NONFARM ECONOMY

TRANSFORMATION OF THE RNFE

The present structure of the rural nonfarm economy in developing countries results from an ongoing economic transformation that has proceeded for many generations, and at varying speeds in different countries. Historically, the process typically begins with a countryside dominated by self-sufficient and primarily agricultural households producing for themselves most of whatever farm and nonfarm goods and services they need. Trade and commerce remain marginal given the subsistence orientation of agriculture, the prevailing farm technologies that require few external inputs and given limited transport and communications infrastructure in rural areas. Gradually, as population density and market access increase, new technologies and modern farm inputs become available, leading to increased agricultural surpluses in some commodities and increased opportunities for trade.

As agriculture grows, it stimulates growth of the RNFE through a number of key linkages:

- rising labor productivity on the farm increases food supplies and releases farm family workers to undertake nonfarm activities;
- increases in farm incomes, together with high rural savings rates, make capital available for investment in nonfarm activities;
- as agriculture modernizes and its productivity grows, it requires additional inputs and services such as seeds, fertilizer, credit, pumps, farm machinery, marketing and

processing of output which create a growing demand for nonfarm firms providing these inputs and services; and

- as their incomes increase, farm households, like good consumers everywhere, spend much of their new income on a range of consumer goods and nonfarm services (Timmer 1988).

In accordance with Engel's Law, the share of non-food items in consumer budgets rises, leading to accelerating demand for nonfarm goods and services such as improvements in housing, clothing, schooling, health, consumption of new kinds of purchased foods, more visits to town, to the cinema and to the tea shops, all of which dramatically increase the demand for rural transport services (Hazell and Roell 1983).

As this process unfolds, households begin to specialize, taking greater advantage of their individual skills, resource endowments, and market opportunities. Some nonfarm activities, initially undertaken by farm households for self consumption, spin off as separate full or part time commercial activity. Others, particularly labor-intensive household manufacturing of baskets, pottery, and roof thatching, die out, displaced by the import of cheap plastic pails, iron vessels and corrugated roofing[5]. As a consequence, greater trade develops between rural households, small market centers and rural towns. These burgeoning rural towns frequently grow quite rapidly, particularly in buoyant agricultural zones.

As rural towns grow they stimulate growth in rural nonfarm activity by offering markets large enough to capture economies of scale and agglomeration for many types of nonfarm firms (Rondinelli 1987; Satterthwaite 2000). They likewise provide higher levels of infrastructure development, which helps to reduce production costs and facilitate

[5] Hymer and Resnick (1969) have dubbed these declining rural manufactures "Z-goods."

communications and market reach. Towns also become important centers of demand for food, consumption goods and labor. This in turn creates new market opportunities for neighboring agriculture and rural nonfarm activity. As a result, recent decades have seen an explosion in urban demand for higher value agricultural products – including milk, meat, vegetables, flowers, and fruits—across Asia and Latin America. Sub-contracting of many lower level manufacturing processes to rural nonfarm enterprises has likewise increased, all of which has boosted income and employment opportunities in surrounding rural areas (Otsuka 1998).

These linkages from rural towns to their surrounding rural hinterland take on particular importance as rural towns become better integrated into the national urban economy, as they develop manufacturing and service activities that serve urban and export demands in addition to rural needs. Such towns can become important growth poles for their surrounding regions. As in Japan and Taiwan, these processes can lead to considerable income diversification even amongst farm households (Ho,1986b). Similarly in recent years, rapid growth of India's urban economy has stimulated corridors of rural nonfarm development along major highways and transport routes (Bhalla 1981).

As rural towns develop and population and infrastructure density increase, the RNFE becomes increasingly differentiated. Increasingly concentrated markets permit the scale of nonfarm production to increase. Consequently, RNF firm size increases and full-time wage employment becomes increasingly prevalent, while the importance of self employment diminishes correspondingly. Strengthened links with urban centers stiffens competition for manufactured consumer goods, thus displacing many labor-intensive rural manufacturing such as basket making, weaving, beer brewing, pottery and even rural tortilla production

(Table 1; Rello 1998). Rising incomes lead to consumption diversification and hence still greater share of services in the RNFE (Box 2).

Box 2—Spatial differences in composition of the RNFE

India. The importance of wage employment and of services normally increases in the rural nonfarm economy, both over time and as urbanization penetrates rural zones. In rural India, the share of both wage employment and services has grown over time. This trend accelerates in areas linked to urban markets and along transport corridors that criss-cross rural areas (Sheila Bhalla 1981, 1997).

Nicaragua. Similarly in Nicaragua, higher share of wage employment and services emerges in the more densely populated areas, those better serviced by roads and with a greater share of population living in rural towns. In rural areas of Managua department, rural nonfarm wage employment and services become very important. In contrast, rural manufacturing -- mostly labor-intensive, home-based and female-operated – dominates the RNFE in the hinterland zones of rural Nicaragua (Corral and Reardon 2001).

Chile. In dynamic agricultural zones, such as the horticultural export boom region of central Chile, the rural nonfarm service sector grew rapidly during the 1990s, fueled by rapidly rising farm incomes and consumer diversification. In these zones, commuting has developed to the point that commuters, who move daily between rural areas and rural towns, earn about one-half of all nonfarm income. Reverse commuting also takes place seasonally, as residents of rural towns and intermediate cities account for about 20 percent of farm wage labor in surrounding rural areas (Reardon 2001).

Table 1--Vulnerability of rural manufacturing to urban competition, Bouake region, Ivory Coast, 1970 (employment per 1,000 population)

Activity	Kilometers from Bouake*				
	0-10	10-15	15-20	20-25	25+
Diminishing importance near town					
basket makers	6.2	8.8	16.4	19.5	40.7
weavers	9.7	11.7	13.8	15.7	17.8
potters	2.7	4.6	3.8	3.4	4.2
dyers	0.0	0.5	2.3	6.8	1.9
wood carvers	0.6	1.4	0.9	0.6	1.1
others	0.9	2.3	2.2	2.3	5.0
Increasing importance near town					
builders (cement)	2.8	2.9	1.9	1.8	1.9
builders (mud)	1.7	1.8	2.2	1.3	1.1
Uniform density					
tailors	1.6	1.2	2.3	1.5	1.5
Total	26.2	35.2	46.0	53.1	75.2

Source: Ancey (1974), p.116.
Bouake had a population of 110,000 in 1970.

Rural towns also stimulate additional agricultural production by improving the range, quality and availability of farm inputs, financial services, and agricultural marketing and processing services (Hardoy and Satterthwaite 1986). Asia's green revolution, for example, launched development of a major boom in local manufacturing of farm equipment and processing machinery (Johnston and Kilby 1975). Often beginning as an outgrowth of traditional black smithing, local entrepreneurs respond to increasing demands for simple tillage, pumping and threshing machines, and provide products that are much better adapted to local conditions than machines purchased from outside.

As the rural economy continues to grow, trade with larger urban centers also expands, and more urban goods become available. These often displace many traditional rural products, forcing structural changes in the composition of the rural economy and its towns.

This process receives further impetus from rising wages, which drive workers out of many traditional but low productivity nonfarm activities. Factory-made shoes replace the products of the village cobbler, factory-brewed beer replaces local home brew, and corrugated iron replaces local thatch. As towns grow, they attract more workers from the rural hinterland, and the agricultural workforce begins to decline, even though the rural population as a whole may not. Towns grow as major sources of demand for nonfarm goods and services in their own right, both for production and consumption purposes, and their nonfarm activities expand to serve these needs as well as to export to other urban and rural areas. Agriculture becomes less important as the economic motor for the regional economy, eventually becoming a relatively minor economic activity in some rural regions as well as in many national economies.

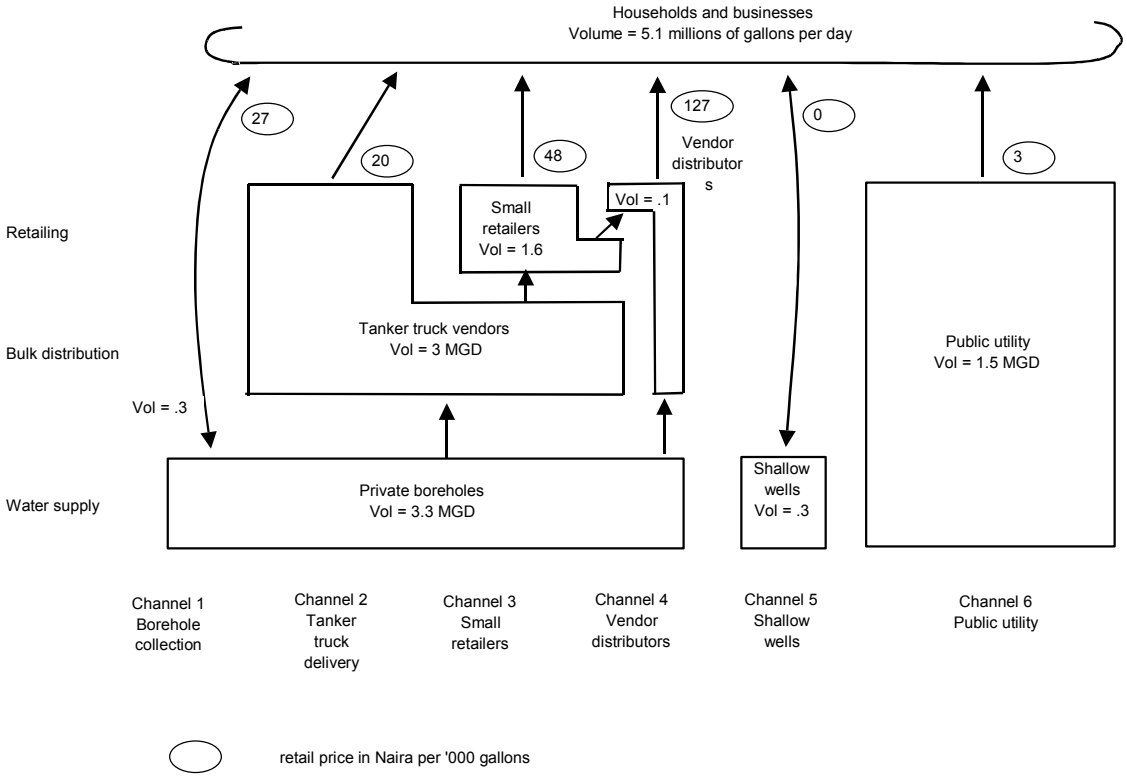
Given differing initial asset distributions and differing regional endowments of natural resources, human skills, social and political institutions, the transformation proceeds at variable speeds and takes on location-specific signatures across regions and countries. A region's comparative advantage in the production of tradable products, particularly in agriculture, its population density, infrastructure, location, history, and government policies all shape different outcomes across locations. Regions with significant recreational, mineral or trade advantages, such as a port or highway, may prove less dependent on agriculture as an engine of growth and hence may expand and diversify their RNFE much earlier in the development process.

GLOBALIZATION

Market and trade liberalization policies that enhance non-agricultural opportunities may delink growth of the RNFE, to varying degrees, from agriculture. And these possibilities increase with globalization. Consequently, many rural regions enjoy greater opportunities today in locating additional drivers of local economic growth. The relevant "motor" does not even have to be local. As long as the local economy is open, workers can commute and local farm and nonfarm firms can sell to the area where the economic base is growing rapidly. For example, a mine or a big city in a coastal region may induce nonfarm employment growth in the nearby hinterlands. Of course, the types of nonfarm labor and products demanded and the capital/labor ratio of the technology used in the economic base activities will condition the amount of nonfarm employment creation induced in the nearby hinterlands: a ritzy tourist hotel may demand less local nonfarm labor per unit of output than does a roadside truck stop.

In some instances, liberalization opens up significant opportunities for growth of rural nonfarm business activity. The demise of state marketing agencies across Africa has created a broad swath of economic space for private delivery of fertilizers and hybrid seeds and for marketing and processing both food and cash crops. Similarly, the regular withdrawal of public agencies from utilities such as electricity and municipal water supply, and from services such as inter-city transport, telecommunications, education, and health have all generated opportunities for the private sector to fill these important service needs (Figure 1).

Figure 1--Dry season water distribution in Onitsha, Nigeria



Source: Whittington et al. (1991)

While globalization and liberalization open up new opportunities for rural nonfarm enterprise growth, they introduce new risks as well. On the downside, the forces of trade and globalization often bring new competition to local markets – sometimes with breathtaking speed (Box 3).

Box 3—Perils of liberalization

Supermarkets. South African supermarket chains have expanded aggressively northward following the advent of majority rule in 1991 and the demise of economic sanctions that had prevented such investments previously. Two major chains, Shoprite and Pick N Pay, have opened outlets in nearby Zambia, Malawi, Mozambique and are considering forays into Kenya and even West Africa. In Zambia alone, Shoprite has opened a dozen stores, not only in major cities along the line of rail but also in regional towns such as Mongu, Chipata, Mazabuka, Monze and Solwezi. In each locality, their entry has radically altered product selection and market share in favor of imported South African brands at the expense of local farmers, processors, food suppliers and retailers. As Shoprite moves in to command as much as a 60 percent market share, smaller local food suppliers and retailers face a serious competitive squeeze.

Elsewhere in Africa, rising regional supermarket chains have emerged. After aggressive domestic expansion, Kenya's Uchumi and Nakumatt chains have recently launched expansion into neighboring Uganda and Tanzania (Business Week, December 11, 2001). In Latin America, giant Brazilian, Argentinian and even international supermarket chains have expanded rapidly over the past 20 years, leading to a consolidation and concentration of power in processing and distribution that have left many small rural nonfarm firms out in the cold. In India and across Asia, the consolidation of large supermarket chains has led to similar concentration of power and scale and to an ever-growing competitive pressure of small rural nonfarm suppliers (Fernandes et al. 2001).

Dairies. Across Chile, Brazil and Argentina, the rapid spread of supermarkets has driven a corresponding consolidation among input suppliers, as scale and strict quality standards become essential in all major supply chains. In Brazilian supermarkets, during the decade of the 1990s, the share of fluid milk sold in tetrapaks rose from 10 to 90 percent. The necessary leap in scale by supplying dairies leads to ever-stricter requirements from small dairies who supply processors their raw milk. The mega-processors require strict cold chain management, including cooling towers and refrigeration, in order to meet the standards imposed by the supermarkets. As a result, unable to make the large investment necessary to participate in this rapidly changing market, thousands of small dairies have gone out of business in the past decade in Argentina, Barzil and Chile (Gutman 1999; Jank et al. 1999; Dirven 1999).

Some categories of rural nonfarm activity have thrived in the past because of protection from outside competition by high transport costs, restrictive production (e.g. reserved handicraft industries in India) and trade policies (e.g. barriers to cheap imported consumer goods), subsidized inputs and credit, and preferential access to key markets (e.g. town and village enterprises in China).

Globalization and market liberalization remove many of these barriers, effectively "deprotecting" the RNFE. The transition may prove brutally abrupt for many traditional small-scale manufacturing activities whose products cannot compete with higher quality, mass produced goods. For this reason, the initial stages of deprotection can lead to massive

job losses in the RNFE, even though many of these may later be recovered as new types of RNFE activity sprout up, as in India during the 1990s (Bhalla 1997). Since poor households congregate disproportionately in traditional, low-investment, low-productivity rural nonfarm activity, they tend to suffer most during this transition. Given their vulnerability, policy makers need to remain especially attentive to this problem. In some cases, it may prove necessary to provide a helping hand to cushion this transition (Box 4)

Box 4--Helping small RNF firms adjust to an increasingly competitive environment

Brazilian supe market suppliers. In the face of rapid penetration by large supermarket chains into their region, and threatened with the wholesale disappearance of local nonfarm food suppliers, the municipal government of Paraná in Brazil sought ways of assisting local suppliers adjust to this quickly altered competitive environment. With assistance from the national government and from the World Bank, the local government launched the Fabrica do Agricultor project in 2000. This consortium of actors aims to identify key public investments and legislation required to permit small firm participation in food processing supply chains. Following a series of industry consultation, the regional government established a special local agency to coordinate food safety, health and other business requirements for small businesses involved in food processing (Escobar et al. 2001; Del Grossi and Da Silva 2001).

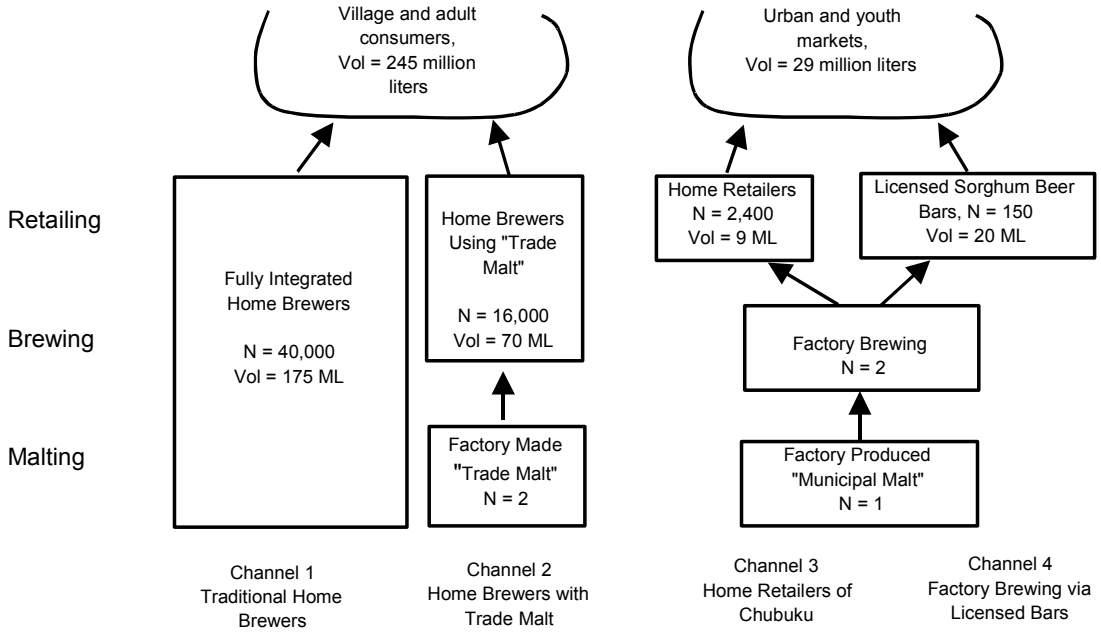
Sorghum beer in Botswana. After South African Breweries purchased Heinrich's Chibuku Company, a regional brewer of factory-brewed sorghum beer, it launched a rapid major expansion in Botswana beginning in the late 1970s. The expansion of factory-brewed Chibuku aimed at the large domestic market for sorghum beer, a low-alcohol fermented sorghum porridge, traditionally prepared by over 50,000 rural women home brewers. Market competition coupled with exclusionary practices by some of the emerging sorghum beer bars placed household brewers in a dire competitive squeeze. Even as their competition increased, a handful of influential license holders attempted to prevent them from supplementing their product line or switching to home retailing of Chibuku.

