

**Support to Small  
Enterprise Development:  
Key Design Issues  
in the Mahaweli  
Enterprise Development  
Project**

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## CHAPTER ONE

### RATIONALE FOR THE SMALL ENTERPRISE SUPPORT COMPONENT OF THE MAHAWELI ENTERPRISE DEVELOPMENT PROJECT

#### PROBLEM

The lack of an explicit developmental model for the Mahaweli areas has hampered justification of the Mahaweli Enterprise Development Project (MED) project. What is required is the identification of the process of economic development expected to occur there and the specific constraints to such development that may be alleviated by project interventions.

One of the important issues raised with respect to this project concerns the relationship between the interventions designed to support and stimulate small enterprise development and the overall process of economic change in the Mahaweli. Specifically, will MED project activities targeting the promotion of the small business sector result in economic development or in economic involution?

Economic development is a linear process, leading to increasing diversity, complexity, and overall scale of the economy of a given area. The process is evolutionary and generally self-sustaining, once the appropriate underlying conditions have been created. On the other hand, economic involution is largely circular; it is entrepreneurial energy turned in upon itself, because of environmental limitations. Involution results in great diversity, but does not lead to overall growth or to higher stages of organizational efficiency and complexity. It is a process of ever-increasing division of the same pie, in the absence of real advancement.

In order to make the case that development, not involution, will occur in the Mahaweli under MED, we must first have a conceptual model of the developmental process we wish to promote there. Second, the place and role of nonagricultural enterprise, particularly the small business sector, must be made explicit. Finally, constraints to economic development which MED proposes to alleviate through enterprise support activities should be identified and justified within the context of the overall model.

#### A MODEL OF ECONOMIC DEVELOPMENT IN THE MAHAWELI

The Mahaweli systems were created to provide an egalitarian, subsistence base to a maximal number of families. The division of newly irrigated lands of the dry zone into one-hectare leasehold plots makes sense ideologically and politically, but not economically. A rapidly rising population on a fixed base now poses a serious problem of agricultural involution.

Over the last two years, the Mahaweli Authority has thrown itself into finding economic solutions to the problem of the underemployed second generation of settlers. However, in order for this growing population to find a suitable livelihood

in the Mahaweli areas, a process of economic development must be launched. The alternative is economic involution or disguised social transfer payments.

The key to launching a process of economic development in the Mahaweli is the raising of settler incomes beyond the subsistence level, where they are presently mired. There are two major sources for this additional income: agricultural diversification on settlers' irrigated holdings; and employment on major agro-industrial estates created by external investment. In both cases, the emphasis is on agricultural production for export from the region. This does not imply export from Sri Lanka, but, in many cases, this will also be true.

Ernest discusses the issue of export crops in terms of tradeables, that is, produce that can be sold outside the region (Ernest, 3, 1988b). Discussions between MASL and vegetable buyers from Colombo indicate that the dry zone of Sri Lanka, when properly developed agriculturally, has a comparative advantage with respect to the wet zone. Many of these vegetable crops (chilies, eggplant, grams, gherkins, sesame, watermelons, asparagus, onions) are sought for export to foreign countries.

Since agricultural holdings are limited to one hectare of irrigable land and 1/5 hectare of homestead per settler family, agricultural diversification into cash crops on existing paddy land is the only solution for the vast majority of settlers. Such agricultural diversification on settler holdings will, thus, constitute the first stage in the process of rural development in the Mahaweli areas. Moreover, this development will be characterized by rising disposable incomes, not just increased food production.

In order to promote agricultural diversification into cash crops and to circumvent the limited size of settler landholding, the Mahaweli Authority is presently engaged in encouraging the formation of agricultural producer associations. For the moment, it is MEA which speaks for the associations, finds them markets, promotes the cultivation of new crops, extends new relevant technologies, and provides advisory services. Through such efforts, it appears that raised settler incomes from agricultural production on paddy land (*yala* season production) is both possible and imminent. As analysis of the MARD project indicates, this can result in significant revenue increases.

Other, less important, agricultural innovations are also possible, and two are presently occurring in the Mahaweli. In System B, irrigable upland plots to a maximum of 50 hectares are being leased to middle-class farmers. The poorly drained, paddy-growing lowlands remain limited to one-hectare family leaseholds.

A second, informal process of agricultural concentration is that of land rental to *de facto* absentee landlords. While these landlords cannot have legal title to the land, they, nonetheless, control it through patron-client credit arrangements. Even in the absence of private land ownership, the covert process of agricultural concentration in the hands of wealthy farmers or local merchants will continue. While this should result in increased rural income through economies of scale, crop diversification, and intensification of land use, it comes with the cost of increasing economic marginalization of some settlers.

The second source of increased disposable incomes for settler families will come from full or part-time labor supplied to large agro-industrial concerns. These companies, or branches of larger commercial groups, will set up operation in the

Mahaweli, responding to the clear incentive of long-term lease of large tracts of available upland, particularly in System B. Such tracts of agricultural land are simply not available elsewhere in Sri Lanka. Interviews with large Colombo-based firms indicate strong interest in acquiring land in the Mahaweli, with few, if any, other incentives necessary to attract them.

In sum, two developmental processes will result in significantly raised incomes for a majority of settler families in the Mahaweli: the first will come from agricultural diversification and economies of scale on paddy fields through new export-oriented crops and the creation of producer associations; the second will result from wage work on agro-industrial estates of 600 to 1,000 hectares, employing many thousands of people part or full time.

