

**STRENGTHENED URBAN-RURAL LINKAGES
AS INSTRUMENTS OF RURAL DEVELOPMENT**

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INTRODUCTION

Two major goals are laid out for USAID (Sri Lanka) in the 1990 Country Development Strategy Statement (CDSS): income growth and increased reliance upon market forces. Specific programmatic initiatives will be directed to the mobilization and allocation of financial resources, promotion of higher productivity and diversification in agriculture, and the expansion of employment opportunities in off-farm locations through support of formation and growth of viable micro and small scale enterprises. These initiatives are seen as being directly supportive of the continuing Sri Lankan development objective of growth with equity, and they are interrelated. New forms of financial mobilization and allocation are required to promote diversification in agriculture and employment creation by new enterprises. Diversified agricultures and small-scale enterprises require markets and these markets, as well as the financial institutions that support them, are urban-based. A question then arises of the extent to which programs that help develop urban growth centers and that build new forms of urban-rural linkages might contribute to CDSS. This is the question that is addressed in this report.

THE SIZE OF SERVICE CENTERS IS LIMITED BY THE SIZE OF THE MARKET

To the extent that urban issues have been considered in rural development programs in Sri Lanka, concern has been restricted to ensuring that essential services are accessible to the farming population. Yet little work has been done on the numbers and types of services required by markets of different sizes and income levels, nor upon the appropriate locational configuration of service provision.

Typical of current practice is the a three-tiered hierarchy of rural service centers has been planned and provided in the H, B and C Systems of the Mahaweli Development Program (Bandaroga, 1988):

Hamlet Center Small settlement nucleus of 100 families and 500 people with a primary school, cooperative store, post box, visiting dispensary and health center, playground, religious place and cemetery.

Village Center Serving a cluster of 4 to 6 hamlets with a population of about 500 families and 2,500 people. Additional services provided include a sub-post, cooperative depot for purchases and sales, fertilizer and grain store, junior secondary school, community center with multipurpose hall, reading room and dispensary, a Gramodaya health Center and a bus stop.

Township (E.g. Galnewa in System H), serving 4 to 6 village-centered clusters, or 10,000-20,000 people, with administrative, commercial, senior secondary educational, health (hospital), cultural and recreational facilities. Galnewa has a 60-bed hospital, the senior secondary school has an enrollment exceeding 1,000 and there are a police station, a filling station, three main government offices, three banks and a trade center.

While such a hierarchical system is intuitively appealing, what was planned is full of problems. There is no apparent basis for assuming that a three-level hierarchy, with higher-level centers serving 4-6 centers of the next lower level, is appropriate; nor is there any apparent basis for the allocation of the numbers and kinds of services to each level. Most importantly, such planning exercises typically make no attempt to relate the planned service provision to the size of market, the factor that determines and limits the potential service center growth.

Programs to plan and promote small-scale enterprise in local service centers must be based upon an understanding of the demands for services in the target region, constraints upon the travel behavior of the consuming population, and the market-size thresholds that determine the conditions of entry of each type of service provider. Only with such a base of understanding can the employment potential of small-scale enterprises oriented to a regional market be assessed.

A Simple Hierarchy Model

Simple urban hierarchy models that address these issues are developed in Berry and Parr's Market Centers and Retail Location (1988). Application of even the simplest of these models is insightful in the Sri Lankan case.

Let m_1 be the population of the market area of the lowest-level center in the urban hierarchy, and p_1 , the population of the center ("hamlet"). Then $u_1 = p_1 + m_1$ is the total population of the lowest-level region. Assume that for all h levels of the hierarchy $p_h = v(p_h + m_h)$ so that $p_h = vm_h/(1-v)$ and $v/(1-v)$ is the urban multiplier.

For the lowest level of the hierarchy, $p_1 = vm_1/(1-v)$, but for higher levels the relationship is more complex because the population served by higher order centers p_h includes not only the market-area residents m_h , but also the populations of the lower-level centers p_{h-1} . Consider a center of level 2 in the hierarchy. It will serve its own level 1 market area, providing it with both level 1 and level 2 goods, plus several level 1 centers and their level 1 market areas. Designate the number of level 1 market areas served as k . One of these is served by the level 2 center; thus, the number of level 1 centers served is $k-1$, and we can write $m_h = (k-1)u_{h-1} + m_{h-1}$. From this, we derive $m_h = (k-1)(m_{h-1}/(1-v)) + m_{h-1}$ and $p_h = (vm_{h-1}/(1-v))((k-v)/(1-v))$ or $p_h = vm_1 (1-v)((k-v)/(1-v))^{h-1}$.

To reproduce a central-place hierarchy, one thus needs to know v , k , and m_1 .

Application to the Kirinda-Oya Case

A Sri Lankan case that yields usable data is the Kirinda-Oya Irrigation Settlement Area in the south-east (Panditharatne and Nelson, 1987). This area is composed of an old irrigated area focussed on the historic town of Tissamaharama, with secondary centers at Yodakandia, Kirinda and Pallemalala, and newly irrigated settlements stretching along the left and right banks of the Lunugamvehera reservoir. See Figures 1 and 2.

As development progressed in this area, Panditharatne and Nelson report that the project administrative center at Debarawewa failed to capture the project-induced growth in demand for services, as the planners thought it should. The older market town and religious center at Tissamaharama grew at an annual rate of 4.7 percent as it took over the role of commercial center for the region. An emergent hierarchy could be discerned as the growth unfolded:

Hamlets: Provide the basic settlement unit with such facilities as a cooperative store, primary school, community center, playground.