Because home brewing accounted for 80 percent of rural manufacturing income at the time, the Ministry of Commerce and Industry became concerned about the employment and equity impact of this rapid change in market structure. After conducting a review of the subsector supply channels, in consultation with major players, the Ministry intervened on behalf of the home brewers in two ways. First, after consultation with the Attorney General's office, they sent a circular to offending district councils stipulating that existing sorghum beer legislation clearly permitted home retailing of Chibuku and that all exclusionary practices against home brewers must cease. Secondly, the Ministry worked through local trade maltsters to expand use of factory-produced malt whose higher diastatic power enabled home brewers to increase profits by lowering grain requirement by as much as 40 percent (Haggblade 1987; Figure 2).

Shoprite expansion in Zambia. In the face of rapid expansion by the South African grocery chain, Shoprite, legions of Zambian farmers, rural food processors and retailers have seen themselves squeezed out of the urban food distribution channels (Figure 3). Local suppliers have seen their market shares fall dramatically, as Shoprite acquired as much as a 60 percent market share in some locales. In addition to Zambia's major urban centers, Shoprite has opened stores in much smaller provincial towns including Mongu, Chipata, Mazabuka, Solwezi and Mansa.

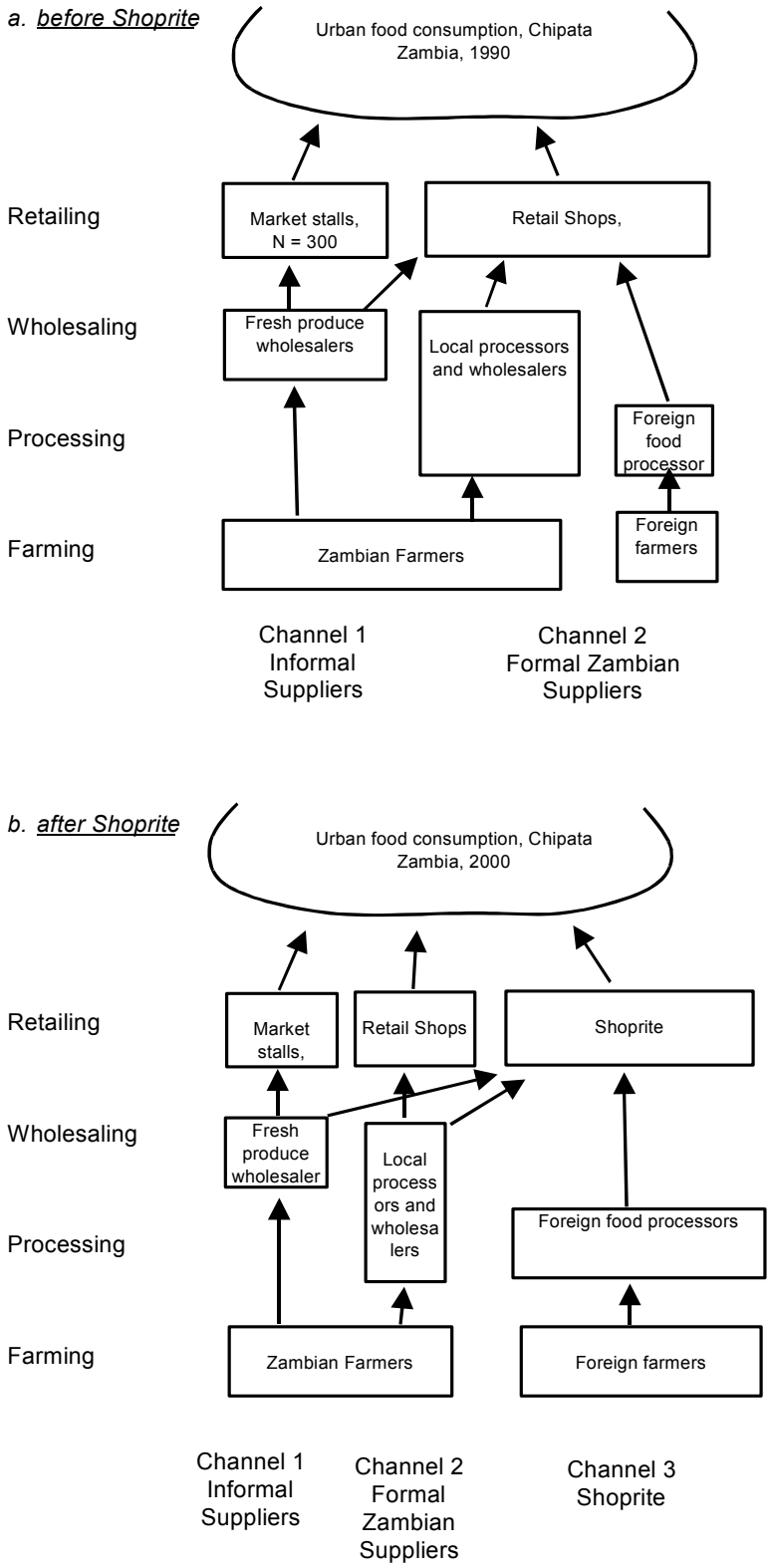
A World Bank agribusiness team has initiated efforts to find ways of cushioning the blow and enabling local suppliers to meet the quantity and quality standards demanded by Shoprite. Working with both Shoprite and the local business community, the team is exploring donor financing of training and lending necessary to enable local firms to understand and match quality standards as well as bulking facilities that would permit local suppliers to match the quantity requirements of the large Shoprite franchise.

Figure 2--Sorghum beer in Botswana, 1982



Source: Haggblade 1987

Figure 3--Zambian food retailers adjust to the arrival of Shoprite



Key Characteristics of the RNFE

As this transformation unfolds across a wide variety of settings, it generates some common patterns and signature characteristics. These general patterns prove useful as background in understanding opportunities and in designing policy interventions.

a. Large and economically important.

Employment shares, reported in Table 2, offer the most widely available indicator of the relative importance of the rural nonfarm economy. Though differences in definitions of rural, age and gender delineations of workforce participation complicate comparisons across countries, a consistent story nonetheless emerges about the importance of RNFE employment.

The rural nonfarm economy accounts for about one-third of full-time rural employment in Latin America, for one-quarter in Asia and West Asia and North Africa (WANA), and for 10 percent in Africa.[6] These shares do not include part-time employment or rural nonfarm employment in rural towns, which, though classified as urban, frequently depend on the rural hinterland for both inputs and markets. Inclusion of rural towns raises nonfarm employment shares substantially, to 20 percent for Africa and about 40 percent for Asia and Latin America (Hazell and Haggblade 1993).

[6] Because the Africa data are older, they may under-represent the current situation.

Table 2--Composition of rural nonfarm employment by region (primary workers)

	percent Rural Workers Employed in RNF Activity	percent Women among Total RNF Workers	percent RNF Workers in Mft.	percent RNF Workers in Trade & Transport[1]	percent RNF Workers in Other Services[2]	percent RNFE Workers in Other Activity[3]
Weighted [4]						
Africa[5]	10.9	25.3	23.1	21.9	24.5	30.4
Asia[6]	24.8	20.1	27.7	26.3	31.5	14.4
Latin[7] America	35.9	27.5	19.5	19.6	27.3	33.5
WANA[8]	22.4	11.3	22.9	21.7	32.0	23.2
Unweighted						
Africa	11.9	25.3	23.1	21.9	24.5	30.4
Asia	30.6	24.2	20.8	24.4	31.6	23.2
Latin America	33.3	27.9	20.7	17.9	24.2	37.2
WANA	24.8	10.7	21.5	23.2	30.8	24.4

Notes:
1. Trade and transport includes wholesale and retail trade, transport and storage.
2. Other services includes finance, insurance and community and social services
3. Other includes mining and quarrying, utilities, construction and other non-classified activity.
4. Country data weighted by size of total primary work force.
5. Africa figures based on the following countries (with census year in parentheses):Burkina Faso (75), Cameroon (87), Cote d'Ivoire (88), Liberia (74), Malawi (77), Mali (76), Mozambique (80), Namibia (91) and South Africa (85).
6. Asia figures based on the following countries (with census year in parentheses): Bangladesh (91), India (91), Indonesia (95), Korea (80), Nepal (81), Pakistan (81), Philippines (80), Sri Lanka (81), Thailand (96).
7. Latin America figures based on the following countries (with census year in parentheses): Argentina (80), Bolivia (88), Chile (70), Dominican republic (81), Ecuador (90), El Salvador (71), Guatemala (73), Honduras (88), Uruguay (85), Venezuela (90).
8. WANA (West Asia and North Africa) figures based on the following countries (with census year in parentheses): Egypt (86), Morocco (94), Turkey (90).

Because employment shares based on primary occupations exclude part-time and seasonal labor, they frequently under-estimate the relative importance of nonfarm activities. Income shares, therefore, offer a more complete picture of the scale of rural nonfarm activity. Unfortunately, income data are rarely available at the national level. Indeed, many countries do not even collect comprehensive production or income data on the output of informal, itinerant or household-based activities that prevail in many nonfarm sectors, particularly the service and manufacturing sectors. We must, therefore, rely on household- and firm-level

surveys, which frequently prove spotty in both regional and temporal coverage. Table 3 provides a summary of relevant evidence on income shares based on household surveys from a number of countries.

Table 3--Rural nonfarm income shares

Region	Average Share	Coefficient of Variation
Africa	42	0.45
- E & S Africa	45	0.47
- W Africa	36	0.36
Asia	32	0.33
- E. Asia	35	0.19
- S. Asia	29	0.52
Latin America	40	0.20

Source: Reardon et al. (1998), (Table 11)

These data suggest that nonfarm income accounts for about 40 percent of rural income in Africa and Latin America and for about one-third in Asia. Standing 10 to 20 percent higher than the employment shares reported in Table 2, the household income data confirm the importance of RNFE activity and of the part-time and seasonal activities frequently omitted in employment surveys.

b. Composition.

Rural manufacturing does not predominate, in spite of all the attention it has received. Manufacturing consistently accounts for only 20-25 percent of total RNFE employment in developing countries (Table 2). Services and commerce typically prove much larger sources of both employment and income. Over time, this disparity often grows since a large segment of labor-intensive, household-based manufacturing remains highly vulnerable to competition from urban suppliers (Table 1).

Services and commerce frequently grow faster than manufacturing as well. A rare time-series study from Sierra Leone indicates that employment in rural repair services grew at 15 percent per year compared with zero or negative growth in the largest rural manufacturing activities, tailoring and carpentry (Table 4).

Consumption data likewise suggest that, as incomes rise, rural households increase spending on services such as education, health, transport, cinemas, prepared foods and transport faster than they do on local manufactured goods (Hazell and Roell 1983; Hazell and Ramasamy 1986).

Labor migration typically proves small as a source of rural nonfarm income. Instead, earnings from self- and wage-employment in the RNFE dominate agricultural wage earnings and migration remittances. Despite widespread migration from many poor rural areas, migration income accounts for less than 10 percent of total rural nonfarm income (RNFY) for most rural households, even in labor-exporting zones such as northern Mexico and Burkina Faso (Reardon et al. 1998).[7] Agricultural wage earnings are also modest (typically 5 to 10 times smaller than RNFY). Thus, local rural nonfarm activity normally generates the lion's share of nonfarm income (Reardon 1997; Reardon et al. 2001).

[7] In some cases, remittances may be significant, particularly for certain household groups. In Nepal, they contribute 25 percent of household income to nearly one quarter of all rural households and contribute significant foreign exchange inflows into the kingdom (Seddon et al., 2000).

Table 4--Rates of growth in nonfarm employment* by locality, Sierra Leone 1974-80 (compound annual growth rate in percent)

Activity	Locality Size		
	2,000 – 20,000	20,000 – 250,000	250,000 +
Repairs	15.0	5.2	15.0
radio	22.0	19.0	o
motor vehicle	17.0	2.4	20.0
watch	+	+	13.0
Food processing	14.0	33.0	21.0
bakers	3.4	14.0	32.0
other	39.0	o	o
Woodwork	0.5	8.8	7.6
carving	0.0	o	24.0
carpentry	-0.6	8.6	3.6
Clothing	-0.7	1.8	5.0
tailoring	0.0	3.8	4.9
tie dyeing	-3.0	-8.5	+
shoemaking	-4.3	16.0	6.2
Metalwork	-5.8	9.4	10.0
welding	0.0	23.0	6.6
blacksmithing	-5.5	1.8	22.0
Total small manufacturing and repair	-2.4	6.0	5.7

Source: Chuta and Liedholm (1982).

Below the broad aggregates, the details of specific rural nonfarm economies reveal rich differences across countries and even across regions within the same country (Box 2). In Nyanza Province of Kenya, rural manufacturing looms larger than elsewhere, primarily because of the prevalence of home-brewing of maize beer, *pombe*, a pattern that repeats itself in most African countries outside the tuber-dominated tropical zones (see, for example, Botswana 1976; Wilcock and Chuta 1982; Fisseha 1985). Elsewhere in Kenya, as in Central Province, where brewing is less prominent, nonfarm services become relatively more important (Table 5). And in a classic green revolution region of Malaysia, public services,

Table 5--Heterogeneity of rural nonfarm activity

Activity	Muda River Region, Malaysia 1974 (percent regional value added)	Rural Kenya, 1977 (percent of households participating)	
		Central Province	Nyanza Province
Resource extraction		*4.8*	*13.0*
Manufacturing	*9.6*	*45.5*	*54.1*
maize beer brewing		6.6	19.4
weaving		8.1	9.1
charcoal production		12.9	4.5
wood products		6.6	7.5
sawmilling	2.2	3.3	0.6
grain milling	1.1	1.2	1.0
other food processing	3.4	3.7	6.8
other manufacturing	2.9	3.3	5.2
Construction	*12.0*	*1.7*	*5.1*
Trade, transport and communications	*23.8*	*29.9*	*15.4*
trade	10.4	14.1	10.2
transport	6.8	8.3	1.6
hotels and restaurants	1.8	7.5	3.5
post and telecommunications	4.8		
Private services	*37.9*	*18.1*	*12.4*
housing	10.7		
finance	10.1	1.7	0.7
repairs	5.5	6.0	6.6
entertainment	5.2		
health	3.7		
education			
other services	2.8	10.4	5.0
seasonal labor			
Government services	*16.7*		
Total rural nonfarm	100.0	100.0	100.0

Sources: Bell, Hazell and Slade (1982), Freeman and Norcliffe (1985).

trading, and agroprocessing activities such as rice milling, fish and rubber processing and saw milling dominate the RNFE (Table 5). Each rural region offers its own distinct flavor and requires site-specific investigation to establish a good understanding of future opportunities and constraints to rural nonfarm growth.

c. Importance of large firms

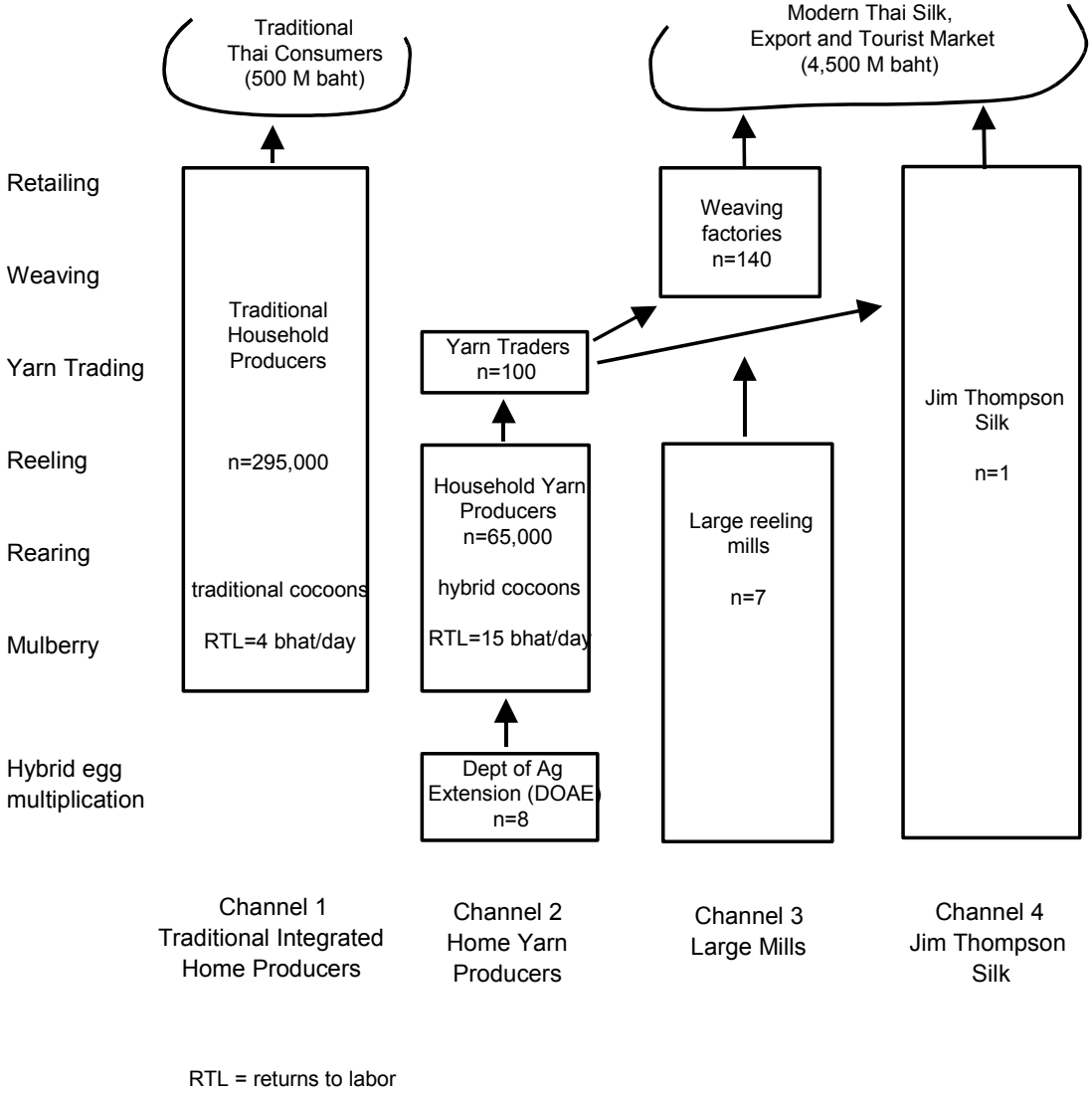
Though most RNF enterprises are small and employ less than 5 workers, larger firms often account for the majority of output and incomes. Large firms play particularly important roles in agroprocessing, export and trading activities. In many situations, large firms occupy strategic positions in local supply chains. Because of this, they many times govern prospects for small firm growth. In some cases, large firms compete directly with small firms. In other instances, their interests prove complementary, with large firms supplying key inputs and marketing output of smaller nonfarm firms (Table 6).