### RURAL HOUSEHOLD ECONOMIC DEVELOPMENT

Key to understanding the process of rural economic development is the identification of how households advance socioeconomically. Thayer Scudder, who has closely followed the evolution of Mahaweli settler families over the last 9 years, has reported that families tend to pass through identifiable developmental stages, once their income increases beyond the subsistence level (Baldwin, 1-3, 1987). At each stage of household development, an increasing percentage of disposable income is likely to be reinvested in new productive activities. The result is a linear momentum of development, as opposed to the circularity of involution. What is true of individual families also characterizes the development of the community and region.

The following stages of household development, according to Scudder, can be expected to occur in the Mahaweli, once household disposable incomes increase significantly beyond the subsistence level.

- (1) **Increased food consumption:** The first increment of increased income is spent on more and better food, purchased now for cash rather than on credit.
- (2) **Diversification of production:** Once basic consumption needs are met, additional income is channeled into farm improvement, particularly livestock purchase and cash crops.
- (3) **Economies of scale:** As farm income increases further, farmers seek to expand their level of operation through rental of additional land and the hiring of nonfamily laborers.
- (4) **Education of children:** As family labor becomes less critical in farm operations, children are sent further in school in the belief that education will one day free them for a better life and for occupations permitting the sending home of cash remittances.
- (5) **Cottage industries:** The emergence of successful, small on-farm industries, generally the purview of female householders, depends on freeing household members from part of their previous labor obligation.

- (6) **Homestead quality improvement:** As income from cottage industries swells revenues, major improvements to the size and composition of the house, water system, toilet facilities, and lighting will occur.
- (7) **Local service and trade businesses:** Households launching into substantial business activity prefer services, trading, or retail activities destined for local consumption; Scudder estimates that only 20-30 percent of rural value-added will be in the form of exported manufactured goods, in this first stage of true small business activity (Baldwin, 3, 1987).
- (8) **Small-scale manufacturing and transportation:** The next step in regional business development is the launching of small-scale manufacturing enterprises (milling, tailoring, construction, food processing), or transportation services (taxi, truck). Since these industries require technical skills or considerable capital, they tend to follow previous involvement in retailing and trading activities. Such, of course, is not always the pattern, as in the case of the returning overseas worker.
- (9) **Real estate investment:** Investment in urban real estate tends to follow, establishing a link to nearby urban areas, but resulting in an exporting of capital earned from rural-based activities.

#### **THE ROLE OF NONAGRICULTURAL ENTERPRISE DEVELOPMENT**

Rural development in the Mahaweli areas will, thus, receive its take-off impetus from substantially raised settler incomes derived from the export of cash crops from farm fields and from wage labor on estates financed by outside investment. This, however, is just the first stage of regional development, although necessary to set the process in motion.

Just as governmental intervention can be useful, even necessary, to bring together the conditions for take-off, well before it would occur naturally, project interventions of various types can influence the speed and nature of succeeding stages of regional development. These stages are characterized by the increasing importance of nonfarm enterprises in the overall development of the region. Increasing diversity, complexity, and efficiency of business activities will, in turn, feed back into the process of agricultural development. Particularly important among these linkages are farm mechanization and farm management.

What potential does project intervention hold to hasten or shape the course of Mahaweli development? As Ernest points out, it is possible to hasten the developmental process through the accelerated creation of a suitable business environment, thus encouraging and aiding "investment pioneers" and "early adopters" of entrepreneurial behavior by lowering risks and start-up costs (Ernest, 2, 1988b).

By investing in a variety of skills training activities, such as entrepreneurial development courses, business advisory services, and training cum production centers (incubators), outside assistance can increase the speed with which small business activities will grow and flourish in the Mahaweli. Moreover, by promoting innovation in organizational forms, a greater variety of income-generating strategies can be

created than would occur naturally. This means that the process of regional development can be channeled in directions maximizing, as Ernest notes, "gains in terms of both efficiency and equity (Ernest, 2, 1988b)."

Ernest makes the case that project interventions should concentrate on key business sectors, that is sectors having the greatest number of forward and backward linkages to export-oriented cash cropping and the largest number of indirect multiplier effects on the regional economy as a whole (Ernest, 3, 1988b). Food preservation and processing industries are paramount here, but the production of small farm machinery and tools, repair of food processing and agricultural equipment, and building construction are also of primary importance.

Notwithstanding the importance of key export sectors, the creation of a foundation for entrepreneurial activity in its broadest sense in the Mahaweli should be the objective of the MED project. While emphasis can be placed on training potential businessmen (and women) in the technical and business skills necessary to operate their own small businesses in key sectors, such as food processing and equipment manufacturing, it would be short-sighted not to see the need to sow the seeds for overall entrepreneurial activity, as economic development gains speed in the Mahaweli regions.

The fact that the majority (70-80 percent, according to Scudder) of small businesses launched by settlers in the Mahaweli are in nonexport related petty trade, retailing, labor-intensive services, and extremely small-scale manufacture with limited economic potential does not mean that an enterprise development project should focus only on high-potential manufacturing businesses in key sectors. The development of key business sectors can only occur in an overall context of rising level of business activity, and many of those venturing into key support sectors will have made their start in far less risky and capital intensive ventures.