Village Centers: Usually at road junctions, serving 5-6 hamlets. Example - Pannegamuwa in 1987: 12 functions, 46 establishments -

Post office	5
Polas	5
Grocery stores	4
Fancy goods stores	5
Hotels	14
Rice dealers	3

Textiles dealers	3
Dispensaries	2
Saloons (barbers)	2
Laundries	1
General stores	1
Battery chargers	1

District Centers: Example - Tissamaharama in 1987: 40 functions and 392 establishments -

Grocery traders	47
Fancy goods	18
Hotels, restaurants	25
Beverages	6
Vegetables and fruit sellers	32
Rice sellers and purchasers	6
Building material and hardware	2
Fertilizers and pesticides	2
Radio and watch repairs	7
Photographers, printers	3
Tailoring	23
Dispensaries	6
Pharmacies	5
Dentists	1
Laundries	3
Saloons (barbers)	6
Jewelry and antiques	2
Shoe sales, manufacturing & repair	3
Records and cassettes	1
Cinemas	1
Banks	3
Insurance Cos.	3
Furniture and wood sellers	4
Bicycle, motorcycle repairs	5
Motor spare parts	6
Garages, blacksmiths	17
Lottery tickets	3
Curd dealers	3
Pot and mat dealers	4
Tire rebuilders and dealers	1
Service and gasoline	2
Postal service	15
Local Govt. Admin.	10
Hospitals	12
Govt. warehouses	30
Rural fairs (Polas)	15
Police station	10
Courts	10
Water supply schemes	10
Religious/Cultural facilities	30

Settlers purchased more than 80 percent of most primary goods (rice, sugar, fuel, gram, aerated waters, etc.) from the most locally-accessible facility at the Hamlet level. Vegetables, coconuts, fish and meat were acquired at the weekly polas, primary meeting and trading places for the farmers. Secondary goods (clothing, jewelry, building materials, electrical goods) came from the district centers. Tissamaharama's catchment area extended out some 6-7 miles, including a population of 68,000, ten times that within the city limits. See Figures 3, 4 and 5.

The initial central-place postulate is that $p_h = v(p_h + m_h)$. Tissamaharama has a population of some 6,800 and serves 68,000 in its catchment area. Thus $6,800 = v(6,800 + 68,000)$ and v is approximately 0.091, $1-v$ is 0.909, and $v/(1-v)$ is 0.1.

Figure 1

Location of Kirinda Oya Irrigated Settlement Area

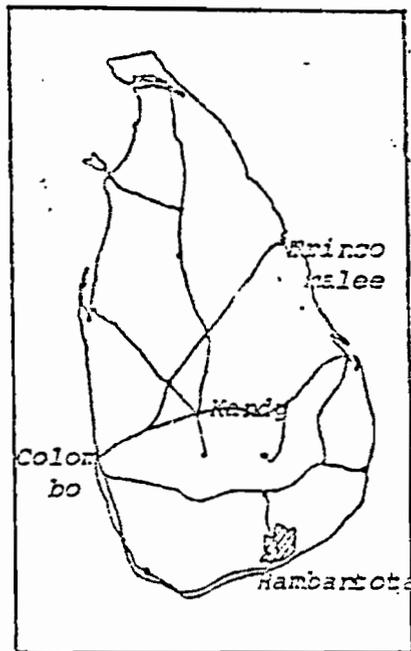
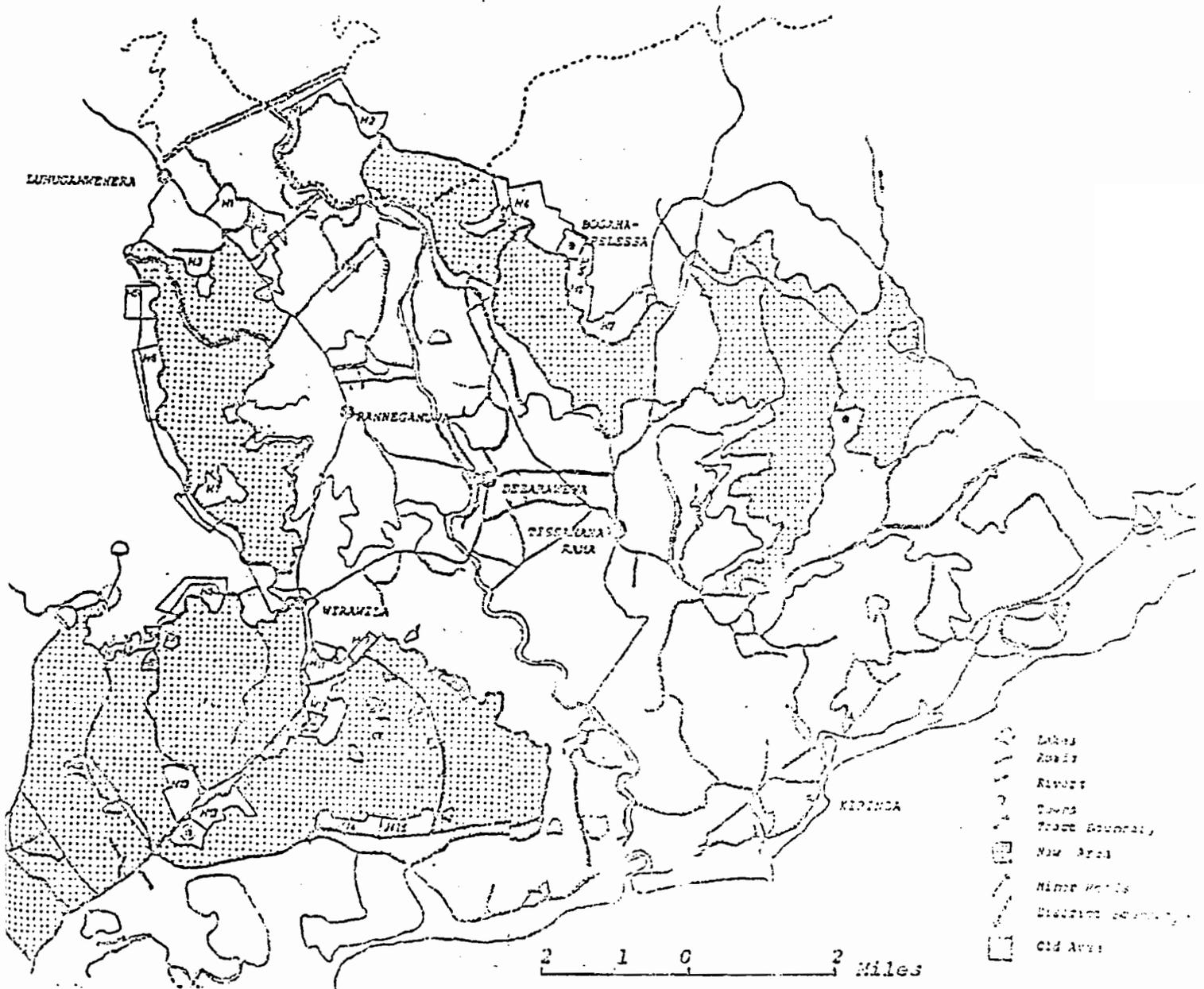