Though much prior work on the rural nonfarm economy has focused exclusively on small and microenterprises, operational work increasingly recognizes the importance of viewing small and large firms together within the vertical supply chains that bind them together (Figures 1-5).

Table 6 – Small firm-large firm relationships

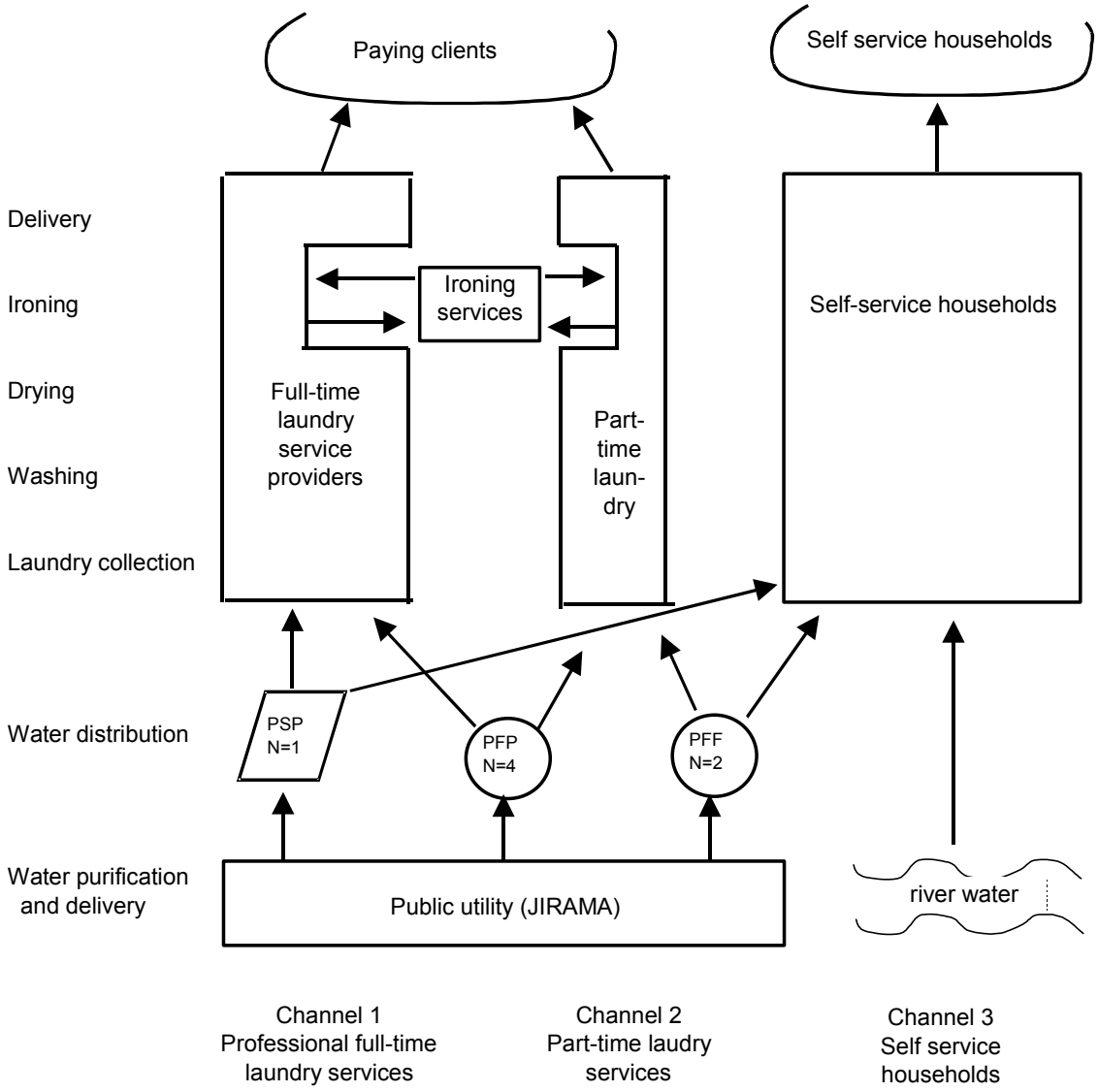
Subsector	Location	Complementary Relationships		Competitive Relationships	Reference
		input supply	output marketing		
Automobiles	Japan	small rural contractors supply Toyota			Wada (1998)
Bamboo products	Bangladesh		large traders assemble and market output from small producers	small producers vs. large factories	Begum et al. (1995)
Batik	Indonesia		wholesalers market output of household producers	household vs. medium-sized producers	Boomgard et al. (1986)
Dairy	India			smallholder women vs. large cooperatives	Sattar (1996)
Dairy	Colombia			large dairies vs. small dairies	Reardon et al. (2001)
Garments	China	state garment enterprises supply materials and subcontract sewing to TVEs	then market output domestically or abroad		Liu and Otsuka (1998)
Garments	Egypt		wholesalers market cloth from small weavers	tailors vs. large factories	Boomgard et al. (1986)
Garments	Thailand	large merchant manufacturers subcontract with home sewers	then sell output to exporters who market it abroad	modern factories vs. merchant manufacturers and home sewers	Ohno and Jirapatpimol (1998)
Improved stoves	Kenya	urban plant suppliers ceramic liners to village producers			Jeans et al. (1990)
Maize marketing	Zimbabwe			small hammer mills vs. large roller mills	Jayne et al. (1996)
Poultry	Bangladesh	large hatchery supplies chicks to small farmers	traders market eggs produced by many small farmers	small producers vs. integrated large farms	Begum et al. (1995); Dawson and Jeans (1998)
Rice marketing	Bangladesh	itinerant traders supply large wholesalers		husking mills vs. small mills vs. automatic mills	Chowdhury and Haggblade (2000)
Rattan furniture	Indonesia	factory producers market through itinerant retailers	large exporters market village production	small producers vs. large factories	Davies (1988)
Shrimp	Indonesia	large hatcheries supply fry to small producers	brokers buy from small producers	small producers vs. large fishermen	Boomgard et al. (1986)
Silk	Thailand	large factories subcontract with home weavers	yarn merchants market weft yarn from home reelers	home weavers vs. large integrated factories	Haggblade and Ritchie (1992)
Water supply	Nigeria	tanker truck vendors supply small retailers			Whittington et al. (1991)

Figure 4--Thai silk subsector, simplified version



Source: Haggblade & Ritchie (1989)

Figure 5 -- Laundry Services, Suburban Antananarivo, Madagascar



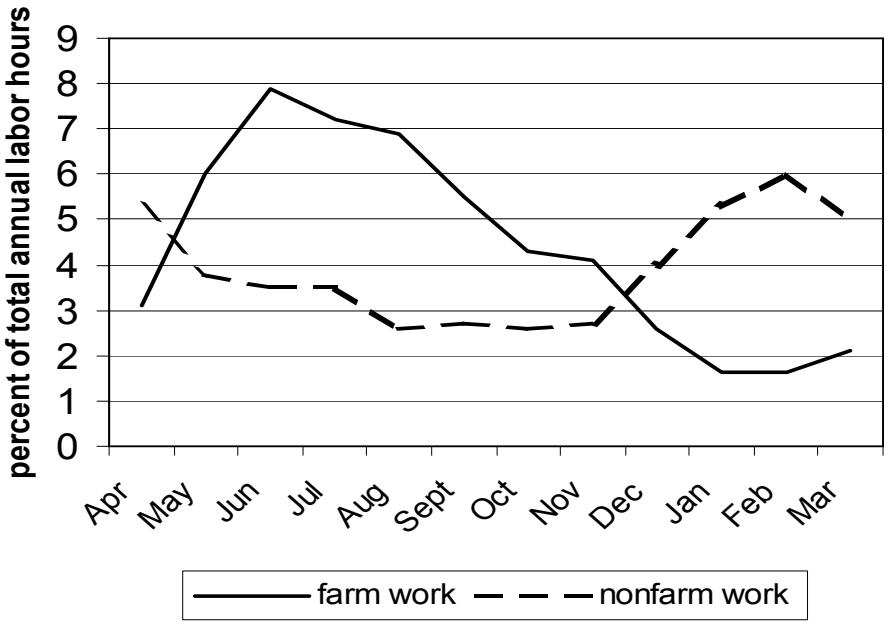
PSP = public sink, paying
PFP = public faucet, paying
PFF = public faucet, free
N = number of outlets

Source: Taillefer et al. (2000).

d. Seasonal.

Rural nonfarm enterprises experience marked seasonal fluctuations in activity (Figure 6). In general, levels of rural nonfarm output run counter cyclically to the agricultural calendar (World Bank 1983; Chernicovosky et al. 1985; ILO 1985; Thomi and Yankson 1985; Hazell and Hojjati 1995). Given agriculture's role as the predominant employer in most rural areas, seasonal labor release from agriculture drives labor availability for many off-season activities.

Figure 6—Seasonal Labor use in northern Nigeria, 1966-67



Source: Norman (1973).

Despite marked seasonality of nonfarm activity, numerous time allocation studies have found that nonfarm troughs rarely descend to zero. Even during the peak agricultural season, nonfarm activities can occupy as much as three to four hours a day (Norman 1972; Cleave 1974; Matlon et al. 1979; Eicher and Baker 1982). Rural

blacksmithing and metal work, for example, reach their peak during the agricultural season, as farmers require new tools and repair services for farm equipment (Liedholm and Chuta 1976).

e. Spatial clustering.

Nonfarm firms engaged in similar activities tend to cluster together, especially in towns, in order to benefit from larger markets, scale economies, lower energy costs, and a series of external economies of agglomeration. These benefits can arise from knowledge spillovers, the advantages of local markets for specialized skills, and backward and forward linkages associated with large local markets (Fujita, Krugman, and Venables 1999).

Even outside of rural towns, spatial clustering of nonfarm activity commonly emerges in purely rural settings. Silk weaving in Thailand is concentrated in Northeast Thailand, particularly around the town of Pak Ton Chai (World Bank 1983; Haggblade and Ritchie 1992). Some villages in India specialize in snake charming (International Herald Tribune, December 28, 1989), others in production of plastic jewelry (Papola 1987). Hebei province in northern China specializes in producing gymnasts and circus performers. A study of over 4,400 rural nonfarm clusters in Indonesia found the highest tendency to cluster in rural textiles, brick and roofing tile production (Weijland 1999). Tanneries, shoe production, saw milling and metal working often congregate in specific locations and in tight proximity to one another (Kennedy 1999; Schmitz 1999; Freeman and Norcliffe 1985).

These agglomerations of rural nonfarm activity emerge for a variety of reasons (Schmitz and Nadvi 1999). Some arise by historical accident, others due to a confluence of unusually favorable natural conditions, some as a result of direct public inoculation. Whatever their origin, clusters have attracted growing interest in recent years because of the

business linkages they create across like enterprises, and opportunities for collective action, collective learning, technological spillovers and prospects for reducing contact costs by promotional agencies (Ceglie and Dini 2000; Rosenfield 2001a, b, c; Schmitz and Nadvi 1999). Agglomerations can serve as important focal points for policy and program interventions as well as for private sector investment.

The distribution of service activity differs spatially as well. While rural areas house small retail establishments, basic farm repair and input supply, other services, such as primary schooling, health clinics, barber shops, milling, and transport facilities tend to locate in small towns. Larger settlements attract cinemas, restaurants, wholesale distributors, and higher level school, health and communication facilities (Wanmali 1983).

f. Important for the rural poor.

Rural landless and near-landless households depend heavily on nonfarm income sources. Those with less than 0.5 hectare earn between 30 and 90 percent of their income from nonfarm activities (Hazell and Haggblade 1993). The poor face great pressure to explore opportunities in the rural nonfarm economy. Yet the paucity of their human, financial and physical assets handicaps these efforts and often confines them to low-productivity, low-growth market segments from which there are few pathways out of poverty, simply a means of bare survival. As a result, the RNFE often becomes highly concentrated, with sharply unequal distribution of income and with richer and more educated households dominating the most lucrative niches. In this environment, the policy challenge becomes one of equipping poor households to move from these “refuge” nonfarm jobs to more remunerative ones. To do so, they require a variety of private assets such as education

and start-up funds, and public assets such as roads and electricity and information about how to access dynamic market segments.

Nonfarm income also provides an important tool for the poor in stabilizing household income during drought years (Gordon and Craig 2001; Reardon et al. 1998). In a study of several villages in the semi-arid tropics of India, for example, Walker and Ryan (1990) found that non-agricultural self-employment and labor market earnings not only became a more important source of income on average during the arid 1980s, but also contributed to lower income variability.

Because nonfarm income proves important for financing on-farm investments, nonfarm earnings become important to food security both directly by helping the poor to buy food and indirectly by financing the purchase of farm inputs necessary to increase food production. In Africa, nonfarm income is usually much more important than farm input credit in financing farm inputs (Reardon et al. 1994).

Gender, caste and social status can restrict access by the poor to the most lucrative nonfarm activities in some settings. In the same way that child-rearing obligations may limit women's mobility and force them into home-based, highly labor-intensive pursuits such as weaving, silk rearing and basketry, caste and social restrictions may force specific poor household groups into traditionally reserved low-productivity rural nonfarm activities. In India, these include pottery, weaving and tanning among many others (Lanjouw and Shariff 2000). Evidence from many areas indeed demonstrates a correlation between asset poverty, ethnic minorities and gender. Discrimination, weak asset base, and restrictions on geographic and occupational mobility all conspire to limit access by key disadvantaged social groups to more remunerative rural nonfarm activities.

g. Women's key role.

Rural nonfarm employment holds special importance for women. Women account for about one-quarter of the total full time RNFE workforce in most parts of the developing world, though only about 10 percent in the MENA region (Table 2). They also participate in part-time RNFE activity, particularly in household-based manufacturing and service activities. Women dominate many of the nonfarm activities that grow most rapidly during structural transformation – activities such as food processing and preparation, trading and many services. They likewise hold major interest in many of the declining rural nonfarm occupations – basket making, mat making, ceramics and weaving. Consequently, women will be key actors in the economic transition of the rural nonfarm economy. To facilitate their contribution to an accelerated rural transformation will require assistance agencies and governments to explicitly recognize the key role to be played by women entrepreneurs and employees.

Evidence on women's success in RNF activities is mixed. In some situations, as in some poor zones of Chile, women prove more successful than men in RNF activities, earning higher wages (Berdegué et al. 2001). In other cases, the opposite occurs. It appears that the critical issue may not be gender per se but rather who lacks the assets and mobility to undertake poverty-alleviating, non-refuge rural nonfarm activities.

h. A handmaiden or an engine of growth?

Many RNFE activities produce goods and services that are consumed almost entirely within the region in which they are produced (e.g. many retailing and personal services, highly perishable agricultural products, and the processing of local agricultural outputs). Expansion of these activities is constrained by growth in local demand, which in turn

depends on growth in regional income and in the volume of goods produced that need to be processed and traded. But what determines regional income and the overall volume of goods produced? Economists distinguish between those goods and services produced in a regional economy that have their most important markets outside the region (the region's so called 'tradables' or "exportables"), and those that are mostly consumed within the region itself (the region's 'nontradables'). Tradables play the key role in determining the level of output and income in a region. Because their demand lies mostly outside the region and the price they receive is largely independent of the amount the region sells, then growth in tradables output is determined primarily by supply side constraints. By overcoming these supply side constraints, a region can expand its production and sale of tradables, and this leads to additional income and demand for local nontradables. Tradables production acts as a powerful motor of economic growth, and this motor in turn generates additional demands for local nontradables to supply inputs, process outputs or furnish consumer goods to workers in the tradables sector (Mellor 1976; Haggblade, Hammer, and Hazell 1991)[8]. Consequently, direct promotion of tradables output can generate significant second-round benefits by propelling demand-led growth in rural nonfarm activity. Tradables output propels the regional economy and serves as the engine of rural growth, while the ancillary activities become handmaidens of growth, their prospects governed ultimately by the rate of growth in tradables output. Where does the RNFE fall? Is it an engine or a handmaiden of rural economic growth?