One should not underestimate the magnitude of household consumer demand set in motion by increased agricultural income. Scudder has reported that in the older Mahaweli areas, particularly System H, farmers are reaching income levels sufficient to stimulate significant consumption demand (Baldwin, 4, 1987). Substantial take-off from present levels of economic development may well depend on the ability of local businessmen to provide the nontradeable goods and services now affordable by an increasing number of households. This will inevitably stimulate a growing amount of import-substitution for goods manufactured outside the region, if entrepreneurial and technical talent has developed sufficiently through previous trading, retailing, and petty manufacturing activities.

#### **IMPORTANCE OF THE SMALL BUSINESS SECTOR: WORLDWIDE EXPERIENCE**

The importance of supporting the small business sector in the Mahaweli has at times been questioned. The cost effectiveness of aid to a host of small or micro-enterprises has been challenged, particularly when compared to offering incentives for large-scale capital investment by Colombo-based firms. Moreover, early data from the ARTI census of firms in the Mahaweli indicate a preponderance of retail shops and eateries (44 percent) in the 4,600+ businesses identified. Are not manufacturing firms, making up 18 percent of the total, most worthy of attention,

and what do we make of the fact that 2/3 of these firms are small (artisanal) rice mills?

In order to appreciate the potentially very important role of the small business sector in the economic development of the Mahaweli, comparative data from other developing countries should be examined. Unless results from the ARTI and follow-on surveys (cf. Chapter Two) show otherwise, which is doubtful, small business in the Mahaweli should be quite similar to what has been found elsewhere in the Third World.

Comparative research has indicated that the small business sector -- firms with less than 50 workers -- are a dominant part of the overall industrial sector of developing countries. A recently completed study from Michigan State University (MSU), "Small Scale Industries in Developing Countries: Empirical Evidence and Policy Implications" (MSU, Paper No. 9, 1987), provides impressive evidence in support of the role of small business, particularly manufacturing, in the economic development of the Third World. Its findings will be relied on heavily in the discussion to follow.

The basic MSU research, carried out in 6 countries between 1974 and 1981 (Sierra Leone, Bangladesh, Jamaica, Honduras, Thailand, and Egypt), is supplemented in the study by other available data on small business in developing countries. Overall, it was found that "small scale firms accounted for more than 50 percent of total industrial employment" in 13 of 14 countries surveyed. "For these countries, a mean of 71 percent of all industrial employment was generated by small enterprises (MSU, 14, 1987)."

Moreover, most of this employment was concentrated in the smaller firms. Thus, about 2/3 of manufacturing businesses in the sample of 14 employed fewer than 10 persons. Interestingly, the share of industrial employment held by the larger small businesses (10-49 employees) was only another 10 percent.

These observations mean that a strategy of enhancing employment opportunities in the Mahaweli should focus not only on the small business sector, but on the smaller firms within that sector. This does not mean concentrating on one-person firms, since, although very common, they appear to be less efficient than firms employing even a few workers.

Worldwide evidence reveals that one is wrong to dismiss small business as producing little of value. With respect to the small enterprise share of value added in the manufacturing sector of developing countries, a survey of 7 countries indicates "a mean of 37 percent of manufacturing value added came from small scale firms (MSU, 16, 1987)."

It should be no surprise to find that small business in the Mahaweli is producing overwhelmingly for direct, local consumption. Worldwide, small business manufacturing is concentrated in the production of consumer goods. A 10-country survey indicates that more than 77 percent of small enterprise manufacturing employment is in food/beverages, textiles/clothing, and woodworking products (MSU, 18, 1987). Moreover, a 4-country study shows that direct sales to the final consumer exceeds 80 percent in 3 of the 4 countries (MSU, 46, 1987). When the ARTI survey is analyzed, we should find a similar pattern in the Mahaweli areas.

The MSU study also discovered that most small industries are to be found in rural areas, albeit defined as localities with fewer than 20,000 persons. Employment in these rural firms generally exceeds that for urban firms; in a selection of 13 countries for which data are available (including Sri Lanka), 63 percent of manufacturing employment came from rural areas (MSU, 20, 1987). The share of rural manufacturing employment in the national (manufacturing sector) total for Sri Lanka (1971) was 75 percent.

It is thus quite useful to encourage the development of small business, manufacturing or other, in rural areas such as the Mahaweli. A process of sustained development will, in fact, require the expansion of this sector. Increased household income will fuel demand for locally produced goods and services, which, in turn, will stimulate small business expansion. This should occur well before Colombo-based medium- and large-scale firms respond to local marketing opportunities.

### **Worldwide Characteristics of Small Enterprises**

While awaiting the results of the Agrarian Research and Training Institute (ARTI) survey of Mahaweli enterprises, (August, 1988), we must turn to worldwide, comparative data, in order to gain an understanding of the structure and functioning of the small rural businesses likely to characterize the MED project area.

### **Firm Size and Social Composition**

The usual small manufacturing firm -- the same can be said for nonmanufacturing enterprises -- is extremely small. In a 7-country sample of small businesses compiled by MSU (Bangladesh, India, Sierra Leone, Zambia, Honduras, Egypt, Jamaica), over 50 percent are one-person firms. 85 percent or more of the enterprises in all countries of the sample employed fewer than 6 persons (MSU, 20, 1987).