Figure 2
Location of the Newly Irrigated Zones



If we assume that $k=7$; i.e. that there are $k-1 = 6$ subsidiary centers per higher level center, we can work backwards and calculate that if $m_h = (k-1)u_h + m_{h-1}$ then in a three level hierarchy $m_3 = (k-1)u_2 + m_2$. But since $u_2 = p_2 + m_2$ and $p_2 = vm_2/(1-v)$ we have $p_2 = 0.1 m_2$ and $u_2 = 0.1 m_2 + m_2$ so that $m_3 = 6 (0.1 m_2 + m_2) + m_2 = 7.6 m_2$ and $m_2 = 68,000/7.6 = 8,947$ with p_2 approximately 895 and $u_2 = 9,842$. Thus $u_3 = 6,800 + 6 \times 9,842 + 8,947 = 74,799$ i.e. the level 3 center of population 6,800 serves an area that includes six level two centers of 895 population and their service areas of 8,947, plus its own level two service area of 8,947.

Similarly $m_2 = 7.6 m_1$ and $m_1 = 8,947/7.6 = 1,177$ with p_1 approximately 150.

The implied hierarchy is:

Level	Population of Center	Population of Tributary Urban	Population of Region Rural	Population Served	Total Population
1	150	-	1,490	1,490	1,640
2	895	900	8,047	8,947	9,842
3	6,800	11,670	56,330	68,000	74,800

Bandaroga (1988, p. 19) points out that in older-established settlement areas, non-farm employment is usually about one-third of total employment and the trade and services sector three quarters of that, or one quarter of the total. This is quite consistent with the urban population ratio that results from the

Figure 3
Relationship between Numbers of Establishments and Numbers of Types
of Functions in the Service Centers of the Hambantota District