[8] Regional economists refer to the tradables sector as the economic "base" of a region's economy (Richardson, 1985).

Most commonly, agriculture produces the main tradables in rural regions, but so can natural resource extraction activities like mining and logging, and tourism (a way of 'exporting' services). Many, though not all, RNFE activities are regional nontradables and are handmaidens rather than engines of growth. In some instances, however, especially in the more liberalized economies of today, export potential of rural nonfarm goods and services can serve as motors of rural economic growth. Independent motors of growth in the rural nonfarm economy include tourism, mining and quarrying, entrepot trade, and rural sub-contracting of some manufacturing processes by urban-based firms. The amount and type of such tradable opportunities vary enormously across regions, depending on such key factors as agroclimatic conditions, access to roads and markets, and the health and structure of the surrounding national economy, its per capita income, growth rate, and accessibility.

Policy and program interventions designed to strengthen the supply side of the RNFE need to recognize the importance of growing regional tradables output, without which regional consumer and business demand becomes a serious constraint to rural nonfarm growth. Increasing the supply of nontradables in the context of stagnant tradables output is likely to be counterproductive for the producers of nontradables, depressing their prices and incomes. Assessments of the potential for both economic growth and for cost-effective interventions need to be based on realistic assumptions about the available tradable activities that will drive growth in demand for many of the RNFE outputs. This can pose a particularly severe constraint in many resource-poor areas, as we shall see later.

3. INTERVENTIONS IN HISTORICAL PERSPECTIVE

WHO INTERVENES IN THE RNFE AND WHY?

Alongside the multitude of small and medium-sized firms who operate daily in the rural nonfarm economy, a group of key large actors make decisions and take actions that largely shape the environment and opportunities faced by the RNFE. Three groups, in particular, converge in the rural nonfarm economy with each playing a different but crucial role in influencing the structure and dynamics of opportunity for the rural poor.

a. Large private firms.

Large modern corporations make decisions and take actions that powerfully shape opportunities in the rural nonfarm economy throughout much of the Third World. More frequently than governments, in many instances, these private firms initiate sweeping changes in the rural nonfarm economy. In the wake of world-wide trends towards economic liberalization, from the 1990s onward, these forces of change have swept ever more powerfully across the rural nonfarm economies of the developing world.

Rural areas have attracted several main categories of large firms. Agribusiness firms locate processing plants and collection facilities in rural areas to reduce spoilage and reduce transport costs in weight-reducing processing activities and to take advantage of lower wages. Tourism promoters export services by developing facilities in unsettled regions, along pristine beaches, in interesting ecological niches or favorable climates. Resource extraction – of timber or minerals – likewise requires location in rural areas where the raw materials are found. And in a more recent development, the food retailers (supermarkets, fast

food chains and mini-market chains) that have sprung up in enormous numbers in many cities are also spreading, starting in the early to mid-1990s, to intermediate cities and larger rural towns all over East and Southeast Asia and LAC. Many of these retailers develop local contracting arrangements for the supply of their agricultural products. Together, these four activities – agriculture and the agroprocessing it supports, tourism, extractive industries, and food retailing – provide the economic scaffolding on which much of the supporting nonfarm activities are built. Where the large players establish largely governs market prospects for ancillary rural service and commercial activities.

In some instances, the actions of large firms benefit specific categories of smaller rural nonfarm actors. They supply improved technology, key inputs or market outputs of smaller producers (Table 6). Urban ceramic plants supply high-quality ceramic liners to village stove producers in Kenya (Jeans et al. 1990). A network of yarn traders in Northeast Thailand links newly specialized household yarn producers with large mills who serve the large and growing export market (Figure 4).

The tourist industry from Cancun to Goa and throughout the developing world generates service sector jobs as well as markets for agricultural products and marketing services necessary to deliver them to the new hotels.

In addition to marketing both inputs and outputs, some large firms even offer direct assistance to their small firm clients. For many years, Unilever South Africa ran management assistance courses for the many small retailers who distributed their products (Rodolo 1972). They recognized that well-managed, prosperous small vendors would prove more valuable business partners, so Unilever invested in extension support to the small firms. Growing recognition of these private sector business linkages has inspired a series of efforts

to build on these market-delivered business development services (Barton 1997; Goldmark et al. 1997; Grierson et al. 1997; Steel et al. 2000; Hallberg 2001).

In other cases, the large firms threaten to obliterate entire armies of smaller-scale competitors. The recent entry of large dairies and modern chain retailers has decimated smallholder dairying in parts of Chile, Argentina and Brazil where thousands of small dairy operations have closed down over the past decade (Dirven 1999; Gutman 1999; Jank et al. 1999). Aggressive expansion of factory brewed sorghum beer during the 1970s and early 1980s threatened the livelihood of over 50,000 home brewers in Botswana (Haggblade 1992). Similarly, the introduction of large-scale rice mills in Indonesia during the 1980s likewise threatened to put tens of thousands of village women out of business as hand pounders of rice (Timmer 1972). Moreover, even when large food retailers such as supermarkets bring new sources of demand to a region by sourcing locally for their far-flung chains, smallholder farmers and rural processors frequently face difficulties in capitalizing on these opportunities because they cannot easily meet the required volume, consistency and food safety standards (Reardon and Berdegue 2002).

b. Non-profit promotional agencies.

A plethora of private, civil society and public agencies promote rural nonfarm activity on equity and environmental grounds, mostly on a not-for-profit basis. They see large numbers of poor households engaged in small businesses that provide an important supplement to their meager household earnings. They see the need for increased rural nonfarm earnings in areas where widespread landlessness limits farming for large segments of the rural population. They see opportunities for the poor to contribute to environmental goals while also increasing their incomes, through activities such as organic coffee roasting

or processing of nontraditional tree products. They note that low capital requirements for labor-intensive rural nonfarm activities ensure easy access to these activities by poor households.

Equity-oriented groups – NGOs, religious groups, donors and sometimes selected government departments – implement an array of direct interventions on behalf of the poor (Table 7). Fashions have shifted over time, as multipurpose, cradle-to-grave integrated support systems have given way to specialist, single dimensional interventions (Figure 7).

Among direct interventions, micro-credit proves by far the most popular among promotional agencies (Otero and Rhyne 1994; Morduch 1999). These lending programs aim to provide rural entrepreneurs access to funds, then step back and let them exploit business opportunities as best they know how. In parallel with the dominant micro-credit efforts, a solid minority of practitioners offers an array of business development services, including entrepreneurship training and development, improved technology, marketing support, and business linkages to large firms (Donor Committee 1995, 2001; Dawson and Jeans 1997; Levitsky 2000).

As they operate their promotional programs, socially motivated agencies now increasingly converge with profit-oriented corporations in the newly liberalized rural economies of the Third World. The lion and the lamb now meet face-to-face.

Figure 7–Historical evolution of direct firm-level efforts to promote small and micro enterprises

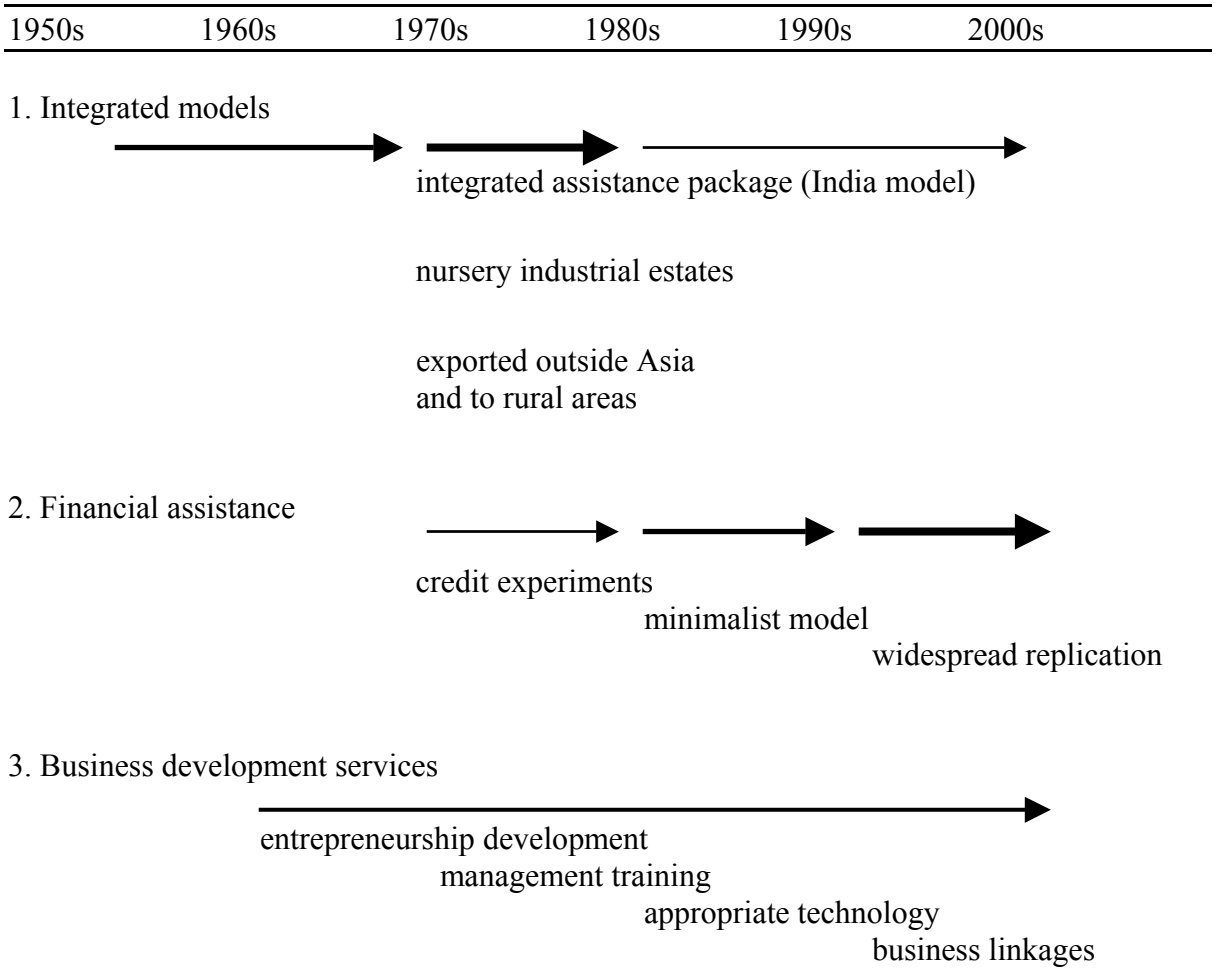


Table 7–Categories of intervention on behalf of the rural nonfarm economy

	Demand Stimulus for RNF Goods and Services	Supply-Side Interventions
System-level interventions (multiple-firm impact)		
1. Policies	• pro-agricultural policies • government procurement • trade policies affecting competitive imports • tourism promotion	• macro policies affecting input cost and output prices (tariffs, exchange rate, interest rate, labor law) • subsector-specific policies (licensing, taxation, subsidies, zoning, building and health codes)
2. Public investments		• rural infrastructure (roads, electricity, communications) • rural markets • rural town infrastructure • industrial parks and estates • credit institutions • education
3. Large firms as intermediaries	• export promotion • promote linkages (subcontracting, business linkages)	• supplier credits • technical and management assistance
Direct assistance to individual firms		
4. Credit		Capital • credit • subsidies • facilities rental
5. Business development services	• marketing assistance	• appropriate technology research and extension Management • entrepreneurship screening and training • management training and advice Labor • technical training Raw materials • bulk purchasing

Recognition of the opportunity - and of the corresponding tension - that large firm presence presents becomes crucial to identification of opportunities for growth among the small and micro-enterprises activities in which the poor typically predominate. Much of the key to successful equity-oriented business promotion involves recognizing conflicts and complementarities where they exist and, where they exist, exploiting available complementarities in the marketing, input supply, and technological links between large and small firms (see Figures 1-5).

c. Governments.

Governments powerfully condition opportunities and constraints in the RNFE, though they often do so unintentionally and by default. Many times, national economic policies intended to influence the national economy as a whole generate unintended impacts on individual segments of the RNFE. Less frequently, governments enunciate policies explicitly intended to influence the RNFE.

Some policies, for example, exchange rate policies, tariffs, licensing and fiscal reforms, typically emerge from a set of complex and ongoing negotiations between government, large domestic urban businesses and foreign interests, that aim to further larger national interests but with little if any thought about their impacts on the RNFE. Business regulations and policies most frequently focus on the needs and interests of large urban firms. The small and the rural have little voice (Snodgrass and Biggs 1996). In rural areas, agricultural considerations dominate over the largely invisible rural nonfarm economy. Thus, in most situations, the policy environment in which rural nonfarm firms operate emerges by default as a result of many considerations other than the welfare of the rural nonfarm economy. As a result, these policies can have unintended impacts on the RNFE,

sometimes opening up opportunities and in other instances destroying whole industries overnight.

Unintended negative consequences for the RNFE have emerged frequently from the recent trend towards macro-economic liberalization that has unleashed a flood of competition from large agribusiness and retail firms in rural areas of the Third World. In Sri Lanka, the liberalization of the late 1980s launched a flood of imported textiles sending 90,000 deprotected rural handlooms into extinction (Osmani 1987). In the Philippines, textile resale prohibitions compromised raw material access by 50,000 producers of recycled cloth products (Overy and Giray 1996). Liberalization in Zambia, in the early 1990s, opened the door to rapid incursions by the large South African grocery chain, Shoprite. Within five years, Shoprite has captured an estimated 60 percent of the local food retail market, squeezing legions of local suppliers out in the process (Figure 3).

Unintended windfalls have also emerged sparking sometimes considerable growth in the RNFE. In Bangladesh, liberalization of agricultural inputs during the 1980s spurred a huge influx of small diesel engines for use as pumps on shallow tube wells. Only after their introduction did farmers realize that during the offseason they could move these small engines into riverboats and rice dehullers. As a result, these small engines launched a revolution in rural riverboat transport, transforming it from an old-fashioned, cheap-and-slow to a modern, cheap-and-fast mode of transportation (Jansen et al. 1989). They likewise dramatically transformed the rice and wheat milling industries by launching 30,000 small rural dehuller mills into the rural nonfarm economy (Chowdhury and Haggblade 2000).

Similarly, agricultural research, extension and infrastructure investment programs that influence the rate of change in agriculture powerfully influence opportunities for

agriculturally linked rural nonfarm enterprises. The rapid agricultural growth in the Pakistani Punjab during the late 1960s and early 1970s stimulated development of a large, rural diesel pump manufacturing industry overnight (Child and Kaneda 1975). Similarly, rapid growth in the green revolution rice belt of the Philippines stimulated rapid growth in rural commerce and services, particularly education (Gibb 1974; Sander 1983). Often these indirect and inadvertent policy effects stimulate marked change in the rural nonfarm economy.

Some governments also intervene with a range of polices and investments that are explicitly intended to assist or modify the RNFE, for example, the provision of roads, power, water and telecommunications in rural areas and rural towns (some targeted specifically to RNFE firms through creation of industrial estates), small business assistance programs (including credit, input subsidies and training programs), and interventions in labor and product markets (such as the creation of reserve occupations for handicraft workers in India, and trade protection for some manufactured products). Table 7 provides an overview of popular types of firm-level assistance.

THE APPROPRIATE ROLE FOR GOVERNMENT INTERVENTION

In an ideal world, government interventions would be justified on the basis of sound economic or social concerns, such as the provision of public goods, correction of market failures, and poverty and environmental concerns.

a. Creation of an Enabling Business Environment

The overall business environment in which nonfarm firms operate proves central to their competitive health and to their prospects for growth. Macro-economic stability, physical security, property rights, contract enforcement, trade and pricing laws, business

registration, and other direct regulations all combine to influence the business climate and incentives for investment in nonfarm activities.

An important component of the required enabling environment is the adequate provision of public goods and services. Uniformly, studies of the rural nonfarm economy conclude that many of the fundamental prerequisites for enterprise growth remain public goods. Roads, electricity, telecommunications, and other infrastructure provide fundamental underpinnings for rural nonfarm activity (Ahmed and Donovan 1992; Ahmed and Hossain 1990; Binswanger et al. 1989; World Bank 1994). Investments in rural education, health and skills development likewise provide essential building blocks for prosperous, high-productivity rural jobs. Growth in the rural nonfarm economy will require a set of public goods, which the private sector, left to itself, will either not provide or will provide at too low a level from a national economic perspective.[9]

The introduction and enforcement of grades and standards, the creation of brands, and public certification systems constitute important soft infrastructure and soft assets. All require collective action, at least, if not public intervention. Given the rapid growth of large retailing and agribusiness firms now operating in rural areas, access by small firms depends increasingly on their ability to meet quantity and quality standards required by the large firms. Governments are uniquely placed to play adjudicate and enforce these contractual grades and standards.