The social composition of small-scale enterprises is primarily familial. MSU found in a sample of 11 developing countries that "proprietors and family workers account, on average for over 50 percent of small enterprise employment (MSU, 23, 1987)." Moreover, hired workers form the smallest percentage of small business employment, particularly in the smallest firms. Apprentices, whose share of employment varies widely worldwide, do not seem to be a large part of Asian manufacturing firms (1-2 percent), while in Africa they may compose up to 65 percent of a business's labor force.

Ownership of small enterprises is overwhelmingly sole proprietorship in developing countries. In a 6-country sample, MSU research found that 95 percent of small firms were sole proprietorships. Rarely were the remaining firms organized as anything else than partnerships. The percentage of female heads of businesses were significant in most countries of the sample (except for Bangladesh -- 3.3 percent), ranging from 37 percent in Thailand to 61 percent in rural Honduras (MSU, 29-30, 1987).

With respect to the social origin of entrepreneurs, MSU research has found that "the vast majority of proprietors were operating in the areas where they were born." On the other hand, "relatively few were engaged in the same occupation as their fathers, many of whom had been farmers." The study indicates that from 65 percent to 86 percent of business owners had started their own firm. While geographically relatively immobile, entrepreneurs were "highly mobile in terms of occupation (MSU, 32, 1987)."

A majority of this sample of entrepreneurs had some formal education. However, few of them "kept even a rudimentary set of business records." The study goes on to say "that the management skills of small scale proprietors, in general, are deficient." One example cited by the MSU study (Jamaica) revealed "that more than half the proprietors could not identify all their business costs, could not keep business and nonbusiness funds separate, and did not assess their business performance as often as once a year (MSU, 32, 1987)." This makes a strong case for entrepreneurial (business skills) training and a business extension service under the MED project (cf. Chapter Three).

### Capital Composition and Sources

The amount of capital used in small-scale enterprises is modest. It varies considerably by country level of development and business sector, rising with per capita income and increasing with the shift from consumer to intermediate or capital goods enterprises. According to the MSU study, fixed assets, especially buildings and equipment, form the largest capital component. The use of machines is generally limited to simple equipment, operated without power. Buildings, on the other hand, normally serve also as the family dwelling, the workshop having been established within or alongside the original living quarters.

The proportion of working capital is quite variable worldwide, ranging in a 4-country MSU sample from 5 percent to 29 percent. The figures take into account only inventories, however. "Although quantitatively not the dominant element in the total capital stock, working capital shortages were frequently the most pressing problems perceived by small scale proprietors (MSU, 36, 1987)."

Initial capital needs for business start-up appear to be rather small, based on worldwide evidence. Again, considerable variation occurs between business sectors and across countries. The evidence appears to indicate, however, that "capital entry barriers are higher for manufacturing than for most unskilled service and petty trade activities (MSU, 38, 1987)." This does not seem surprising, given the need for at least some limited tools and inputs in manufacturing.

A sample of 5 developing countries studied by MSU shows that between 60 percent and 94 percent of all initial investment comes from the entrepreneurs' own savings. Friends and relatives provide most of the rest. Formal credit channels from government or banks constituted about 1 percent of start-up capital, while the informal sector's oft-maligned money lender does not appear to surpass 1 percent of the total.

Again, at times of business expansion the vast majority of funds (80+ percent) come from reinvested profits. Remaining funds come from friends, relatives, or money lenders (MSU, 40, 1987).

The small role played by formal credit schemes and the fact that start-up financing tends to be mobilizable from personal savings, friends and relatives would argue against a credit component for the MED project. This is an important design issue, which will be addressed in the baseline enterprises follow-on survey (see Chapter Two).

Excess productive capacity seems to stalk the small manufacturer, according to the worldwide comparative evidence. Estimates in a sample of 4 indicate from 18 percent to 35 percent excess capacity, attesting to a fairly ubiquitous and characteristic slackness, and "that considerable scope exists among small enterprises for short-run supply responses (MSU, 41, 1987)."

### **Small Business Efficiency**

The MSU study attempted to gain an idea of the economic efficiency and profitability of small businesses in general, and the differential efficiencies of various sub-types. In the aggregate they tend to be quite viable, although the evidence regarding whether they are more efficient than large firms is variable and not convincing. Those factors found by MSU to be most linked to business viability and efficiency are: "(1) use of hired workers; (2) operation in workshops away from the home; (3) operation in larger localities; and (4) involvement in product lines with better economic prospects, such as tile, furniture, baking, and repair activities (MSU, 89, 1987)."

It appears that the smallest firms -- often one-person enterprises -- are less efficient than somewhat larger small-scale businesses; the latter, however, tend to be more efficient than middle-level firms. Ultimately, very large businesses, through economies of scale and improved technology, become more efficient than middle-level firms. There, thus, results what MSU calls an inverted "U" relationship between firm size and economic efficiency (MSU, 81, 1987).

The least efficient category of businesses is, at the same time, the most common. MSU reports that the one-person firm constitutes over half of all small enterprises in a majority (5 of 7) of countries sampled (MSU, 20, 1987). Another sample of 4 countries indicates that, within the population of small-scale businesses, returns are lowest for the one-person firm, but that "returns then consistently rise as the number of workers increases . . . (MSU, 81, 1987)." This finding should discourage investment in self-employment programs in general and particularly under MED. It would be very useful under this project to encourage entrepreneurs in the Mahaweli to envisage partnerships or other types of business association, when they launch their enterprises.