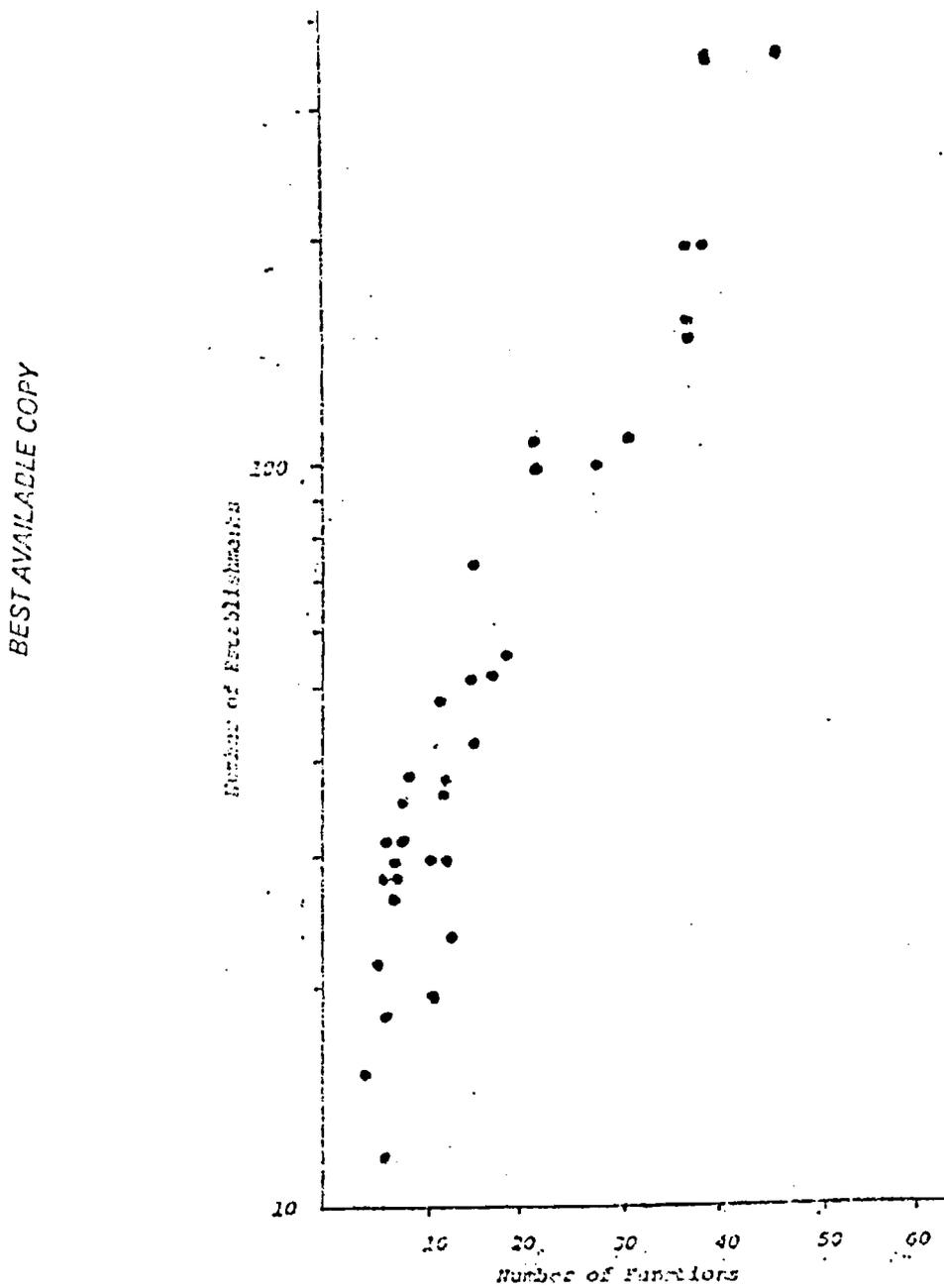


Figure 4

Examples of Service Areas in Kirinda Oya: Primary Health Care

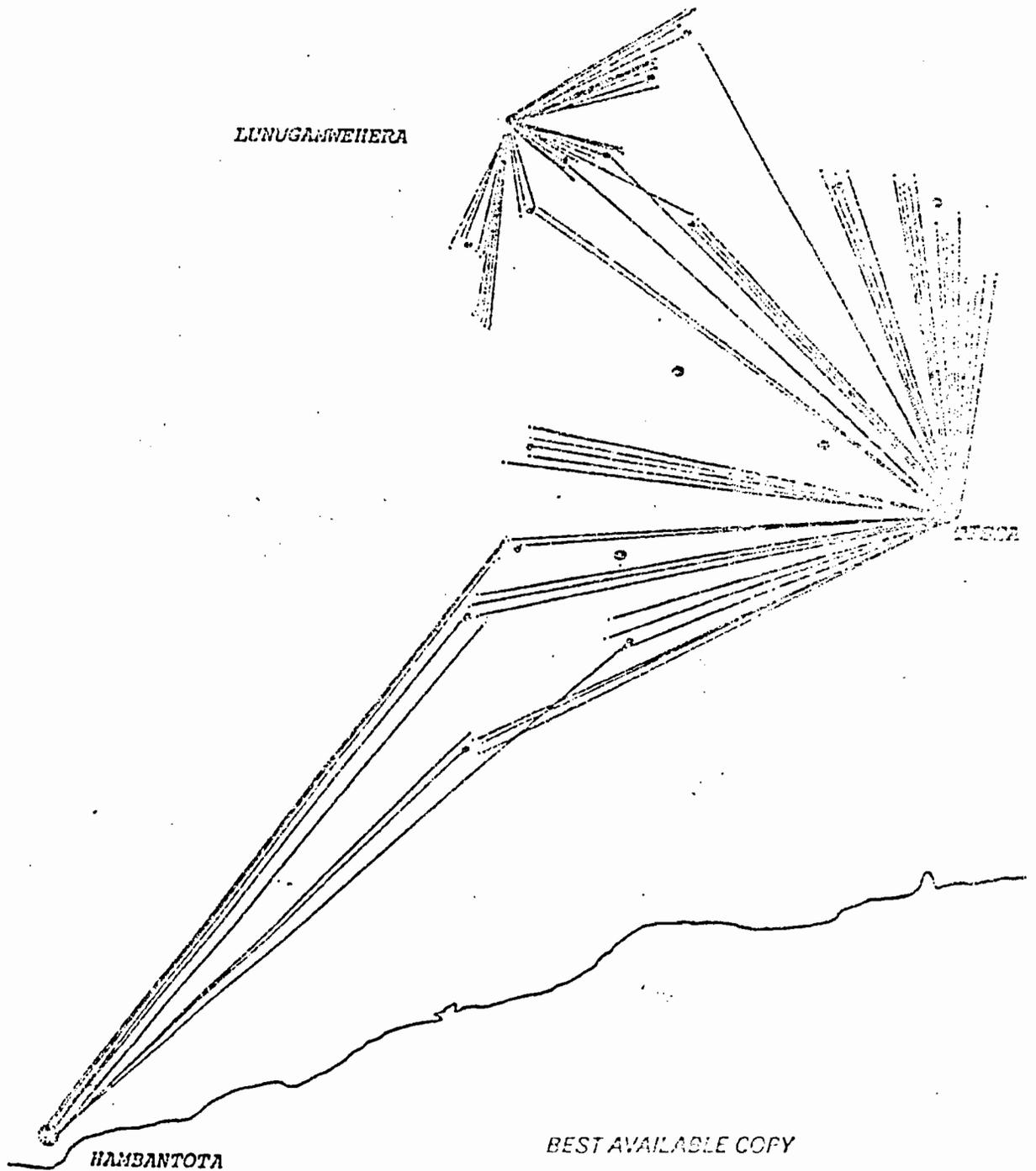
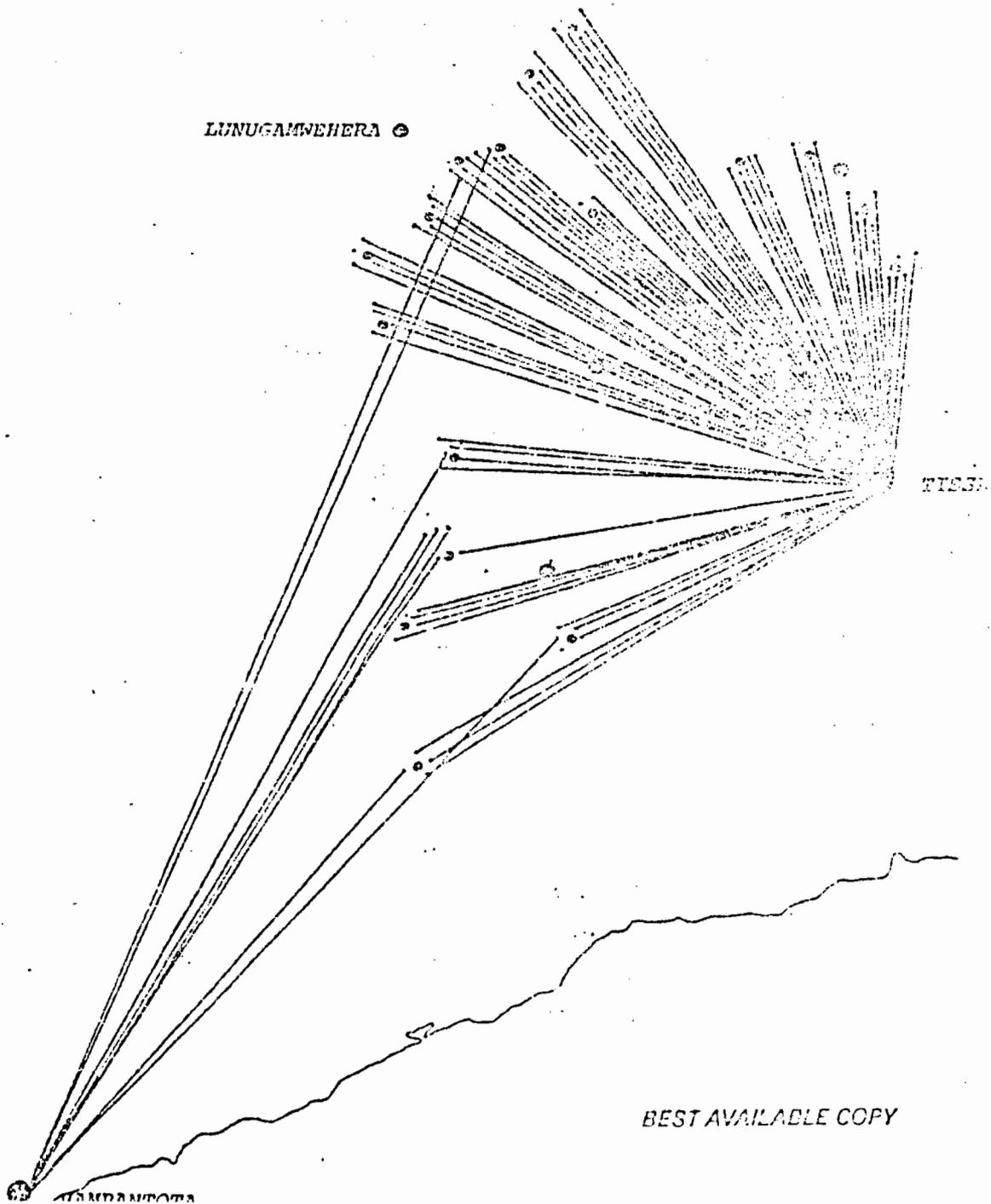