Much of the basic architecture of the required enabling environment is not specific to the RNFE, but also benefits other sectors including the urban nonfarm economy and

[9] Even though private firms could conceivably operate toll roads, private electric utilities and courrier services, experience suggests that in most rural areas of the developing world they do not. Or at least the private sector fails to invest as much, as early or as aggressively in rural areas as would be desirable.

agriculture. But greater attention to the needs of the RNFE does lead to some departures from the past. Too often, for example, business regulations and policies have reflected the needs and interests of large urban firms and manufacturers, while the needs of small rural firms and service establishments that dominate the RNFE have been largely overlooked. Likewise, infrastructure investments have been concentrated in larger urban areas, whereas the RNFE requires a more equitable spatial allocation of these investments to include small rural towns and their hinterlands. Such investments can also stimulate more widespread agricultural growth, leading to a double dividend.

b. Equity Concerns

Because the RNFE plays such a key role in the livelihood strategies of the rural poor, who account for the vast majority of the poor in most developing countries, changes that adversely affect small RNFE firms and RNFE employment require special vigilance on the part of government. These concerns are especially heightened at a time when market and trade liberalization are unleashing new forces of competition in rural economies, with significant short and long term implications for the livelihoods of the rural poor. We have already cited the cases of the adverse impact of supermarkets in southern Africa on small retailers, of commercial beer brewing on home brewers in Botswana, and of large dairies and modern chain retailers on smallholder dairying in parts of Chile, Argentina and Brazil, but these are indicative of a much larger problem that is emerging.

The appropriate government response in these cases in not to prevent modernization and its consequent benefits for consumers, including the rural poor themselves, but to assist small firms either better compete in the market or to retool for alternative RNFE activity, while providing adequate safety nets in the meantime. Assisting the poor in these ways can

be especially challenging when past protectionist policies are being dismantled. For example, the Indian government and others have historically initiated large-scale schemes and quota systems designed to protect some rural activities important to the poor. The heavy implicit subsidies embedded in these programs have proven very costly, leading many governments to dismantle them. But as rapid economic liberalization sweeps across the developing world, governments may once again face stiff pressure to assist rural producers navigate these rapid transitions by reintroducing protectionist measures.

Equity considerations also motivate many of the non-profit agencies who most frequently intervene on behalf of rural nonfarm economy. They aim explicitly to open up opportunities for the rural poor to diversify their income earnings in nonfarm pursuits. As large firms increasingly penetrate rural areas of the developing world, the legions of small firms deprotected as a result may face serious dislocation without some sort of temporary assistance in making the transition to newly ascendant niches (Box 5). Governments should buttress rather than compete with these efforts, focusing on residual poverty problems rather than crowding out private and civil society initiatives.

c. Environmental Concerns

Some types of RNFE firms are responsible for significant and growing environmental problems in may rural areas and rural towns. For example, tanneries associated with growing livestock activity, and small-scale chemical, textile and even food processing firms are significant polluters of waterways in many Asian countries, and some types of large manufacturing firms are major air polluters. Government has an important regulatory role to play in these cases, which sometimes simply require imposing the same environmental standards and enforcement already practiced in larger urban centers.

Box 5—Facilitating poor household transition to growing market channels

Village women have produced silk in Northeast Thailand for centuries. Today, nearly 300,000 operate, as they have for centuries, as integrated producers of mulberry, cocoons, yarn and woven cloth (Figure 2, Channel 1). They rear native yellow silkworms, reel yarn by hand, and then weave their yarn on traditional hand looms.

Rapid changes began to occur during the 1950s and 1960s after a retired secret service agent named Jim Thompson retired to Thailand and began working with local silk producers. He identified key designs, imposed strict quality controls and began marketing Thai silk to the tourist and export market. He established large-scale production facilities using fly-shuttle hand looms and high-quality white warp yarn in setting his looms. Over time, many of his former employees established their own weaving factories, as gradually a concentration of about 140 large and small factories emerged in close proximity to the original Jim Thompson headquarters in Pak Ton Chai.

As high-end silk exports grew, the Department of Agricultural Extension (DOAE) began a breeding program to reduce dependence on imports of exotic white silk. They succeeded in producing a hybrid silkworm by crossing the native yellow silkworm with exotic white varieties from Japan. The resulting yellow hybrids roughly doubled yarn yields per cocoon while at the same time retaining the knobby texture for which Thai silk is known.

During the late 1980s, CARE began working with poor village silk producers in the Northeast. In conducting a diagnostic subsector study to evaluate opportunities for their client group, they discovered that village women can occupy several principal niches. They can remain as fully integrated producers of traditional silk in Channel 1. Alternatively, they can specialize as producers of yellow weft yarn in Channel 2, linked to the growing factory weavers by a network of about 100 itinerant yarn traders.

Market dynamics under way point to rapid growth in the modern segments of the silk subsector. Channels 2-4 have grown rapidly in recent years, at about 10 percent per year, driven by international export growth and quality control efforts of the Jim Thompson Silk Company and the constellation of large factory spin-offs set up nearby. Channel 1, the integrated traditional producers, serve a shrinking market with low-productivity, low-returns technology. Between 10,000 and 12,000 traditional weavers exit this channel each year. Meanwhile, the growing channels offer higher growth as well as higher productivity in mulberry, cocoons and weaving.

The transition to Channel 2 roughly quadruples household returns, though it requires access to hybrid eggsheets from the DOAE and improved mulberry to cope with the increased volumes. CARE's efforts, described more fully elsewhere, revolved around facilitating the transition of village women from the slow-growing, low-return Channel 1 to the much faster-growing, higher-return Channel 2 where they specialized as producers of weft yarn for the large export factories (Haggblade and Ritchie 1992; Bear et al. 1993; Bear 1993).

ALTERNATIVE INSTITUTIONAL MODELS.

a. Institutional Gaps

In spite of its size and economic importance, the rural nonfarm economy frequently falls through gaping holes in the fabric of existing promotional and support institutions (Gordon and Craig 2001). Ministries of Agriculture, which dominate the rural landscape, typically find themselves preoccupied with issues of farm production, research and extension. Only rarely do they establish marketing divisions to monitor and support rural nonfarm assembly, marketing and agroprocessing activities (Abbott 1986).

Ministries of Commerce and Industry concentrate most frequently on large urban centers and on international trade rather than on dispersed, itinerant rural firms. Even notable exceptions such as India's Village and Khadi Industries Commission and China's priority rural industries program concentrate exclusively on rural manufacturing to the exclusion of the often larger and faster growing rural services and commerce (SGRNFS 1995). Consequently, large segments of the rural nonfarm economy fall through the cracks.

Private services, even though they predominate in many rural nonfarm economies, find little support from their respective Ministries of Health, Education and Transport. Instead, these line ministries typically focus on delivery of public, rather than private, services. Yet private schools, private clinics, private transport, private media and entertainment frequently grow quickly in buoyant rural economies.

Similarly, responsibility for infrastructure citing, financing and maintenance – so vital to the health of RNFE – remains splintered across line ministries of Post and Telecommunications, Energy and Roads. Meanwhile secondary roads and maintenance

typically fall within the purview of local government authorities. The result is a highly fragmented institutional network of public support for rural nonfarm activities.

b. Integrated Responses

To bridge the sectoral divide that fractures most institutional support networks, governments have responded in a variety of ways. Much of this institutional experimentation took place in the 1970s, during the past great wave of public interest in broad-based rural development (Ruttan 1975, 1984; Rondinelli and Evans 1983; Holdcroft 1984; Donaldson 1993). In the course of that and subsequent experimentation, six principal institutional models have emerged. The first four are integrated models. They recognize the mutually reinforcing interdependence between agriculture, nonfarm activity, infrastructure, education and social services, then try to find institutional models that can coordinate delivery of these interconnected ingredients. The two remaining models take a sectoral approach to nonfarm promotion.

Ministries of Rural Development. A common response during the 1970s, these new ministries typically assumed a broad cross-sectoral mandate for the provision of agricultural support, social services, nonfarm business assistance and infrastructure. Yet since the old line Ministries of Agriculture, Commerce, Roads, Post and Telecommunications remained, the newcomers quickly encountered stiff resistance to the erosion of the prerogatives and resource control. In most settings, the resulting institutional skirmishes and infighting quickly dissipated the influence of the new Ministries of Rural Development. So most governments have abandoned this model as unworkable. The short-lived Ministries of Rural Development have mostly disappeared, their functions subsumed within the line ministries whose mandates they usurped.

High-level, supra-ministerial coordinating units. An alternate model called for the establishment of a rural development czar or council, often located in the President's or Prime Minister's Office, to coordinate activities of the line ministries. One example of this approach comes from Botswana, where a Rural Development Coordinator sat in the Ministry of Finance and Development Planning but reported directly to the Vice President who chaired a newly established Rural Development Council. Because of the high-level political commitment of the Botswana government, the effectiveness of the RDC and VP, and the tight link between RDC priorities, rural development planning and financial budgeting, this system ensured synchronized priorities and activities across both central government ministries as well as local district governments. Consequently, the system yielded generally impressive results. The small size of the country, the highly professional and effective civil service and strong political commitment all contributed to the smooth functioning of this model work. However, in other settings, these ingredients are not always present.

Special regional or project authorities. The rural development fervor of the 1970s gave rise to a generation of integrated rural development projects (IRD). Because of the project packaging prevalent among donor-funded activities, many such efforts adopted that same framework for project management. Funding agencies persuaded host governments to sanction the creation of special regional or project authorities to manage these complex, multi-sectoral interventions. Heavily subsidized and largely reliant on donor funding, these special project authorities naturally withered as donor enthusiasm faded and the great tide of funding ebbed to leave the remains of rusted carcasses stranded and rusting in the sand. The contraction was amplified by domestic financial stringencies imposed by structural adjustment programs in the late 1980s. Some continue to function, notably the large regional

development programs of North East Brazil (Tendler 1993). The vast majority, however, remain defunct and largely discredited as overly ambitious, excessively expensive, and too difficult to manage (Ruttan 1975, 1984; Holdcroft 1984).

Decentralization and delegation to local governments. Early in the 21st century, as during the 1970s, decentralization has emerged as a popular strategy for spurring rural and local development efforts (Rondinelli 1981; Pearson 1997; Manor 1999; World Bank 2001). Recent thinking also supports the synergistic roles of central and local government, and the need to find an appropriate combination of the two (Tendler 1993). As with the previous approaches, this strategy is based on the premise that a combination of ingredients – agricultural technology, rural roads, and communications facilities – is necessary to stimulate broad rural growth. Unlike the other integrated strategies – the rural development ministries, ministries of agriculture and the high-level coordinating committees – this approach relies on local administrations rather on central government agencies. The premise of this approach is that local knowledge is necessary for effective priority selection and that local commitment is necessary for infrastructure maintenance and on-the-ground tracking necessary to monitor and ensure desired outcomes.

In spite of the resurgent optimism of its proponents, local governments throughout much of the Third World remain bereft of fiscal resources and decision-making authority, both of which financially beleaguered central governments prove reluctant to devolve (Bahl et al. 1984; Bahl and Lynn 1992). While some countries have made progress, in most instances the transfer of real authority and resources to local level decision-makers remains largely an unmet challenge.

c. Sectoral institutions and responses

Expansion of responsibilities in the Ministry of Agriculture. Because of its large presence in rural areas, Ministries of Agriculture typically staff the most effective extension network functioning in rural areas. They therefore become natural candidates for extending central government mandates in rural areas. In practice, this all too often involves nothing more than the addition of a marketing division or agroprocessing unit within the ministry. Historically, these units have fared poorly in resource allocation decisions since they are viewed as peripheral to the core ministry functions of boosting farm production. In response to greater competition in domestic agricultural markets as a result of trade liberalization, this view is now changing in some settings as countries face greater opportunities to capture more value added from agriculture through agro-processing and from production of higher value products. Chile and Brazil, for example, have invested heavily in the past decade to modernize and bring small-scale farmers into the market economy by adding value through agroprocessing and improved marketing, including promoting stronger links with urban markets (Berdegué 2001).

Rural industry programs. Eschewing the cross-sectoral approach embodied in the above models, some countries have instead focused on one portion of the rural nonfarm economy – rural manufacturing. Both China and India have adopted this strategy, India with its Village and Khadi Industries Programs and China with in Five Rural Industries program. Though the industries selected for assistance differed, both countries translated high-level policy commitment for rural industry promotion into a complex system of subsidized inputs, policy protection, quotas, and promotional institutions. Common to both was a favoring of rural manufacturing and largely neglect of rural commerce and services. During the 1990s,

both governments abandoned these heavily subsidized systems, deprotected the previously favored rural manufacturers and liberalized incentives to a considerable extent. In doing so, they have both ushered in an era of major transition – large-scale disappearance of many highly protected but uncompetitive industries and the rapid growth of others such as export subcontracting. Interestingly, many of the emerging private rural firms in China today are transformations of formerly community-owned town and village enterprises (TVEs). Some observers claim that prior public or community investments and protectionist policies laid the foundations for successful privatization, suggesting that such policies are not always inappropriate in the early stages of rural economic growth (Tendler 1993).

LESSONS FROM THE EVALUATION LITERATURE

Experience to date with policy and program interventions in the rural nonfarm economy has been extensively reviewed elsewhere (Haggblade et al., forthcoming; Harper and Finnegan 1998; Kilby 1979; Kilby and D'Zmura 1985; Hulme and Mosley 1996; Morduch 1999; Sebstad and Chen 1996; Tendler 1989; Tendler and Amorin 1996). This accumulated body of evidence suggests the following general principles for successful intervention on behalf of the rural nonfarm economy.

Policies matter. Macro economic policies, key sectoral policies and even subsector-specific policies (taxes, tariffs, quotas, regulations) all influence opportunities for rural nonfarm firms. A favorable legal and regulatory environment, especially property rights and contract enforcement, marketing institutions, and policies (grades and standards, safety regulations) are also necessary to enable rural nonfarm enterprises to be responsive to new opportunities and threats. Since these impinge differently on different categories of firms,

on-the-ground diagnostic exercises often prove crucial to unraveling the precise impact of a given enabling environment.

Invest in human capital: the one asset poor households possess in abundance. Education offers one of best long-run tools for enabling access by the poor to the higher growth segments of the RNFE (Bigsten 1984; Jollife 1998; Lanjouw 1999; Lanjouw and Shariff 2000). These opportunities typically include higher-productivity nonfarm technologies and private services as well as wage employment in modern nonfarm enterprises. Given often implacable opposition to asset redistribution in many policy environments, focusing on education for the poor offers one of the very few politically feasible means of leapfrogging poor children out of poverty in the next generation.

Adequate rural infrastructure is essential. This conventional wisdom receives consistent ratification in over four decades of empirical research. While the general principle remains unimpeachable, its application is not always easy. The difficulty, like the devil, lies in the details. Key questions of sequencing and specific site selection depend on extensive local knowledge. Political intrigue and conflicting priorities complicate decision-making. Funding for maintenance remains elusive in many settings, and so building standards must accommodate realistic service expectations.

Financial institutions facilitate growth and transition of the RNFE. Effective savings institutions are required to intermediate and maintain a flow of investible funds within rural regions. Viable lending institutions for both consumer and producer credit will certainly facilitate growth of markets and firms.

Yet past emphasis on micro credit as a driver of RNFE growth has been greatly overstated. In stagnant markets, an infusion of working capital credit leads to a simple redistribution of income, often among the poor themselves, as assisted firms pull market share from unassisted firms (Box 6).

Box 6--The Displacement problem: Difficulties of RNF promotion in stagnant rural regions

Dhenki loans in pre-Green Revolution Bangladesh. In first half of the1980s, five years before the Green Revolution swept across rural Bangladesh, Grameen Bank loaned 15 percent of its funds to women villagers for operating push-pedal *dhenkis* to dehull paddy. At the time, dhenki lending constituted the second largest item in the Grameen portfolio (Hossain 1985).

As a result of these loans, the borrowers' income rose. But what was the net income gain to Bangladesh? Paddy production at the time hovered at about 22 million metric tons per year. With or without the Grameen loans, villagers and millers husked 22 MMT of paddy. If Grameen's borrowers husked more, someone else necessarily husked less. The assisted firms' growth represented pure displacement. Redistribution may be a legitimate project objective, especially if poor village women gain at the expense of large wealthy rice millers. But often observers have confused redistribution with growth. In the lethargic rice economy of Bangladesh in the early 1980s, rather than increasing aggregate rural nonfarm income, this portion of the Grameen portfolio merely redistributed milling income from one group of processors to another.

In general, credit schemes operating in stagnant markets run the risk of merely redistributing income. In cases where the poor compete among themselves, credit injections may merely serve to redistribute poverty.

As Morduch (1999) concludes, in his recent review of microfinance programs, "The best evidence to date suggests that making a real dent in poverty rates will require increasing overall levels of economic growth and employment generation. Microfinance may be able to help some households take advantage of those processes, but nothing so far suggests that it will ever drive them." With credit, as with any other intervention tools, policy makers must always ask how interventions increase aggregate opportunities for RNFE.

Identify growing markets. Successful efforts at rural nonfarm promotion begin by identifying and expanding key sources of demand for RNF goods and services and then figuring out how to link RNF producers to those sources of demand. Growth in local

demand is typically conditioned by growth in local tradables production, and it is only once this is growing that significant opportunities for expanding local sales of most RNF products arise. But as many countries liberalize their markets and develop, opportunities increasingly emerge for selling more RNF products outside rural areas. These opportunities prove especially important to regions poorly endowed for agricultural growth. Without prior identification of growing sources of demand, interventions that simply increase supply will lower prices, often to the detriment of poor producers and perhaps even to the sector itself in cases where demand is inelastic.

Recognize the importance of rural commerce and services. Many emerging market opportunities will lie in commerce and services: Supply-side promotional interventions must remember that commerce and services are most frequently the most rapidly growing segments of the rural nonfarm economy. Private education, health, entertainment, prepared foods, communication and transport services offer legions of growing opportunities for rural entrepreneurs. Therefore, projects and policies should not focus, as many have in the past, exclusively on rural manufacturing (Boxes 7 and 8).