### **Demand-driven Small Business Growth**

Increasing household disposable income based on agricultural diversification and increased off-farm employment was proposed earlier as the motor by which a process of economic development would be launched in the Mahaweli. The growth and increasing sophistication of the small business sector must be a key component of this development, and empirical evidence from the MSU comparative study supports this strongly.

Two persisting questions raised with respect to supporting the small business sector in the Mahaweli concern: the lack of information regarding the relationship between household demand for goods and services and small enterprise growth; and the nature of backward and forward production linkages between various types and levels of enterprises. While these questions cannot now be fully answered for the Mahaweli, worldwide evidence provided by the MSU comparative study provides a much clearer picture of what is likely to constitute the small business sector under the MED project.

The close link between household disposable incomes and the directly consumed goods and services provided by rural small enterprises raises the question of the relationship between rising income, increasing demand, and small business supply response. After examining the evidence from 4 country studies, the MSU authors state unequivocally: "These empirical studies reveal a strong positive relationship between changes in rural household income and changes in the demand for rural small scale enterprise goods and services in all four countries (MSU, 49, 1987)." The authors go on to say that expenditure elasticities for small-scale, nonfarm enterprise products are consistently high, ranging from 1.34 to 2.05. This means that a 10 percent rise in rural household disposable income should result in a rise in consumer expenditure on small business products of from 13.4 percent to 20.5 percent.

The empirical evidence also suggests that expenditure elasticities for locally produced goods and services are higher than for comparable products produced outside the region. There is, thus, reason to believe that a certain process of import substitution is both possible and likely in the Mahaweli.

Specific small enterprise products, not unsurprisingly, have rather different expenditure elasticities. The worldwide evidence indicates that highest elasticities are associated with services. Evidence from various countries points to very high elasticities for personal services and ceremonial outlays, followed by transportation and housing construction and repair. On the other hand, the global elasticity for small-scale manufactured products in one study was only 0.76. The same study indicated a higher expenditure elasticity for small-scale manufacturing products than for similar products produced by large-scale, urban-based companies (MSU 50, 1987).

In sum, in spite of sometimes spotty data, there seems to be firm evidence supporting an important household expenditure response from rising income in favor of locally made or supplied goods and, especially, services. While this pattern might change over time, at least initially in the Mahaweli, it would be unwise to focus all support activities on manufacturing firms. Indeed, the case can be made that benefits of small enterprise support activities might be greater in key service areas, such as transportation, trading, delivery, and repairs, since demand should increase faster there than in small manufacturing.

### **Wider Economic Development: Forward and Backward Linkages**

Subsidiary demand for the products of small enterprises stems from forward and backward linkages with other private producers. The evaluation of the potential for such linkages, particularly with agriculture on the one hand, and large-scale industry, on the other, is very important to an appraisal of economic development opportunities in the Mahaweli.

The evidence for linkages between agriculture and small-scale enterprises, according to the MSU study, is still rather sketchy. One study from Malaysia, which specifically examined these linkages, found "that for each dollar of income created in agriculture by the project, 90 cents of value added was created indirectly in local nonfarm enterprises, the vast majority of which were small scale. One-third of this indirectly created small scale activity was due to backward and forward linkages with agriculture, while the other two-thirds was attributable to increased consumption expenditures (MSU, 53, 1987)."

The magnitude of backward linkages from agriculture to small-scale enterprises depends greatly on the technological level of agriculture. Large-scale farming does not normally require locally-made manufactures. On the other hand, the technologically simple, but developing, agriculture of the Mahaweli areas can be expected to provide an ideal outlet for local manufacturers of improved tools and implements, irrigation pumps and motors, and power tillers. Mechanization of paddy farming equipment and aid to small business producers of such machines is already under way in System H, under the GTZ project at Maha Illuppallama.

Forward linkages from agriculture to small enterprise consist normally of processing, transport, and marketing activities. The MSU study states, citing a World Bank report on rural growth in Thailand, that: "Indeed, there is evidence that the small scale enterprise value added generated from these activities is significantly larger than that generated from providing agricultural inputs (MSU, 55, 1987)."

Another study cited on Pakistan "reveals that crop flows to small scale processing activities are more than five times the flow to large scale processors (MSU, 55, 1987)."

One of the reasons for the close link between agriculture and small enterprises is that they tend to be close to the production source. However, most case studies indicate that these rural, small-scale processing enterprises are really economically quite efficient. Comparative studies on rice processing, for example, indicate close linkages between rice producers and very small mills. This correlation has already been discovered by the ARTI census of businesses in the Mahaweli, where small-scale (artisanal) mills constitute 11 percent of total enterprises, 62 percent of all manufacturing firms.

The close linkage between the predominant paddy farming system in the Mahaweli and small rice milling businesses points to the likely direction of change in local food processing industries. As cash cropping gains momentum, many rice milling businesses will diversify into various other food processing technologies. A small-scale food processing industry for diversified cropping systems will not be hard to create under MED. It already exists in embryonic form in the Mahaweli.

Worldwide empirical evidence for the types of forward and backward linkages between small businesses and the large-scale enterprises beginning operations in the Mahaweli is rather sparse. Small-scale enterprises are rarely included in input-output analyses. One study from Chile, while not elucidating the exact nature of the linkages, demonstrated their existence and the fact that more were backward than forward (MSU, 56, 1987).