Figure 5
Examples of Service Areas in Kirinda Oya:
Radios, TVs and Electrical Goods



above model: 24.7 percent. In the Tissamaharama case, some 390 establishments serve a total population of 74,800 and support a level 3 center population of 6,800--on average each service establishment supports 17.4 residents or 3.49 households. Likewise, using the Pannegamerwa example, 46 establishments support 895 level 2 urban residents, or 19.5 residents (3.9 households) per establishment.

Service Needs in Mahaweli

Application of this arithmetic and multipliers to the 300,000-population Mahaweli case yields a four-level, not a three-level, hierarchy:

Level	p	m	u
1	62	622	684
2	473	4,730	5,203
3	3,585	35,850	39,535
4	27,306	273,062	300,000

If we take as a reasonable rule of thumb the Kirinda-Oya ratio of 1 establishment per 18 residents, we have:

Level	Establishments
1	3-4
2	26
3	199
4	1,517

The entire four-level system would comprise a level 4 center with 1,517 establishments, six level 3 centers each with 199 establishments, 42 level 2 centers each with 26 establishments and 294 level 1 centers averaging 3.5 establishments for a total count of $1,517 + 1,194 + 1,092 + 1,029$ equals 4,832 establishments serving the direct and indirect demands generated by the 300,000 population. Interestingly, the Mahaweli Enterprise Survey revealed the existence of 4,700 small scale enterprises (Ernst, 1988).

The total "urban" (i.e. service center) population is $27,306 + 6(3.585) + 42(473) + 294(62) = 86,910$, resulting in an "urbanization" ratio of 29 percent of the total population. This again is consistent with other evidence. The 1981/82 Consumer Expenditure and Socio-Economic Survey reveals that purchases of local goods and services claim 20 percent of total expenditures by rural households (Ernst, 1988). The multiplier effect is such that in the Mahaweli region roughly one-third of the sales of small-scale enterprises came from earnings in the small-scale enterprise sector; the other two thirds come from rural expenditures. This one-thirds:two-thirds ratio is very close to the urbanization ratio just calculated. According to the estimates, then, at current levels of income and expenditures, 213,000 rural residents should support via direct and multiplier effects some 87,000 central-place residents: every 5 rural

households generate sufficient direct and indirect expenditure flows to support 2 urban households.

How does this rural demand translate into jobs? Bandaroga (1988) estimated that trade and services sector employment is about a quarter of total employment in older established regions, whilst two-thirds is employment on the farm. Ernst (1988) records 55,000 agricultural households in Mahawali (This, interestingly, equals our $m_4 = 273,000/5$). He also uses as a rule of thumb two jobs per household or 110,000 jobs. Using Bandaroga's estimate, this yields 41,000 jobs in the small enterprise sector, as an average of 8.5 jobs per establishment. These jobs support a population of 18.0 per establishment - at the levels of earnings in these jobs, an average of 2.36 jobs is required to support one urban household.

NEW URBAN-RURAL LINKAGES AS INSTRUMENTS OF JOB CREATION

While service center development provides substantial off-farm employment, the magnitudes generated are strictly limited by the scale of the local market. Additional opportunities for small enterprise growth will emerge only if disposable incomes increase in agriculture or if off-farm employment can be generated by extension into new markets and product lines i.e. if small-scale enterprise can be converted into another regional export base. That such opportunities can be created is suggested by the example of the lending programs of the Regional Rural Development Banks (RRDBs). Three contrasting cases provide insights into the potentials, suggesting that if the banker goes beyond his traditional lending role to offer a package of services that create markets where none existed before, even the poorest of the poor can become regional income generators.

The banking case leads to a broader generalization: **that programs are far more effective if they support and help develop the intermediation agents who link the potential producers and the vendors who contract for their output.** Yet very little is known about the nature and variety of intermediation in Sri Lanka. Development of the necessary knowledge base is essential if an effective program is to be created that helps craft new forms of

urban-rural linkages as instruments of job creation oriented to extra-regional markets.