Box 7--Services as sources of growth

Service activities frequently comprise the fastest growing segment of the rural nonfarm economy. Demand for transport, construction, marketing, consumer retailing, prepared foods, health and education services grows rapidly with income growth in dynamic rural regions. And unlike home-based manufacturing, which proves to be the most vulnerable component of the rural nonfarm economy, rural services enjoy spatial insulation from urban competitors. While home-based basket-making, pottery and weaving face stiff competition as rural economies grow (Table 1), rural services ride the tide of growing local consumer demand.

In spite of its natural protection and frequent opportunitiesfor growth, rural services have been historically ignored in promotional efforts – in part because they are often itinerant, seasonal and invisible and in part because of a mistaken belief that only manufacturing is "productive". Recognition of the importance of service income suggests it deserves greater consideration in promotional efforts than it has received in the past. Indeed, the three-pronged strategy advocated in Section 4 applies equally well to services as to other segments of the rural economy.

In some instances, services can serve as motors of regional growth. Marketing services, such as export promotion, brand development, bulking and efficient export distribution systems, often prove crucial to the expansion of export-led growth in resource-poor zones. The introduction and enforcement of grades and standards, likewise, often proves key to both efficiency and to poor household participation in rapidly evolving marketing chains. Tourism development -- encompassing on an array of rural services from transport, to hotels, to laundry services, restaurant and guide services – can serve as an important motor of regional development.

In other instances, service activities ebb and flow with purchasing power generated by the regional economic base. Personal services such as tea shops, maid services, hair salons, consumer retailing, repair, education and health services remain tightly linked to trends in general economic activity in a given region. These activities remain, for the most part, handmaidens rather than engines of rural economic growth. In the same way, rural manufacturing of consumer goods such as local beers, pottery, mats and construction materials also rise and fall with changes in consumer spending in the region. In most cases, interventions which focus on stimulating engines of rural growth will automatically carry along these demand-driven consumer services with them. Where equity concerns arise, intervention may be necessary to ensure that the poor are able to participate in these growing service activities. Elsewhere, intervention may not be necessary in these ancillary activities. Efforts will be most productive if focused on revving up regional engines of growth, whether they be in agriculture, manufacturing or services.

Box 8—Promoting service activities

Laundry services. Poor women earn significant income by providing laundry services to better off local households in a suburban slum area of Antananarivo, Madagascar (Figure 5). In a recent subsector review of these laundry services, a team from CARE International together with the staff from the neighborhood association examined the functioning of this activity, looking for bottlenecks, opportunities and means of expanding income for these women. The review identified three important points of intervention. First, expansion of key infrastructure, in this case public water fountains and wash basins, would prove central to efforts at expanding income for other local women. Second, policies aimed at imposing user cost fees at public fountains would raise costs of operation and lower poor households' access to already limited water supplies, though it would open further opportunities for private water delivery services. Finally, municipal management of wash basins limited access to key market infrastructure, so expansion of facilities and opportunities would require development of more open procedures for allocating wash basin access (Taillefer et al., 2000).

Maid services. In Monterey, Mexico, the local technical university has recently instituted a maid training program to help prepare poor women for entry into this growing market. They offer an overview of standards required in different market segments, such as upper class, middle class employers in large and smaller urban areas. They then provide training in contract law, and job specifics such as bed making, table setting and cleaning.

Tourism. Regional governments in Latin America have initiated a series of programs aimed at promoting rural tourism. In addition to marketing support, provision of key road and airport infrastructure, some offer specific training in hotel management, maid services and cooking.

Liberalization demands competitive thinking. Rural nonfarm enterprises increasingly operate in liberalized, deprotected markets. These newly liberalized markets mean that rural firms will have to improve quality or reduce cost in order to remain competitive. The introduction of grades and standards, improved marketing channels and new production and packaging technologies will all play a role in meeting the demands of increasingly exigent rural and urban markets.

Technology offers a key tool in the transition to higher productivity activities. Lowering costs and raising quality and standards require new ways of doing business. At the same time that new competitive pressures demand higher quality, changing rural wage rates

will favor transition to new forms of technology. Ultimately, the transition from low-wage, low-productivity nonfarm pursuits to higher wage, higher productivity activities will require access to new production technologies as well as investments in human capital.

Leverage, the simultaneous impact on many like firms, provides a common key to cost-effective interventions. Since rural enterprises are often small, interventions must affect many simultaneously to generate sufficient income growth to defray the costs of the intervention. Policy interventions offer the best examples of leverage. Increasing recognition that leverage is key to cost-effective interventions has led to growing interest in subsectors (Malhotra and Santer 1994; Nelson 1997; Chen 1996; Dawson et al. 2000), geographic clustering (Humphrey and Schmitz 1996), and business linkages (Grierson, Mead and Moyo 1997).

Tailor interventions across settings. Opportunities and constraints differ dramatically across settings. Even in a given location, the heterogeneous structure of the rural nonfarm economy implies that small and large firms, manufacturing and services may face considerably variable prospects for growth. Opportunities for some rural firms may come at the expense of others. Yet in other cases, growth for the few may trigger up- or down-stream potential for others. In order to evaluate opportunities and priorities across settings, potential interveners will require appropriate analytical and diagnostic tools, a task to which we turn in Section 4.

IMPLICATIONS FOR FUTURE INTERVENTION

Over the past four decades, the world has unleashed enormous energy and creativity into improving the welfare and performance of the rural nonfarm economy, particularly those segments on which the landless poor of the Third World so often depend. Yet these considerable efforts have met with mixed results because of three special challenges posed by the RNFE. First is the complexity of rural nonfarm activity, both structural and spatial. Intricate, often highly seasonal, networks of itinerant and small-scale participants link in complex and spatially far-flung supply chains with much larger firms who market inputs or outputs on which their economic survival depends. Second, the small size of many rural nonfarm enterprises -- particularly those accessible to the rural poor-- raises individual firm contact costs while at the same time making per firm benefits small in absolute size. Third, the highly fractured institutional environment in which rural nonfarm economy operates. Spatially, rural nonfarm supply chains transit multiple administrative boundaries – rural district administrations, various municipal jurisdictions. Functionally, they traverse not only district and municipal jurisdictions but also likewise the regulatory and promotional responsibility of multiple central government ministries. Thus emerges the fractured institutional environment in which most promotional efforts necessarily take place.

The experience of the past forty years suggests that the most effective of past promotional efforts have recognized three essential strategic ingredients.

Differentiate among regional settings. Rural regions differ dramatically in their economic potential, structure, institutional history, current asset distribution, and

performance. Standard prescriptions, the most popular of which is microcredit, generate widely differing impact depending on where they are injected. While lending may prove a valuable means of enabling poor households to grow their nonfarm businesses in buoyant agricultural zones, it risks merely redistributing market share and poverty in stagnant zones (Box 6). So attention to site-specific motors of regional growth becomes essential to understanding growth prospects for various segments of the rural nonfarm economy.

Supply chains. Both regional planners and business development specialists have concluded that a focus on specific commodity subsectors and the various supply chains within them offers the most feasible and effective means of promoting rural nonfarm activity. For regional planners, selection of a handful of key commodity subsectors provides a tractable means of coping with the bewildering spatial and structural complexity of the regional economy and of identifying key strategic investments necessary to facilitate growth in these lead sectors (Bar-El, et al. 1987; Rondinelli 1993; Karaska and Belsky 1987; Bendavid-Val et al. 1988; Belsky and Karaska 1993). For business development specialists, a focus on the dynamics of alternative supply channels within a given commodity subsector enables equity-oriented interveners to identify key growing niches accessible to the poor. It likewise allows promoters to identify instances where large numbers of like firms face similar opportunities and constraints and where intervention might prove most cost-effective by opening up opportunities for many like firms simultaneously.

Institutional opportunism. The RNFE operates in a highly fractured institutional environment. Institutions that regulate, promote, and support rural nonfarm activity span a broad range of district, municipal, national, and nongovernmental organizations. The myriad institutional models adopted in the past suggests that each rural region and commodity

subsector will offer different existing institutional support on which opportunistic interveners can build coalitions in support of particular rural nonfarm activities.

4. STRATEGIES FOR TAILORING FUTURE INTERVENTIONS

Non-intervention may prove the most prudent course of action in some rural nonfarm settings. In instances where the general enabling environment proves inimical to nonfarm business activity, that environment must change before effective promotion can take place. Where war, conflict, or political turmoil prevail, nonfarm businesses and promotional activity will likely prove of limited value. In transition economies where the basic property rights, contracts, legal systems, enforcement mechanisms, and labor laws remain highly fluid works in progress, where recently liberalized financial systems malfunction routinely or for the benefit of a favored few, and where uncertainties over state commitment to current policy regimes make business an intolerably risky proposition, rural nonfarm businesses face crippling policy constraints. Reform of that enabling environment will prove to be a necessary prior condition for efficient wide-spread rural nonfarm business activity (Vijverberg 2002).

Even in generally favorable settings – where basic policies, infrastructure, and human resources exist – closer inspection may reveal deficiencies in the enabling environment for specific nonfarm businesses. In the highly pro-business environment of Botswana, mis-enforcement of arcane sorghum beer legislation threatened income-earning opportunities for thousands of rural home brewers (Box 4). Similarly, in the generally open business environment of rural Thailand, fluctuating quotas on silk yarn imports wreaked havoc on incentives and opportunities for tens of thousands of rural households rearing, reeling silk

yarn and weaving silk cloth (Box 5). Infrastructure requirements may prove likewise highly specific to given nonfarm activities: provision of public water points proved a crucial constraint to small laundry services in Madagascar (Taillefer et al. 2000), while a missing bridge provided an essential link for rural cheese-makers in Honduras (Zelaya and Reardon 2001). Enabling environments are in fact everywhere continuously evolving works-in-progress, built brick by brick, as the sum of all policies, infrastructure investments and collective actions affecting a specific economic activity.

Where the basic components are in place for an incentive system favorable to rural business activity, specific promotional activities can greatly accelerate rural growth as well as the participation of poor households in the rural nonfarm economy. In such settings, the following three-step process offers practical guidelines for nurturing a dynamic rural nonfarm economy:

a. Identify engines of regional growth to match supply and demand for RNFE outputs
b. Undertake supply-chain analysis to identify bottlenecks that affect many like firms for cost effective and leveraged interventions.
c. Build flexible institutional coalitions to implement RNFE interventions, rather than create expensive new bureaucracies.

We discuss each step in turn.

IDENTIFY ENGINES OF REGIONAL GROWTH

a. A typology of settings.

Rural environments vary substantially, structurally, historically, institutionally, and locationally. Therefore, not surprisingly no single magic bullet will work in all locations. Even within a broad general framework for rural nonfarm promotion, specific interventions

will need to vary by location and activity in the face of widely diverging opportunities and constraints.

The typology presented in Table 8 aims to help identify intervention priorities across a spectrum of common situations. Based on practical experience of the past several decades, it considers two dimensions of a rural region that prove crucial to understanding both regional opportunities and constraints: the composition of its tradables sector and the distribution of productive assets there.

Table 8–A typology of rural nonfarm settings

	Asset Distribution	
Rural Economic Base	unequal	Equal
1. Resource poor	1a. poor-unequal • *Andean zones of Ecuador and Peru* • *Bihar* • *Northern Mexico*	1b. poor-but-equal • *West African Sahel*
2. Unexploited potential	2a. potential-unequal • *Bangladesh, 1960-1985*	2b. potential-equal • *Punjab, 1950s*
3. Dynamic	3a. dynamic-unequal • *Bangladesh, 1985-95* • *Punjab, India, 1970s* • *Central Plain of Chile, 1990s*	3b. dynamic-equal • *Tamil Nadu, India, 1970s* • *Taiwan, 1950-1970* • *Uganda, 1989-1999*

Economic base. As discussed in Section 3i, the local demand for the goods and services produced by the RNFE is conditioned by the level of output and income generated by the tradables sector (or economic base) of a region's economy. Unless RNFE activities have access to markets outside their region's economy, then their growth is inevitably constrained by growth in the local tradables sector. In rural areas of the Third World,

agriculture typically forms the core of the rural tradables sector. Unique among productive activities, agriculture requires physically dispersed production units. Consequently, the dispersion of fertile soils, water and infrastructure largely govern the spatial distribution of population across a rural region. Though less important in the aggregate, some rural regions also contain endowments of natural resources – minerals, timber, or exotic natural settings – which sustain production of goods and services for export. In the same way that agriculture generates production and consumption linkages with the surrounding region, these core natural resource businesses generate demand for schools, health clinics, restaurant and commercial services in the region.

The typology presented in Table 8 considers three possible situations for a given region's tradables sector. First are resource poor regions, endowed with vast tracts of marginal land in which an absence of fertile soil, water or exploitable natural resources prevent resource-based tradable activity. In such situations -- the northern part of the West African Sahel, the Indian state of Bihar, the Andean zones of Ecuador and Peru – very poor populations eke out a living from nomadic herding, seasonal migration or risky, low-productivity agriculture. In these types of regions, RNFE activity will be importantly constrained by local demand unless it can establish its own markets outside the region and become part of the tradables sector.

A second situation arises in regions where the tradables sector is currently feeble, yet unexploited potential does exist. This may happen, for example, where fertile soils, minerals, a strategic location or great natural beauty exist but exploitation of this economic potential requires investment in infrastructure (irrigation or roads, perhaps), technology, human capital or marketing arrangements. This situation arose in Bangladesh from the 1950s through about

1985, in the Indian Punjab during the 1950s, in Cancun, Mexico before 1980. In such cases, some sort of investment or collective action proved able to ignite impressive growth – agriculturally led in the Punjab and in Bangladesh and via tourism development in Cancun after the government invested in hostelry and infrastructure in the 1980s. In these types of regions, priority should be given to developing the potential of the tradables sector, thereby creating new demands for nontradable RNFE outputs through within-region multipliers. Once this has been achieved then investments in the supply side of the RNFE become more worthwhile.

A third case occurs when a dynamic economic base already exists, as in the agricultural boom of Central Chilean plain during the 1980s and 1990s, the Punjab of the 1960s and 1970s, and in Uganda's agricultural recovery during the 1990s. In these cases, rapid growth in rural agriculture stimulated widespread growth in ancillary rural nonfarm activities. Clearly, the health of the economic base in a rural region will govern prospects for growth in ancillary rural nonfarm activity. In these types of regions, growing markets for RNFE provide many investment opportunities, though not always for the poor.

Asset distribution. Within a given rural region, regardless of its economic base, the current distribution of assets, income, power and wealth may vary substantially as well. Because equity concerns motivate much of the current work in rural nonfarm promotion, this initial asset distribution provides an important second dimension to this typology. In unequal settings, growth of the tradables sector may trigger accelerating inequality as differential access to education, technology, capital, commercial and political power translate into first mover advantages for the elite.

This disparity becomes even more important given the extreme heterogeneity of nonfarm firm sizes and technology. Typically these settings include large numbers of very labor-intensive, unskilled home-based nonfarm activity – such as basket-making, embroidery and weaving. Though highly important to the poor households who undertake them, these activities prove vulnerable to changing circumstances that emerge during economic growth or liberalization. For example, small-scale producers of hand implements or processed foods are not easily integrated into modern retailing systems because of the low quality and safety of their products, and hence may be rapidly wiped out as supermarkets and mini-markets begin to dominate. Policy makers concerned with equitable rural nonfarm growth need to look carefully at competitive and complementary relationships between large and small enterprises, and at differential opportunities and threats in these situations.

Intervention strategies will vary across the six categories of rural regions described in Table 8. The decision-tree in Table 9 attempts to summarize the sequence of analysis and decision-making necessary in developing an action agenda for rural nonfarm promotion in each of these different settings.

Table 9– A decision tree for establishing intervention priorities across settings

	Regional Typology			
	1. Resource Poor	2. Unexploited potential	3. Dynamic economic base	
			a. unequal	b. equal
1. Does this region possess a dynamic economic base?	No.	Not currently, but unexploited potential exists.	Yes.	Yes.
➔➔➔ *Then focus on:*	*RNF exports of people, goods or services*	*stimulate agriculture or natural resource exploitation*	*tweak RNFE to accommodate the poor*	*tweak RNFE to accelerate growth*
2. Identify principal rural nonfarm activities. • which activities are largest? • which hold largest potential for growth? • for the poor?	➔➔➔ *select 2-3 specific subsectors for review.*	➔➔➔ *promote agriculture, mining or tourism*	➔➔➔*select 2-3 subsectors for review*	
3. Undertake subsector-specific dynamic diagnostics. • identify and involve key stakeholders • examine existing structure -- principal production/distribution channels -- in what channels do small firms operate? • dynamics under way -- action by large firms -- growth/contraction of key markets and channels • key opportunities • key threats to equitable growth *Where can key interventions influence growth* *Opportunities for many firms simultaneously?*	➔➔➔ *leveraged interventions*		➔➔➔ *leveraged interventions*	

Table 9– A decision tree for establishing intervention priorities across settings (continued)

	Regional Typology			
	1. Resource Poor	2. Unexploited potential	3. Dynamic economic base	
			a. unequal	b. equal
-- policies		➔➔➔	➔➔➔	➔➔➔
-- public investments	➔➔➔	➔➔➔	➔➔➔	➔➔➔
-- large firms	➔➔➔		➔➔➔	
b. firm-level				
-- credit	➔		➔	
-- business development services	➔		➔	

Resource-poor areas

In resource-poor areas with no latent potential in agriculture, tourism or natural resource exploitation, prospects for growth in rural nonfarm activity are bleak. In the absence of these standard motors of rural economic growth, efforts will need to focus on export markets and on local urban areas whose economies are based on entrepot commerce, public sector activity, foreign assistance and migration remittances. Labor migration – the export of services -- offers one standard response in these settings, especially in regions with an inequitable distribution of assets. Export of local crafts or artwork may prove feasible, provided marketing links can be established with outside buyers. Provision of processed foods, clothing and services to local urban areas is also feasible, as Woldehanna (1999) illustrates in the case of Tigray, Ethiopia.