Many of these backward linkages between large-scale firms and small enterprises are in the form of subcontracts. According to MSU, limited evidence points to a very high prevalence of such subcontracting in Asian countries similar to Sri Lanka (India, Bangladesh, Indonesia, Thailand). One study from Thailand reported, for example, "that 7 percent of the total economically active time of adults was spent in sub-contracting activities (MSU, 57, 1987)." Considerable potential for this type of business arrangement would seem to exist in the Mahaweli.

## CONCLUSIONS

Economic development in the Mahaweli can and will occur, but it will depend on prior agricultural diversification on settlers' fields and on outside investment by large, Colombo-based agribusiness companies. The Mahaweli Authority of Sri Lanka, and particularly the Employment, Investment, and Enterprise Development Division (EIED), has a very necessary role to play in realizing these preconditions for take-off.

Rising household disposable income in the Mahaweli will result in increased demand for locally-produced goods and services. The small business sector will respond by expanding its supply of such products. Employment will increase in tandem with the total volume of value added in the Mahaweli. The small business sector will increase in organizational complexity, technical skill, and range of products furnished. Inevitably, it will begin to substitute local manufactures for outside products.

The process within which the small business sector has such an important role to play is regional economic development. Such development does not just occur, but is a function of human initiative and organization. Just as MASL is now intervening to organize agricultural production in innovative ways through producer associations employing new crop technologies developed on government commercial farms, the small business sector should be supported and guided by the MED project, particularly in the initial stages of take-off.

The constraints that will exist to a free-flowing development of the small business sector, once household incomes and demand rise beyond the subsistence level, will lie in the general business environment and in the skills of would-be entrepreneurs. With regard to the former, MASL will have to monitor governmental policy, in order that bureaucratic rules and regulations do not stifle growth. Limited zoning for industrial purposes, as just one example, remains a serious constraint in System H.

The entrepreneurial development training programs, discussed in Chapter Three, should, if they stress the acquisition of serious business skills, provide a corps of motivated future business persons. Obviously, some of these would emerge over time without project intervention. Nevertheless, the thrust given by such training should motivate and empower graduates in far greater numbers than would be the case if development were left to its own devices in the Mahaweli.

The business advisory service, also discussed in Chapter Three, will nurture the best of these graduates over the first years of their small business activity, greatly reducing the risks taken by these entrepreneurs. Consequently, they should succeed in greater numbers than would be the case if no support were given. Not only does this reduce the social cost of small business development, but will greatly hasten the realization of substantial social benefits.

The question of the potential role of credit under the MED project cannot be addressed until the results of the follow-on design study, discussed in Chapter Two of this report, indicate the need for such a facility. Should start-up or expansion capital prove to be a major impediment to small business development in the Mahaweli, some way must be found to deliver it to entrepreneurs at real market rates.

The usefulness of the small business incubator as a means to impart a whole package of business skills, ranging from technical skills through personnel management and market analysis, is discussed at length in Chapter Four. In the absence of more detailed analyses, the feasibility of this concept for the Mahaweli remains moot.

## CHAPTER TWO

### SURVEY METHODOLOGY FOR DESIGNING THE SMALL ENTERPRISE SUPPORT COMPONENT OF THE MED PROJECT

#### PROBLEM

The Agrarian Research and Training Institute (ARTI) is presently conducting a survey of business enterprises throughout the Mahaweli. The survey results had originally been intended to provide baseline data against which the success of interventions under the MED project could be evaluated. However, in view of continuing information needs on the small business sector, in order to justify various MED project activities, the ARTI survey should now serve a double function: an essential aid to project design, as well as providing the means for eventual project evaluation.

Since the ARTI baseline enterprises survey now becomes very important for proper project design, we must evaluate the usefulness of the data which will be generated, when it is completed in July, 1988. If data gaps appear likely, a follow-on survey must be designed as soon as possible to provide the information necessary to justify the various activities of the small-business component of MED.

One such follow-on survey has already been proposed by U. Ernest in his memorandum of January 26, 1988. He proposes adapting the questionnaire of the centrally-funded Private Enterprise Development Support (PEDS) project to the special need of assessing constraints to private sector growth in the Mahaweli. A small sample of enterprises, drawn from the larger sample of the ARTI study, would be surveyed. Subsequently, these data would be supplemented by structured group discussions with Mahaweli aspiring or existing entrepreneurs.

In the analysis to follow, the potential for project design of both the ARTI and follow-on surveys will be evaluated, with particular attention to the design needs of the small-business component of MED. It must be borne in mind that both surveys could yield valuable data on the nature and growth constraints of medium and large-scale enterprises already in the Mahaweli. However, the innovative, but somewhat controversial, nature of the proposed activities in the small enterprise component of MED requires far more attention to identification of resource and policy constraints than is the case for MLEs.

Following the evaluation of both the current ARTI and proposed PEDS-based follow-on surveys, the final section of this paper will make recommendations to USAID/Colombo concerning the course to follow in using the follow-on survey to finalize the design of the MED project. Recommendations will refer to the major data needs and the appropriate means to generate information which can support various project activities, within the small enterprise development component. A final set of data categories for the follow-on survey is included.