The Regional Rural Development Banks

Regional Rural Development Banks (RRDBs) have been established in nine regions in Sri Lanka to make farm loans and small enterprise credit available to the "poorest of the poor" -- those traditionally beyond the pale of lending by the Bank of Ceylon or People's Bank. The objective in developing these new financial institutions is to increase the incomes and to provide new employment opportunities for the country's most disadvantaged farmers and laborers. The RRDBs in three contrasting regions (the Kandy, Nuwara Eliya, and the Puttalam Districts) were chosen for comparison to see what lessons might be learned from the bankers' attempts to create small enterprise. The lending profiles and orientations differ markedly between the cases, reflecting not merely differences in the local economic base but also differences in banking practices. It is the latter differences that provide insights into the ways in which linkages can be crafted between small rural enterprises and urban (especially the Colombo) market, and new income flows injected into the service region.

The Kandy RRDB. The Kandy RRDB has been in operation for 18 months, although 6 of these were non-productive because of civil unrest. At present, the organization has a head office and 9 branches. Each of the branches has a manager and 3 field officers, and serves approximately 20 villages.

The service area arithmetic is as follows: to create some economies of scale in collecting savings, providing loan information and materials to the population, and monitoring loans already made, farmers clubs are organized comprising 10-20 families. These clubs are visited each month by a field officer, as are individual small enterprise borrowers. One field officer is in the field every day, and has 2-3 meetings with individuals and groups per day. This schedule of 60-90 meetings per month limits the service radius of a branch to approximately 20 villages. But the Kandy region has almost 1,800 villages. At present, the 9 branches have a capacity of 180 villages i.e. the market penetration by the bank is about ten percent. Interesting questions are: Who is unserved? What configuration of branches might assure adequate access and service? A simple beginning would be to chart the locations of each branch, and of the different loans they have under management.

Three types of loans are given; cultivation loans to farmers, project loans to small enterprises, and a small number of loans guaranteed by the pawning of

jewelry. By March 31, 1989, the Kandy District had processed 2,206 loans with an aggregate value of Rs.9.6 million, distributed as follows;

Size of loan	Number
More than Rs.50,000 .	5
30,000 - 50,000	5
20,000 - 30,000	40
less than 20,000	2,156

Cultivation loans enable farmers to buy seed, fertilizers and pesticides. Granted for a period of 240 days, they enable farmers to develop specialty crops for the Colombo market and substitute for the former system of farm credit that kept many farmers in a situation of permanent indebtedness. In the earlier system, private traders would finance cultivation with interest-free loans on the condition that they be the sole marketers of the farmers' produce. At harvest time, collection agents would gather the output and deliver to the traders in Colombo. Farmers would be given an alleged Colombo wholesale price (which farmers claim was never verifiable), less loan, transfer costs and in-transit wastage. Frequently, the farmers would have to travel to Colombo to obtain whatever residual was due them.

In the RRDB system, the specialty vegetables are sold to the Marketing Department of the Department of Trade at a guaranteed price, an arrangement negotiated by the RRDB manager in Kandy. The pickup receipt is treated as

tradeable paper. The farmer can deliver it to the bank and receive a modestly discounted value, repay his loan, add to his savings account, and take out cash. Farmers with a good track record for two years are designated as "certified borrowers" for whom there is preapproval of the cultivation loan and a larger line of "revolving credit."

Substitution of one system of cultivation finance for another has, according to the banker, increased participants' income, ceteris paribus, by an average of 50 percent.

But the banker is also aggressively seeking out new marketing opportunities for new agricultural products: he has just made an arrangement to produce 50,000 kgs of tomatoes for the Colombo Cannery. He intends to give loans to farmers to produce the tomatoes, not only therefore creating the demand, but also arranging for the supply: i.e. he views his role as extending far beyond that of the traditional banker, including a variety of intermediation activities.

In giving project loans to small enterprises, the manager emphasizes that successful credit also is a package of services. Examples:

1. *A housewife with a sewing machine wanted to begin to produce ready-made women's and children's clothing, but needed funding for materials and patterns. Her wares were displayed*

at the semi-annual Kandy trade fair, which is sponsored by the RRDB banker, and contacts were developed with Colombo wholesalers and retailers. With continuing demand for her products by these extra-regional purchasers, in two years she has been able, with additional small enterprise finance, to expand to 4 sewing machines, and she employs 6 workers in addition to herself and her husband. She makes 3 trips per month to Colombo to take orders, buy raw materials and deliver her output. In addition to ready-made clothing, she accepts made-to-measure orders. She loses a day a week on her electric sewing machines because of unreliable electricity supply. Bottom line: two loans, fully repaid, have created a viable small enterprise oriented to extra regional markets. The enterprise provides 8 jobs.

2. A "very poor" husband-and-wife farming family borrowed enough to purchase a second-hand sewing machine and the necessary raw materials, so as to make ready-made garments for the local market. They now borrow and repay Rs. 4,000 per month in a cycle of conventional business finance. The wife sews and the husband buys raw materials, does the cutting, and markets the output at weekly polas. Net profit per garment is Rs.15, and the couple now clear Rs.3,000 per month. They accumulated sufficient capital in the first year of operation to purchase three additional second-hand sewing machines at Rs.2,500 each, and are in the process of expanding their operation. In so doing, they will begin to provide jobs to equally-disadvantaged neighbors. The RRDB banker serves as a "cheerleader" suggesting product and marketing improvements (e.g. sewing in "professional" labels that increase market appeal). The next step is to break out of the local market orientation by establishing contacts and developing contracts with Colombo buyers.
3. A father and his 4 sons were constrained in expanding production of cement blocks for the local construction industry. They can hand produce 280 blocks per day, using 8 bags of cement, 35 blocks per bag, but were unable to get over the starting threshold, delivery of a truckload of cement -- 2,200 bags costing Rs.22,000. They had Rs.7,000 and they borrowed Rs.15,000. Once over the raw material threshold, they could begin operations, providing jobs for an additional 8 casual day