Educational levels and local skill mix will influence opportunities as well. The rise of rapid Internet service providers and cell phones opens up prospects for offshore delivery of labor and skill-intensive activities such as data entry, drawing and drafting. Entrepreneurs in the US ship digital photographs to China where rural painters produce oil portraits and then ship them back by courier service. Linked by a former NGO employee turned businessman, Bangladeshi draftsmen produce architectural drawings on order and then digitally transmit them to the US. Valued at $600 million per year, these offshore, electronically transmitted services, of course, require good external contacts and communications facilities (Chowdhury 1999). The maquiladora industries of Mexico and Central America use local plus imported inputs to make inexpensive manufactures for foreign markets. Though growing in many locations, these activities take place primarily in

urban areas of the Third World where supervision is easiest and communications are most reliable.

Though daunting and difficult, promotional efforts in these zones can succeed, and sometimes even become commercially viable (Box 9). For agencies mandated to work in these areas, the key will be to focus on development of external markets that match local skills and meager resources with consumers outside the region. Marketing, grading, assembly, and transport services will serve as key engines of growth in these cases. Likewise, strategic infrastructure investments in road transport or telecommunications may prove necessary to reduce transport and transaction costs necessary for opening up viable economic activity in the region. However, potential interveners must recognize that returns to public investment here will normally prove lower than in other settings.

Box 9-- Intervening in Resource-Poor Areas

Botswanacraft *exports: a commercially sustainable model.* During the 1960s and 1970s, before the discovery and development of large diamond deposits in the Kalahari, rural Botswana was sparsely inhabited and inhospitable. Several hundred thousand Bushmen, Herero and Tswana cattle herders eked out a spartan existence on the fringes of the parched desert landscape where the gathering of wild desert products and accounted for nearly 20 percent of rural incomes. From the hardy grasses and reeds that dotted the borders of the Okavango River, Botswana women produced tightly woven, utilitarian baskets with distinctive decorative patterns recorded with vegetable dyes. They limited production, however, to only as many as required for their own household use.

In an effort to boost rural incomes, the Botswana Development Corporation established an export marketing company, Botswanacraft, to identify export markets for these distinctive, high-quality Tswana baskets. This business opportunity built on the abundant grasses and labor and on these pre-existing skills and designs. Established in the late 1970s, Botswanacraft has became a commercially viable concern by insisting on top quality and marketing carefully to high-end markets in the USA and Europe. In 2001, Botswanacraft exported about $200,000 of baskets per year, supplying a significant income boost for its 2,000 rural suppliers (Botswanacraft 2002).

Industrial estates in Rural Kenya: unsustainable white elephants. In 1966, Kenya imported the India model of comprehensive enterprise support centered in nursery industrial estates. In the second phase of the Rural Industry Development Program, in 1974, they exported this model from urban to rural areas via mini-industrial estates called Industrial Promotion Areas (IPAs). Established at Machakos, Kakamega and Embu, the IPAs provided a broad array of subsidized assistance, including below-market rental of workshop facilities on the estate (at about 50 percent of the commercial rates), access to common facility workshops and equipment, bulk raw material purchasing schemes, new product development, and a broad range of technical assistance in managing production, bookkeeping and marketing as well as access to subsidized loans.

Doubtful even in urban areas, these expensive, well-staffed facilities proved prohibitively expensive in rural zones. On average, each RIDC staff member served only 2 enterprises. Though two-thirds attained financial viability in the highly subsidized estates, about one-third failed even in this cushioned artificial environment, and only two enterprises developed to the point of leaving the estates. Clearly not cost effective, the IPA estates provided "too much for too few" according to a major review (Kilby 1982).

Unexploited rural economic base

In rural regions where unexploited potential exists in the agricultural or natural resource base, promotional efforts should initially focus on sparking these latent motors to life. Otherwise, injections of micro-credit or other supply-side efforts at rural nonfarm promotion are likely to stall in the face of stagnant rural demand (Box 10).

Box 10—Activating unexploited rural potential.

Rural tourism in Chile. Through its Rural Tourism Program, the Chilean INDAP (Rural Development Institute) has promoted rural tourism for the past decade throughout most of the rural zones of Chile, including in hinterland areas. The program supports collective activities (such as a cooperative that run a commercial campground), individual household activities undertaken in cooperatives (such as a wine region tours with various participating households and small wineries), and, to a lesser degree, individual enterprises. The program trains participants, finances investments in equipment and buildings and other infrastructure, and advertises the tourism activities in national fairs and conventions. Many of the activities revolve around agro-tourism in small farmer and ethnic areas (such as the island of Chiloe), and eco- and wilderness area tourism. The program seeks to spur development of areas with unexploited potential in terms of cultural or natural riches. The program also helps poor entrepreneurs in areas near developed tourist zones to tap into the tourism demand, attracting tourists that go to beaches or cultural sites to go to the 'back country' and enjoy local traditional products and settings. (Faigenbaum 2001).

Resuscitating agriculture in Hertzog, South Africa. In spite of rich agricultural potential, inhabitants along this stretch of the Kat River remained mired in poverty for over two decades. In the late 1970s, the Government of South Africa expropriated white landholders in the region in order to constitute the "independent" homeland of Ciskei. The displaced white farmers abandoned their land and their irrigation infrastructure and left the region. The black former farm laborers remained behind but without clear title to the land. In spite of an 85 percent unemployment rate, the farmland remained fallow for 25 years, from 1979 to 1994, because the black farmers lacked tenure security.

With the advent of majority rule in South Africa, the ineffectual Ciskei regime disintegrated. Spurred by this opportunity, residents of the valley joined together to form the Hertzog agricultural cooperative. The key barrier they saw to regional growth was their lack of secure legal access to the land. In response to their lobbying efforts, the new government proved far more obliging than the old regime, allowing people of the region to farm the land as individual units pending a final decision on access to state land. The cooperative accordingly allocated individual one-hectare plots to members and pooled resources to operate the irrigation system. With secure access to the land they farmed, the cooperative subsequently negotiated a commercial bank loan enabling them to bring still more land into irrigated cultivation. Income as much as tripled for many families, as they grew staple foods for their own consumption as well as market gardening for sale to itinerant traders from major provincial centers. The key to regional development in this high-potential setting lay in revving up agricultural as the motor of regional growth (Nel 1996).

In addition to agriculture and natural resource extraction, the development of tourism services such as transport, travel, advertising, hotels and restaurants may offer prospects for generating increased regional growth.

New tradables activity in the region will, in turn, stimulate demand-led multipliers in ancillary rural nonfarm services and consumer goods. As incomes increase in agriculture, mining, and tourism, employees in these lead sectors deploy their newfound

spending power on the purchase of food, basic consumer goods, and personal services, many of them supplied by rural nonfarm businesses.

While basic investments in agriculture or the exploitation of other natural resources are essential, complementary interventions in the RNFE to promote supply side improvements may also prove useful to facilitate rural nonfarm growth in concert with increasing demand from local and external sources. A coordinated, systemic and often sequential set of interventions may be required. The successful growth of the Chilean wine industry offers a good example. Agricultural research investments helped the wine-grape growers, food technology and investment programs helped the wine makers, infrastructure over the entire area was improved, and the government helped with wine market information to expand markets. In general, these broad, subsector-based interventions will require good diagnostics, continual monitoring and often changing emphases as developments proceed and new opportunities or constraints become binding (Hyman and Kirk 1996; Bourgeois and Herera 2000). These efforts will frequently require attention to specific subsectors over a period of many years, possibly even a decade or more.

Dynamic rural zones

In dynamic rural zones, growing agricultural incomes or tourist trade fuel demand-led opportunities for growth in rural nonfarm commerce and services. In these settings, opportunities will abound in the rural nonfarm economy. For this reason, large corporations most frequently establish in these settings. Their activity opens up additional opportunities as well as threats for unskilled and small-scale rural nonfarm producers (Boxes 11 and 4).

Box 11--Intervention in Dynamic Rural Zones

Chile's Dynamic Agriculture Area. Rapid agricultural growth in central Chile, particularly export oriented horticulture, launched an agricultural boom in the 1980s and early 1990s. A prosperous agriculture, in turn, stimulated a welter of opportunities in agroprocessing and trade as well as a marked increase in local consumer services (Berdegué et al., 2001). While the poor have benefited to some extent from this buoyant RNFE, a noticeable bimodality remains, with the poor relegated to poorly remunerated jobs that require little education or other entry conditions.

Thus, interventions on behalf of the RNFE in these zones typically do not require jump-starting the RNFE, but rather facilitating the participation of poor households in growing market niches. As medium and large firms increase the scale and sophistication of their operations, in order to meet increasingly stringent quality and product safety standards, poor households face considerable challenges in meeting the new skill and educational standards required. Interventions in such regions need to focus on the specific private or collective assets that the poor lack but require for market entry, in either wage- or self-employment. Examples include INDAP (rural development institute) aimed at developing small and micro enterprises for processed foods (cheese, yogurt, processed vegetables, fruit juices) for marketing to the rural town and intermediate city markets, where Bennett's law predicts that demand is growing for these processed non-staples. INDAP also runs programs for manufactures that use wood from local forests to make furniture for the growing markets in the rural towns and intermediate cities in dynamic zones.

Rural traders: handmaidens of agricultural growth in Uganda. In the early 1990s, a liberalized economy and key sectoral reforms ignited steady growth in Ugandan agriculture. Cotton, nontraditional horticultural crops and livestock all grew steadily, raising farm income as well as demand for nonfarm goods and services. Pulled along by this growing demand, as many as one-third of rural households launched nonfarm businesses, mostly in trading.

Government investments in primary education, rural banking and road infrastructure proved key determinants of nonfarm business start-up and performance. Given these basic public investments, nonfarm activity grew spontaneously in response to this prosperous, agriculturally led economic advance (Reinikka and Collier 2001).

Timely credit in Fada N'Gourma, Burkina Faso. In eastern Burkina Faso (then Upper Volta), an NGO lending scheme operated by the Partnership for Productivity, began operation in several locations throughout the region, beginning in the late 1970s. An evaluation of the impact of their lending revealed very different outcomes in the different rural zones. Shortly after the PfP program began, the Ministry of Roads completed paving of the main road linking the regional headquarters at Fada N'Gourma with the capital city of Ouagadougou, launching a mini-boom in the regional center. Sales, output and incomes of borrowers increased rapidly. In a booming economy such as this, credit can indeed lubricate business start-up and expansion and facilitate nonfarm supply response to growing opportunities and demand (Kilby and d'Zmura 1985; Rosengard et al. 1983).

Here, the challenge becomes one of improving institutions and organizations that will enable the poor to participate. In some instances, this may come in the form of access to improved technology, as with the move to Channel 2 in both Thai silk and sorghum beer subsectors (Figures 2 and 4). In other cases, the training and supervision of grades and

standards, contract enforcement may be necessary, as with the Brazilian supermarkets and Chilean agroprocessors (Berdegué 2001).

Equity issues emerge prominently in these settings, particularly in the presence of an unequal initial asset distribution. In the presence of even asset distribution, scope exists for broad-based rural nonfarm growth following steady growth in agriculture, as in rural Taiwan during the 1940s through the 1960s (Ranis and Stewart 1993; Ho 1986b; Johnston and Kilby 1975). Yet in polarized settings, where huge disparities in land ownership, livestock, financial capital and political power exist, as throughout much of rural Latin America, agricultural growth may simply lead to more profits for a few monopolistic trading families (de Janvry 1981). Therefore, equity-based interventions may prove most necessary in these settings. And in the presence of growing rural markets, business development services or micro-credit programs aimed at the rural poor may in fact facilitate their access to these growing market segments.

Each specific region houses its own particularities, resources and strengths. The three general categories proposed above will help to classify situations and identify general strategies for locating additional sources of export growth. To tailor interventions further will require focus on specific economic activities and on sparking a growing network of lead commodity subsectors.

FOCUS ON SUBSECTOR-SPECIFIC SUPPLY CHAINS

a. Advantages

Within each type of region, an industry- or subsector-specific focus – one that looks at entire supply chains from input supply to production to marketing -- offers many advantages to intervening agencies. For one, the past four decades of business promotion

efforts suggest strongly that those interventions most likely to be cost effective are those that simultaneously benefit many like firms by concentrating on an individual activity or trade and on a minimum of missing ingredients necessary to unleash latent prospects for growth (Kilby 1979; Tendler 1989). Moreover, since policies often impinge in unexpected ways in specific activities, individual industry studies are often necessary to isolate the impact of specific actions. Given the incremental, ongoing construction of the rural nonfarm policy environment, the selection of specific activities for diagnostic review offers a feasible way for interested parties to evaluate, maintain and modify this all-important enabling environment.

An equity orientation likewise demands that potential interveners understand the supply chains in which the poor operate. Some niches offer prospects for income growth, as with the home brewers of sorghum beer switching to factory-made malt (Figure 2, Channel 2), and the village silk rearers who switch to specialized yellow yarn producers (Figure 4, Channel 2). In other settings, small rural firms managed by the rural poor face outright obliteration in the face of rapid competition from outside. This is the case of the 5,000 Chilean dairies that disappeared within a decade following the arrival of large retailers who demanded minimum scale of operation too great for the small firms to finance (Box 3). Similarly, the arrival of the South African grocery chain, Shoprite, in a dozen locations throughout Zambia has resulted in external procurement, quantity and consistency standards that have squeezed several thousand local suppliers of fresh food, processing and retail services throughout rural Zambia (Figure 3). Analysis and understanding of the supply chains operating in key subsectors served by the poor provide an indispensable aid to understanding opportunities, threats and facilitating interventions

necessary to assist small firms make the transition to profitable niches in ascendant supply channels.

Many regional planners have concluded that selection of a handful of key commodity subsectors will offer the best entry point for identification of key strategic public investments necessary to facilitate local economic growth. They suggest that a series of commodity-specific diagnostics and targeted actuating interventions will offer the most feasible operational strategy for effectively stimulating regional economic growth (Bar-El et al. 1987; Rondinelli 1993; Karaska and Belsky 1987; Karaska and Belsky 1993; Bendavid-Val et al. 1988). Through linkages with input suppliers and processors, as incomes grow and consumer demand increases, growth in these targeted subsectors will stimulate further rounds of economic growth more broadly throughout the region. In this approach, analytical and operational work considers the entire network of vertical supply chains linking input suppliers, processors and distributors together in channels that transform products from raw materials on through processing, distribution and to final consumers.

b. Picking winners?

Selection of the specific nonfarm activities for diagnostic review will depend on local priorities. Often, the largest, the fastest growing or those facing the greatest perceived opportunities or threats will make strong candidates for review. Some understanding of external markets will help in assessing market opportunities for nontraditional activities.

We do not advocate picking winners in the sense of mandating the wholesale creation of new rural industries based on heavily protectionist state industrial policy,

investment, quotas and trade restrictions. As we discussed in Section 2, public investment and policy intervention is both necessary and desirable where public goods, market failures and overriding equity concerns occur. The diagnostic procedures we advocate explicitly search for high-payoff interventions first, avoiding those with exorbitant cost and little return.

Yet government policies inevitably favor some income groups, industries, firm sizes and regions over others. Governments must inevitably make choices. Selection of specific subsectors for diagnostic review offers one way of building on existing assets and strengths. It offers a practical means of testing out the appropriateness of the enabling environment – that constellation of policies, practices and public investments that shape opportunities and incentives for different categories of firms. By focusing on a series of important rural nonfarm activities, and fine-tuning where necessary, these strategic interventions of policy, public infrastructure or direct enabling injections aim to stimulate a series of bursts in activity that will, in turn, trigger linkages and stimulate ancillary growth in the rural region. In a nutshell, this model proposes a series of tune-ups of regional motors aimed at stimulating a network of regional growth linkages.

Equity concerns frequently loom large in the selection of subsectors for review and subsequent intervention. Many different analytical tools and selection criteria are available for this purpose. Subsector practitioners suggest a simple set of worksheets and decision criteria (Bear et al. 1993; Haggblade and Gamser 1991). A sustainable livelihoods framework likewise offers valuable tools for identifying key strategies, opportunities, and supply chains in which the poor can effectively participate (Carney 1998). Once selected for review, the chosen activities are all amenable to evaluation and potential intervention

using our three-step procedure. In many instances, the key issue becomes that of picking supply chains in which the poor can potentially be winners.

c. Diagnostic tools

After selection, potential interveners – public or private – will then need to conduct diagnostic assessments of current structure, growth potential and constraints. Agricultural marketing and small enterprise promotion specialists refer to these diagnostic exercises as "subsector analyses" while the corporate and business school world often refer to them as "strengths, weaknesses, opportunities, and threats (SWOT)" analyses (Boomgard et al. 1992; World Bank 2001b). Some frameworks evaluate "competitive advantage" while others concentrate on initiating a diagnostic processes of "actor-led change" in agrifood systems (Bourgeois and Herrera 2000; Porter 1990).

Principal stakeholders -- industry associations, key players in the relevant markets, NGOs involved in the sector and government agencies – should participate in the diagnostic review. Experience indicates strongly that effective interventions are most likely – and most likely to be successful – when principal stakeholders participate in the diagnostics (Bourgeois and Herrera 2000; Chen 1996; Dowds and Hinojosa 1999; World Bank 2001b).

Methods for conducting these assessments are described in detail elsewhere[10] and summarized very briefly in Table 9. The aim of these diagnostic assessments is to identify prospects for leveraged interventions – key investments, policies or organizational changes that will unleash growth prospects for large numbers of like rural nonfarm enterprises.