## SPECIFIC MED PROJECT DATA NEEDS ON SMALL-SCALE ENTERPRISES

Principal objections to the various activities of the small enterprise component of MED center on the lack of information about the nature and composition of this sector, particularly the various resource and growth constraints which may be alleviated by currently proposed or alternative project interventions. We need to know to what extent a small business advisory service is needed in the Mahaweli, and, if so, what key constraints to business development should it focus on? In similar fashion, an understanding of the usual start-up needs and problems and subsequent growth obstacles encountered by entrepreneurs will help us better design the content of entrepreneurial development courses. Finally, when we have a much clearer picture of the economic and social organization of the small business sector in the Mahaweli, including policy, managerial, and factor constraints, a proper assessment of the role and feasibility of the business incubator can be made.

The question of credit to small enterprises in the Mahaweli has already received a good deal of attention without resolution. Credit is probably the most common component of small business support programs in developing countries and is the need most often expressed by entrepreneurs. There is some doubt, however, that entrepreneurs need as much working capital as they profess. Many times such an apparent need simply reflects underlying managerial or technical weaknesses of businesses. In order to resolve the dilemma with regard to their need for capital, we must design a follow-on survey that clearly provides answers to the credit question. Then, the even more difficult task of how to deliver it effectively becomes important.

A final, rather tricky question deals with the question of local demand for products and services of the small business sector in the Mahaweli. We need to appraise the growth potential of various types of businesses, particularly if they target local or regional markets. While market studies are the appropriate vehicle for such evaluation, it should be possible to include key questions in a follow-on survey to the ARTI study, to inform us how small and medium-scale enterprises assess their markets and how they currently perceive opportunities for increased sales.

### THE ARTI SURVEY AND MED DESIGN

The final stage of data gathering in the ARTI survey is presently under way (4/88). Previously, the research team had solicited from Mahaweli field managers a list of all enterprises in the four systems (H, G, C, B) and had verified its validity. A final census of some 4,682 enterprises emerged, which were grouped into 84 types.

In order to select the survey sample, enterprise types with a total population of fewer than 20 units were eliminated. This removed all but 27 types of businesses, which, however, covered 93 percent of the total population. The remaining 4,337 enterprises were stratified geographically by system, township, and rural block and then reduced in size by taking 20 percent of the total number of each type, or 20 units, whichever figure was smaller. The size of the final sample for the main survey is 762.

Since there appeared to be underrepresentation of certain types of urban-based enterprises in the final sample, it was decided to expand the number of surveyed businesses in the townships, by including business types there down to a total of 7 units. One rural enterprise type was also added to the total. These will not be part of the main survey, but will constitute special case studies. It is not clear from the ARTI statement on survey methodology how the data obtained from these case studies will be used.

At this point some interesting observations can be made concerning the composition of the census of 4,682 firms. Nearly 30 percent of all enterprises are grocery stores; this figure rises to 44 percent for all grocery stores, hotels, and combined hotels and grocery stores. On the other hand, manufacturing businesses constitute about 18 percent of the total, but small rice mills compose 62 percent of such enterprises (11 percent of all businesses in the Mahaweli). Without artisanal rice mills, manufacturing businesses compose less than 7 percent of the total population of enterprises.

Another observation which can be made concerning the methodology of eliminating enterprise types with less than 20 units is that some interesting innovative activities likely to be supported under the MED rubric of special projects, such as ornamental fish farms (8 units), inland fishery societies (4 units), and manufacture of cane products (7 units) will not be a part of the survey. Not only can they not be studied for purposes of Med design, but they will not be part of the baseline for later follow-up work. These and other types of small-scale industries, particularly the various types of enterprises now being organized as producer associations (called societies by Mahaweli officials), should be included in a second survey along with a reduced sample from the present baseline survey.

#### **Usefulness of ARTI Survey Results for MED Design**

It is, of course, presumptuous to evaluate the usefulness of a survey that has not yet been completed, let alone analyzed. However, the questionnaire has been supplied to USAID, along with code book, description of methodology (to date), census of firms, and final sample selected. It is the questionnaire that bears most scrutiny, although there remains some concern about the type of analysis to be applied to the data collected, in the absence of any guiding conceptual framework.

Bearing in mind that we want to know enough about the various types of Mahaweli enterprises to design an aid project and to evaluate the effectiveness of this project in later years, the questionnaire has some distinct weaknesses. Two of these stand out, one a sin of omission, the other of aiming too high. In the first case, there is very little on marketing (2 questions), expansion plans and constraints to future growth (1 question), or on the details and dynamics of business origin and start-up problems (if prior to 1987). On the other hand, detailed questions on inventories, fixed capital formation, input costs, fuel use, and costs and receipts of non-industrial services, would seem to target medium to large-scale firms, and may be of dubious use in surveying the plethora of one product/service micro-enterprises likely to compose the final sample.

We will eventually know a great deal about the present composition and operation of a variety of firms in the Mahaweli. It is regrettable that little longitudinal information will be gathered (except for the previous year -- 1987), even in general terms -- such as when major pieces of capital equipment were purchased, employees hired, credit secured, major outlets discovered, and so on.

### **Recommendations**

The usefulness of this survey as a design tool is incomplete and a further survey should be conducted by ARTI to provide information on business start-up needs and problems, entrepreneurial characteristics of business owners, marketing techniques, including assessment of demand for products and services, credit strategies, and perceived policy and resource constraints to business growth.

These new data will allow Med project designers to: fine tune the entrepreneurial training program, particularly for existing entrepreneurs; evaluate the future needs of incubator-trained entrepreneurs and their likely problems once they leave the sanctuary; and orient the future activities of small business advisors toward specific specialties -- probably account keeping, market analysis, and credit sourcing.