- laborers at Rs.50 per day to dredge sand from the adjacent stream bed. They now produce several kinds of cement blocks, cement fence posts and ornamental planters for the Kandy area market but have run into an additional constraint for which another loan will be required -- adequate roofed-over area to permit air drying without rain-produced work stoppages. Their production capability will expand considerably in the rainy season once this roofed-over drying area is constructed, permitting more continual operations. They will of course need loans whenever in the future truck loads of cement are required but after the start up, this is more in the nature of conventional business operations finance.
4. Abrass maker needed funding to acquire casting sands, which must be imported from India, and to add polishing machines. His wares were displayed at the Kandy trade fair, and several large orders were obtained from Colombo wholesalers and retailers. He needed conventional business financing to meet these orders. The RRDB banker found unemployed workers when additional help was required with finishing work, e.g. to man the polishing machines. The banker also urged development of new styles and new products. When the facility was visited, the owner discussed a project loan to cover a Rs.99,000 order that had just been received, plus a plan to add one new polishing machine according to the owner's own design.
 5. A lady with facility for making artificial flowers obtained orders from Colombo after displaying her wares at the Kandy trade fair. A business loan was arranged. Her contacts with Colombo business now enable her to employ 10 girls in this handicraft. Much of the output is in bouquets, head dresses and table arrangements for weddings.
 6. A Kandy batik and oil artist needed project funding to produce several major batiks for clients. His back-yard batik factory employs more than 20 workers. The banker advised on the types of products likely to appeal to visitors from overseas and has tried to arrange exhibition space in tourist hotels. In this painstaking labor-intensive activity, employment generation is directly proportional to the number of orders for the hand made batiks.

What do these examples reveal about the banker's activities? First, with on-time repayment rates that exceed 95 percent, a substitute system of cultivation loans has enabled the participating farmers to increase their net incomes by as much as 50 percent. For a number of farmers, new income opportunities have been created via new crops provided to extra-regional markets. And a system of initial small enterprise loans has produced viable businesses, many oriented to extra-regional markets, in which the proprietors' annual net incomes substantially exceed the amounts of the loans, and in which substantial numbers of additional jobs paying RS 50-65 per day have been created. **Employment and incomes can be generated by promoting small enterprise development by the very poor, oriented to extra regional markets.** The resulting expenditures should, via both direct and multiplier effects, create additional demands for locally-oriented business.

Second, in providing the small enterprise loans, the role of the banker has been critical. He serves as **catalyst, liaison, and entrepreneur.** Each is an element in his **package of services.** He provides business opportunities by creating **linkages** between the local producers and the Colombo market, in effect creating a regional export base. As knowledge of his activities expands, he serves as a **clearing house** for market information, placing buyers in

contact with producers and finding ways for producers to display their wares to prospective purchasers. In effect, he is a classic Manchester School "factor" of production.

To facilitate his work, he is developing a primitive Marketing Information System, a formalization of the clearing house notion, and is actively supporting such other market institutions as the Kandy trade fairs.

But he agrees that the Marketing Information System will need a different level of formalization and sophistication in an RRDB network that has a greater degree of market penetration -- 90 officers rather than 9. And a tenfold increase in the scale of the RRDB would require that the bank itself reshape its organizational structure. At any significantly enlarged scale of lending, there will also have to be a major stimulus to savings. One innovation has been to offer high interest 3-month investments in Treasury Bills for accounts of more than Rs.25,000. These accounts offer close to twice the interest of the traditional savings deposits.

The RRDB in Nuwara Eliya. The RRDB in Nuwara Eliya is one of the latest to be established, effectively in operation for only 4 months, with 3 branch officers and 3 more about to open. There are 800 villages in the district,

suggesting a need for 40 officers for complete market penetration at a ratio of one branch office to 20 villages. Of 150 loans given so far, the majority are for cultivation, totalling Rs.1.5 million. Much of the focus is on a single regional export crop, potatoes, a crop for which the upland environment is ideally suited and which has by far the highest per acre return in the area, providing a satisfactory income even to the very small farmers cultivating less than half an acre.

Focus in the lending program is on cultivation loans that substitute for traditional trader finance. These loans are made to individuals who are members of farmer associations, permitting group purchase of fertilizers and pesticides and joint use of indivisible capital equipment such as sprayers. The arrangements lower the cost and therefore raise the net income of participants while giving them access to equipment that formerly would have been unavailable.

Two problems are being addressed by the RRDB banker as part of his package of credit services: (a) availability and cost of seed potatoes; (b) timing of delivery of output to the Colombo market.

The Badulla and Nuwara Eliya districts together use 18,000 metric tons of seed potatoes per year. The Department of Agriculture and the farmers produce 15,000 tons, and 3,000 tons are imported, costing Rs.30 million in foreign exchange. Existing seed potato production by farmers is inadequate: storage is frequently inadequate and losses exceed 30 percent; improper light and air flow encourage early sprouting and result in etiolation. The imported seed, and that from the Department of Agriculture, goes first to the "larger" farmers and to those with positions of influence. The smaller farmers at the end of the chain have often had to contend with inadequate supplies of seeds of indifferent quality that arrive too late for proper planting.

The problem is to be addressed in a joint project with UNICEF. the plan is to fund manufacture and distribution of small scale seed storage racks that can be used by each of the farmers to store their own seed potatoes, and by mixed-period financing for the various elements in successful potato production -- shorter term for the crop destined for market; longer term for the crop permitted to mature in the ground before being stored as seed. If successful, the effort will significantly reduce seed potato costs, the greatest part (75 percent) of the out-of-pocket costs of production, and potentially double net per acre returns to the farmers (Nuwara Eliya RRDB, 1989).

There is similar experimentation with storage for the potato crop itself, so that it can be released more gradually to the Colombo market to keep up the price, and with improved joint shipping arrangements that lower the cost to the individual farmer and reduce the wastage in transport. Again, different credit terms are required to meet the longer holding period.