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[2] For examples, detailed descriptions as well as how-to manuals and training materials, see Bear et al. (1993), Boomgard et al. (1992), Bourgeois and Herrera (2000); Chen (1996), Dowds and Hinojosa (1997), Goldberg (1974), Haggblade and Gamser (1991), Porter (1990), Reardon (1999) and World Bank (2001).

System-level interventions – such as policy decisions, public investments or interventions via large-firm marketing or input supply intermediaries – generally prove most cost-effective while individual, firm-level assistance is typically more costly. For this reason, the diagnostic tools search systematically for these systemic, high-payoff, "leveraged" interventions first.

d. Incorporating equity concerns

Inequitable asset distribution in a given region frequently generates a heterogeneous dispersion of rural nonfarm firm sizes. Typically, a multitude of small firms operate with simple technologies alongside a few larger firms with more sophisticated technology and with outside commercial links. Sometimes, the large firms support growth for the small, particularly when they market small firm output or supply key technology or inputs (Table 6). In other instances, they compete directly with small firms and threaten to obliterate them. Consequently, in these settings, policy makers concerned with equity will need to specifically examine the nature of small and large firm relations.

The subsector framework offers a means of untangling structural relationships, helping to understand where small and large firms collaborate and where they compete. By identifying complementarities and threats, these diagnostics help identify which categories of nonfarm enterprise hold potential for growth and which appear most vulnerable.

In many cases, survival for the small firms will require a shift from low-productivity, low growth market niches to faster growing, higher-return channels as the Thai silk example demonstrates (Figure 4 and Box 5).

In other instances, participation by the small will require specific equipment, marketing infrastructure, or contracting arrangements that will enable them to participate in markets where quantities, grades, and standards are established by large firms.

Large firms routinely conduct supply chain SWOT assessments. But they remain oblivious to the consequences facing smaller rural nonfarm competitors. In contrast, small rural nonfarm firms of the scale cherished by many promotional agencies, have neither the standing nor the capacity to execute broad industry diagnostic surveys necessary to understand system dynamics and identify promising niches. Therefore, collective action by socially concerned groups, private or public, will be necessary to provide countervailing diagnostics focused on niches and key ascendant channels in which the poor can participate. As in the examples of Thai silk (Figure 4), sorghum beer (Figure 2) and Zambian food retailing (Figure 3), the key in many settings will revolve around facilitating transition of the poor from no-growth, dead-end market niches to more rapidly growing, higher productivity channels.

e. Broad applicability

Most export-oriented components of a region's tradables sector operate in vertical supply chains. Agriculture depends on purchased inputs and on vertical networks of assembly, marketing, processing and distribution. Natural resource extraction, tourism and rural subcontracting businesses likewise operate in clearly delineated supply chains which link regional resources and processors with external markets.

Marketing services for agricultural distribution formed the original focus for practitioners who developed subsector methods (Shaffer 1968, Goldberg 1968) and those applications continue in widespread use today (Nagarajan and Meyer 1995; Dostie,

Randriamamonjy and Rabeneasolo 1999). Most rural manufacturing, even home-based activities with simple technologies, operate in supply chains that link them with input suppliers upstream and distribution networks downstream (Figures 2 and 4). Retail networks similarly operate in what are often surprisingly complex vertical supply chains (Figure 3). Small rural retailers distribute soft drinks, packaged soaps, oil and fertilizers supplied by diverse urban-based suppliers alongside local agricultural produce furnished by a series of networks of rural assemblers and wholesalers. Construction services, household water supply (Figure 1) and even personal laundry services (Figure 5) operate in vertical supply chains which, viewed in their entirety, offer valuable clues as to bottlenecks, system dynamics, current constraints and future opportunities (Grant et al. 1991; Whittington et al. 1998; Taillefer et al. 2000; Box 8).

Even labor markets and migration networks sometimes operate in clearly demarcated vertical supply chains. The widespread systems of mine labor recruitment across Southern Africa, the network of labor recruiters, brokers and exporters who move surplus labor from Bangladesh to the Middle East, and farm labor recruiters who move seasonal farm labor across Madagascar (ImaTeP 1999), often work in structured vertical supply chains.

Some rural nonfarm activities, such as the supply of domestic maid services, do not operate in highly structured vertical supply networks. Yet even activities such as these prove amenable to the type of supply chain diagnostics of the type espoused here. For a key link in the supply chain lies in the connection between suppliers with their final markets. Final consumers, their preferences, tastes and market trends frequently drive production, processing, grading, packing and marketing of rural nonfarm products and

services. Practitioners ignore market issues at their peril. So even in very flat supply chains it will prove valuable to examine two key links in the supply chain, supply and demand.

ADOPT A FLEXIBLE INSTITUTIONAL FRAMEWORK

a. Institutional opportunism

Experience suggests that potential interveners can most effectively begin their search for an institutional vehicle by recognizing that gaps in ministerial and agency portfolios are often inevitable. In the past, creation of new agencies often creates more problems than it solves, and rarely proves sustainable once project funding subsides. So rather than creating expensive new bureaucracies, interveners must simply find ways to work across existing agencies as required. Depending on the commodity subsector selected for review, a coalition of key stakeholders may include government regulators, technical institutes, industry associations, key private sector participants, donors or NGOs.

In this model, any interested party can initiate action. In the past, government agencies have sometimes initiated reviews and responses, as with the Botswanacraft and sorghum beer examples from Botswana (Boxes 4 and 9). In other cases, NGOs have effectively initiated action, as in the Philippine *retaso*, Thai silk, Ghanian palm oil (Bowman and Reiling 1990; Haggblade and Ritchie 1992; Overy and Giray 1996). Donors can do so as well, as they have in the Indonesian shrimp and rattan subsectors (Boomgard 1989). Local governments have taken the lead in the in South Africa and throughout much of Latin America (Boxes 12 and 13).

Box 12—Local Government Efforts at RNFE Promotion in Latin America

During the past decade, local government across Latin America have initiated a series of new-style programs to help small producers of both farm and nonfarm products adapt and compete in the newly liberalized, increasingly competitive rural economies. A series of recent reviews tracking the best-performing of these programs suggest that these new-style programs adopt four key characteristics (Escobar, 2001; Da Silva et al., 2001; Berdegué, 2001; Faigenbaum, 2001; Zelaya and Reardon, 2001).

First, most programs focus on specific products and subsectors with clear growth potential. In agriculture, these include primarily non-staples. For rural processing and other nonfarm activity, efforts in various locations have concentrated on rural tourism, garment subcontracting, processed vegetables, rural cheese production and construction services.

Second, within these specific supply chains, or subsectors, they seek to assist many like firms at once, often by promoting the organization of small producers in associations. These resemble "new generation coops" in that they are composed of selected producers (not all producers in a given area, as was the case with many traditional coops). Through these groupings, they introduce value adding new technologies, improved marketing and market development.

Third, efforts include the full supply chains that link suppliers of all sizes to their ultimate markets. To leverage their promotional resources to benefit large numbers of small firms, the programs tend to promote subcontracting and business linkages between small producer associations and large processing, export and retailing firms. Through these commercial supply chains, large firms open up growth prospects for numerous small producers by providing access to urban and foreign markets, technical information, and sometimes, direct finance of needed investment.

Fourth, the programs retain a tight market focus. The pay careful attention to the requirements of the markets at which they are aiming, and the implications for technology and capital investment that competitive producers must possess and practices they must follow. In many instances, these efforts involve: a) implementation of safety and quality standards, such as for milk products in Chile or processed vegetables in southeast Brazil, or trout cost and quality in Peru; b) adapting products to tastes and preferences of new markets, such as cheese and housewares in Honduras, or clothing made in Northeast Brazil for the Southeast Brazilian market.

In the newly liberalized, globalized setting of rural Latin America, many traditional promotional efforts still fail. Despite a dearth of systematic empirical research on impact and cost, available glimmers of emerging evidence are troubling and challenging. For example, Berdegué (2001), in a study of 500 small producer associations promoted by INDAP in the past decade found that only 20 percent would survive in the marketplace without the heavy subsidies that INDAP provides. He concludes that projects that combined the above four sets of characteristics proved most likely to succeed.

Box 13—Local coalition building for RNFE development

Latin America. Multiple-stakeholder groups focus on a variety of local development issues across Latin America. Often called "mesas de concertacion", these coalition building efforts link municipal governments, local business associations, local farmer associations, NGOs, and others. Where required, key large firms with links to smaller local producers are added to the group in order to facilitate specific sectoral actions. For example, in Project Ceará-Miram, Rio Grande do Norte, Brazil, the municipal government, the regional government, a large clothing company, seamstress cooperatives, and SEBRAE (a national-level quasi-public organization that promotes economic development) banded together to establish subcontracting arrangements in rural areas (Escobar et al., 2001).

Fabric recycling in the Philippines. About 50,000 poor households in the Philippines transform garment waste from textile factories into a variety of utilitarian "retaso" products. Households use *retaso* products as cleaning rags for the bathroom and kitchen . They serve as door mats, bath mats and oven mitts. Taxi drivers and bus owners for cleaning their vehicles. Repair shops and factories of all kinds use *retaso* products for virtually every cleaning need – from machinery to shop floors. A growing number of small businesses has entered the retaso trade to complete alongside the home-based female-operated microenterprises, primarily to service the rapidly growing business demand for retaso products.

Since Philippine law does not allow export firms to sell their goods locally, a clandestine network of traders has emerged to buy *retaso* from the factories and sell to the households. Given the dangers, payoffs and high risks implicit in this sub rosa commerce, traders demand markups ranging from 200 percent to 500 percent. Because of the small volumes they procure and their lack of bargaining power, women working from the household pay margins up to 40 percent greater than those paid by the small business owners.

Because of the importance of retaso business to poor Philippina women, Save the Children launched a major consultation and participatory review of the retaso subsector. Following this diagnostic review, they initiated a series of interventions aimed at lowering cost to household-based microenterprise producers, by working with a broad coalition of retaso subsector stakeholders – household producers, garment factories, retaso traders, and government legislators (Overy and Giray, 1996; Save the Children, 2000).

In some instances, local governments function effectively, generate sustainable own-source revenues, and care about the rural poor. In other cases, they are morally, financially, and functionally bankrupt. In some cases, the private sector can initiate sweeping and important interventions on behalf of the rural poor. In other instances, they will simply steamroll the poor. An institutional audit, which emerges as part of any normal subsector diagnostics, will quickly reveal which stakeholders house the capacity, interest and willingness to intervene on behalf of specific group of rural nonfarm niches benefiting the rural poor. So interested parties must assemble working coalitions from among the vested interests available in each given subsector and location.

This flexible approach to coalition building offers a model that can work in a broad range of settings, in the face of considerable heterogeneity and a historical landscape littered with unsustainable rural development bureaucracies (Box 13). Coalitions emerge and coalesce as needs and opportunities arise. In contrast with top-down models of regional development, this approach facilitates and actively encourages collaboration with business groups, key NGOs, and a range of affected firms and agencies. This institutionally flexible, subsector-based model offers promise for application across a broad range of locations.

b. High-level policy commitment to the RNFE.

In an ideal world, concerned and well-financed governments would focus attention on the needs of the rural nonfarm economy. But given the reality of eroding civil service pay scales, tightly stretched government coffers, and scarce analytical skills, even the best-intentioned governments cannot always take the lead.

Recognizing this reality, the model proposed here urges other stakeholders to take the initiative as required. Using the analytical tools described here, specific interest groups can initiate reviews and dialogue among key private and public stakeholders. Rather than sitting back to wait for Godot-like governments to take the initiative, trade groups or politically attuned allies of the poor can seize the initiative and focus policy makers' attention on key stumbling blocks as well as on key opportunities for rural nonfarm growth.

Though official sponsorship is not necessary to initiate action in this model, outcomes are most likely to be successful if efforts begin with high-level government benediction. Explicit government interest in the outcome of particular cases can only

improve prospects for altering policy environment or mustering resources necessary for stimulating rural nonfarm growth.

Growing recognition of the economic importance of the rural nonfarm economy suggests that it will increasingly need to become the focus of explicit government policy attention. By focusing on high-impact actions that influence opportunities for many nonfarm firms at once – through policy reform, strategic public investment, or new technology -- intervention can prove cost-effective, even in the institutionally fractured environment in which the rural nonfarm economy routinely operates.

5. CONCLUSIONS

The rural nonfarm economy has grown too big for policy makers to ignore. It provides 35-40 percent of rural income throughout the developing world and an even higher share for the rural poor. In the presence of great heterogeneity and sometimes bewildering diversity across settings, many myths abound (Table 10). Yet across a broad range of settings, evidence regularly suggests that rural nonfarm activity offers a key source of potential for income growth and diversification by both the rural rich and the rural poor.

Table 10 – Nine myths about the rural nonfarm economy (RNFE)

	Myth	Reality
1.	The RNFE is small and unimportant economically.	Rural nonfarm income accounts for about 40 percent of rural incomes.
2.	Migration remittances and agricultural wage labor account for most rural nonfarm income (RNFY).	• Migration income accounts for less than 10 percent of RNFY, even in labor-exporting zones such as northern Mexico and Burkina Faso. • Agricultural wages are considered farm, not nonfarm, income. Even so, agricultural wages are typically 5 to 10 times smaller than RNFY.
3.	Manufacturing dominates the rural nonfarm economy.	Services and commerce are often larger employers and income sources. They consistently grow faster than manufacturing as well. Highly labor-intensive household manufacturing proves the most vulnerable segment of the rural nonfarm economy.
4.	Micro and small enterprises dominate the rural nonfarm economy.	Though many RNFE employ less than 5 workers, larger firms typically account for the majority of output and incomes.
5.	Rural nonfarm activities serve primarily as a low-productivity sponge, absorbing additional labor by default in low-return self-employment.	In economically stagnant, resource-poor zones this does occur. But in prosperous rural areas, nonfarm growth occurs in increasingly high-return activities.
6.	Stagnant and tradition-bound, RNFE changes little over time.	On the contrary, rapid change pervades many segments of the rural nonfarm economy. Liberalization of the 1980's and 1990's has opened up RNFE to both competition and opportunities as never before.
7.	Integrated assistance packages offer the best prospects for successful rural nonfarm promotion.	Delivery of a limited number of key missing ingredients offers the greatest prospects for cost-effective intervention. Concentration on a single trade or industry group likewise serves to focus these strategic injections in ways that will open up growth opportunities for many like firms simultaneously.
8.	Microcredit offers the most effective tool for promoting rural nonfarm activity.	No, in stagnant rural markets, injections of micro-credit may merely redistribute poverty as new entrants divide a fixed pie into ever-smaller increments. Expanding markets constitute a prerequisite for stimulating aggregate RNFE growth in these settings. In buoyant rural economies, however, where ongoing income growth drives demand for nonfarm goods and services, injections of credit can play a valuable role in enabling the poor to participate in these growing market niches.
9.	Poverty-oriented agencies must work only with small and micro-enterprises in order to help the very poor.	Large firms frequently shape opportunities for smaller RNFE. In some cases, they marketing output, supplying inputs or new technology. In others, they compete directly with small RNFE. Because of these economic linkages, working with large firms may be key to unleashing growth opportunities for large groups of small firms.

Following widespread economic liberalization across the developing world during the 1990s, the RNFE has witnessed rapid economic change. As a result, the small-scale, labor-intensive rural nonfarm enterprises that most benefit the poor face a barrage of new threats as well as new opportunities. Lacking the standing, the means or the expertise to evaluate structure or dynamics of their own market niches, the rural poor require diagnostic and facilitating assistance from outside groups concerned for their welfare. For they live in a new, often rapidly changing world where both danger and opportunity abound.

To take advantage of new opportunities in the rural nonfarm economy, and to help the poor navigate these turbulent waters, we propose a three-pronged strategy aimed at identifying priorities and prospects for cost-effective intervention across a range of common rural settings. First, identify key engines of regional growth. Where existing motors have stalled, as in resource-poor areas and in regions with unexploited potential, restarting these engines of regional growth will constitute priority number one. In other settings, where a buoyant economic base already exists, efforts will revolve around seeking out and assisting the poor to access ascendant niches in the RNFE.

Second, interested practitioners should identify a handful of key commodity- or service-specific subsectors, and supply chains within them, that hold the potential for growth and participation by the rural poor. Available diagnostic tools provide techniques for evaluating current supply chain structure, dynamics and opportunities for expanding output and income for many like firms at once. This leverage, focused on supply chains where the poor participate in large numbers, will be instrumental in forging cost-effective, equity-enhancing interventions.

Third, develop flexible institutional coalitions of interested stakeholders with the ability to alter opportunities on behalf of the poor. Using the flexible institutional model proposed here, we envision a world in which an evolving coalition of interest groups can initiate diagnostic reviews and identify key systemic interventions on behalf of targeted segments of the rural nonfarm population. In an increasingly dynamic rural environment; intervention by equity-oriented groups will frequently prove necessary to facilitate access by the poor to growing nonfarm market segments. With the benefit of this beneficent oversight where necessary, a prosperous rural nonfarm economy can contribute to both aggregate economic growth and improved welfare of the rural poor.

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LIST OF EPTD DISCUSSION PAPERS

01 *Sustainable Agricultural Development Strategies in Fragile Lands*, by Sara J. Scherr and Peter B.R. Hazell, June 1994.

02 *Confronting the Environmental Consequences of the Green Revolution in Asia*, by Prabhu L. Pingali and Mark W. Rosegrant, August 1994.

03 *Infrastructure and Technology Constraints to Agricultural Development in the Humid and Subhumid Tropics of Africa,* by Dunstan S.C. Spencer, August 1994.

04 *Water Markets in Pakistan: Participation and Productivity*, by Ruth Meinzen-Dick and Martha Sullins, September 1994.

05 *The Impact of Technical Change in Agriculture on Human Fertility: District-level Evidence From India*, by Stephen A. Vosti, Julie Witcover, and Michael Lipton, October 1994.

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