Of the few project loans so far given in Nuwara Eliya, they are largely to finance production of garments and handicrafts for local market needs, substituting local produce for imported items. The remoteness of the area makes access to the Colombo market much more difficult than in Kandy, although this may be as much a matter of perception as reality, for at larger scale Nuwara Eliya is home, for example, to one of Ceylon's national-market breweries.

The Puttalam District RRDB. The Puttalam District RRDB, headquartered in Chilaw, has six branch offices, one located in each electoral district. There were 1,021 villages recorded in the District in 1984; the numbers asserted by the District Manager to be served by the different branches range from 30-40 in the smallest electoral districts to over 170 by the Puttalam branch. Of the Rs.6.7 million disbursed (via 1,390 loans) in the 18 months since inception in July 1987 to the end of December 1988, Rs.2.25 million were in agriculture,

Rs.625,000 in animal husbandry, Rs.200,000 in fisheries, Rs.1 million in small industry, Rs.1 million to small traders and Rs.1.6 million as pawn secured by jewelry. The initial capitalization of Rs.10 million is reserved in interest-bearing instruments in the Bank of Ceylon. By the end of March 1989 total loans of Rs.8.8 million were approximately matched by deposits.

The District Manager, a 40-year Bank of Ceylon executive, views his role as a conventional banker serving the poorest of the poor who traditionally have been unserved by the banking industry. Loans are strictly for purposes of income generation. His branches wait for customers to come and request loans. If they are farmers, but not members of cooperative associations, the banker will then visit the village, help organize the association (members of which serve as loan guarantors), and set in motion a savings program that has to precede borrowing.

Loans have been given to small coconut farmers to expand into dairying: a Rs.10,000 loan will buy two cows, from which the annual milk output (collected by a dairy producers cooperative for Nestles or Milco) yields Rs.8,500. The cows will also each produce a calf, valued at Rs.1,500 when weaned, or Rs.5,000 when grown. Repayable over two years, such a loan approximately doubles the farmer's income.

The only large agricultural loans have gone to producers of specialty agricultural products -- onions, chilies and gherkins for a Colombo factory serving E. Asian export markets. The factory has a storehouse in Puttalam and uses its own agents to contract with growers and to collect the produce. Two acres of onions require Rs.40,000 for seed etc. Other crops had been produced, but local farmers are unable to compete with imported Mysore dal.

Local fisherman have received loans for boats and nets. Working in the lagoon, they produce dried fish for the local market.

Small enterprise loans include moneys to acquire welding equipment by automobile body "tinkerers" and light engineering works.

Only one loan has been given for regional export purposes other than in specialty crops--to a young woman to produce bamboo handicrafts for Laksala in Colombo. She needed raw materials and a polisher/grinder and came with her Colombo contracts in hand. She employs her brother who travels 20 miles to purchase bamboo and once each week delivers the product to Laksala in Colombo.

The banker did not know whether there were opportunities for others to move into similar lines of handicraft production for other than local markets: his lending is confined to those activities for which the locals come to him. No attempt is made to expand the array of alternatives by becoming an active agent in developing markets rather than a passive facilitator of those opportunities of which the poorest of the poor farmers and aspirant operators of small businesses are aware.

Discussion

What these contrasting examples reveal is that if loans are provided as part of a package of credit services that include traditional "factoring" of production -- creation of markets by bringing potential customers and suppliers together -- new opportunities for agricultural and small-enterprise development can be created. In effect, the RRDB is the instrument of the local urban-rural linkage. But the most rewarding of these opportunities arise from breaking out of local-market expenditure constraints by exporting to external markets: in most cases, to Colombo dealers who sell in that metropolitan market, or who may export select items overseas. The entrepreneurial RRDB can, in effect, link the very poor into larger urban systems and income generating opportunities.

But entrepreneurial bankers need training and they need to be equipped with an adequate Marketing Information System so that aggressive lending to create small enterprises can be based upon firm contracts with established wholesale houses and retail outlets. An adequate information system is essential if markets are to be created: such market creation involves establishing linkages between small producers and larger scale urban markets, sometimes within the same region, but more often than not involving interregional linkages to Colombo. Support of the development of such a marketing system, which would be generally useful for all of the regional RRDBs, should be seriously considered as part of USAID's activities in Sri Lanka, consistent with both the objectives of CDSS and of Sri Lanka's own development goals. The brief experience of the Regional Rural Development Banks suggests that creative banking can begin to meet these goals and objectives, even for the poorest of the poor, provided that the banker plays an active intermediation role in creating markets. To play that role he needs a Marketing Information System that identifies purchasers and their needs, providing the banker with the knowledge-base necessary for enterprise creation, and with the opportunity to make loans guaranteed by firm contracts.

There are other constraints. No broad-based system exists where available wares can be shown to potential buyers, as at the Kandy semi-annual trade

fairs, and where style and quality needs can be discussed. And we simply do not know what other intermediation activities exist and might be reinforced. The information and institutions are lacking for crafting further linkages between urban markets and rural hinterlands, providing outlets for agricultural produce, offering processing services, generating off-farm employment and supplying needed inputs and services.

A much better understanding of these linkages and of the ways small towns tie into broader urban hierarchies is required if project interventions targeting the developing of small enterprise or the transformation of traditional agriculture are to be put in a proper perspective.

A full assessment needs to be made of market-based lending programs such as those of the RRDBs, to assess the ways in which the rural-urban linkages that they create can be strengthened and extended. A clear role is evident for the entrepreneurial banker offering a bundle of credit services that includes the crafting of market relationships. Yet such bankers need training in roles that go beyond their traditional reactive relationship to borrowers, and they need to be equipped with adequate information about products in demand and a variety of contexts in which potential buyers and sellers can be brought face

to face. Markets are key, and even for small-scale producers access to external markets is a route of income growth.

And a full study needs to be undertaken of the structure of connections between rural areas and urban regions: the actors and their intermediation activities, the structures that can be strengthened, and the gaps that need to be filled. Absent full appraisal, the experience of the RRDBs to date indicates that the rates of return to borrowers on one such gap-filling activity, extension of loans to the poorest of the poor, can be very high.

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