As a monitoring tool the survey can be of definite use, if business advisors work with a sample of these firms over the course of the project. It would be very useful to select firms for monitoring which have been surveyed in more depth through the follow-on survey, as recommended above. The same firms can be resurveyed in 2-3 years for the mid-term evaluation and again in 5 years for the final assessment of project success. Existing entrepreneurs for the entrepreneurial development program can also be drawn from this pool, the changes in their businesses and business activities in the years ahead a reflection of the value of the course work.

### **THE PEDS SURVEY AND METHODOLOGY**

The use of a modified version of the PEDS survey as a follow-on tool for MED design is proposed by U. Ernest in a memorandum of 1/26/88. The latter also presents a very useful research methodology. However, it quickly becomes apparent on examining his research issues and the questionnaire, that this research tool is far more appropriate to medium and large-scale firms than to small-scale enterprises. A separate survey instrument will be developed to poll approximately 30-40 Colombo-based companies, likely to make direct investments in the Mahaweli.

The analysis provided in this entire section deals with the survey questionnaire and research methodology proposed by Ernest in his memorandum. Following, a modified methodology and an alternative questionnaire format will be recommended.

## **Research Issues**

The issues to be addressed in the proposed follow-on study are organized into 8 questions, 4 of which focus on the current situation for surveyed businesses, and 4 which attempt a longitudinal view of how the situation came to be. The issues questions proposed by Ernest are presented, in somewhat modified form, below:

### **Current Situation**

1. What are the most important constraints on the growth of their enterprises as perceived by entrepreneurs in the Mahaweli?
2. Are resource constraints (limited availability or poor quality of inputs), market constraints (size, accessibility, competition) or policy constraints (fiscal, trade, regulatory, monetary, or infrastructural) perceived as more important? What is the relative ranking of various specific constraints?
3. Which policy domains or policy provisions are viewed as most important to restricting or encouraging business growth?
4. Do private entrepreneurs view government policies or their implementation as more constraining?

### **Constraint History**

5. Has the relative importance of different constraints changed over the years since business start-up? How have specific constraints affected the course of business development?
6. Have entrepreneurs been familiar with the range of support services and incentives offered by the Mahaweli Authority or other governmental institution? If yes, how have they attempted to take advantage of these opportunities?
7. Have the nature and range of government incentives and support services been considered appropriate and adequate?
8. Are entrepreneurs who have attempted to take advantage of incentives and support services satisfied with the way they are administered?

### **Questionnaire**

The PEDS survey instrument is suggested by Ernest as appropriate (subject to minor modifications) to answer his 8 research questions. The survey, briefly presented, is as follows:

An initial group of questions seeks background data and assesses the frequency and nature of contacts with officialdom. These questions (1 and 2), consist of a total of 8 parts, gathering information on:

- a. size and nature of business
- b. number of people employed
- c. sector of activity
- d. legal structure
- e. whether there are foreign partners
- f. frequency of contacts with government agencies and officials
- g. those agencies most frequently contacted
- h. attitude and behavior of government officials

The next part of the survey -- Questions 3 and 4 -- focuses on growth objectives, perceived obstacles (constraints) to growth, investments planned (1 year) to reach objectives, and the means of financing. The question on limiting factors is open-ended. Initially, the respondent is not prompted; if he falters a ready-made list of 27 possible constraints is presented.

Question 5 consists of 13 pair-wise policy comparisons, drawn from a list of "problems businesses may have, or ways in which the Government may affect your business." Of the 13 constraints only one, labor/management skills, is not a policy problem (or policy-related, such as transport costs).

Questions 6 and 7 consist of 7 parts, dealing first with age and recent history of the business (business climate, growth), then focusing on relations with government agencies or representatives at start-up or during periods of expansion (frequency, quality, level -- but, curiously, not type -- of interaction), including financial sources relied upon.

Questions 8, 9, and 10 consist of 10 parts dealing primarily with export marketing. Questions deal with the following:

- a. characterization of market
- b. knowledge of government incentives for exporters
- c. use of particular export incentives
- d. history of experience with incentives
- e. why incentives have not been used/what changes necessary
- f. access to transportation services, especially shipping
- g. reliability and timeliness of shipping services

- h. degree of choice among shippers and buyers
- i. size and stability of domestic/local demand and markets
- j. experience with competition from importers or government

Question 11 stands alone in asking about management problems in the enterprise. Three such problems are solicited from the respondent in this open-ended format.

Question 12 consists of 17 statements soliciting the respondent's opinion on "business in general . . . even though some of these factors or issues may not apply to your own business." The format is a 5-point scale (strongly agree to strongly disagree), plus two possible non-responses (no knowledge, no opinion). The questions deal -- but only superficially -- with:

- a. landholding laws and policies
- b. system of land titling and collateral
- c. availability of serviced lots for new businesses
- d. land use regulation and small business location
- e. availability of machinery and equipment
- f. availability of technicians and spare parts
- g. supply of raw materials and intermediate inputs
- h. customs regulations and raw materials/intermediate inputs
- i. training needs of unskilled workers
- j. effects of minimum wage legislation
- k. adequacy of skills of skilled workers
- l. possibilities of new skills acquisition by managers
- m. transportation costs and reliability
- n. quality of shipping services for exporters
- o. reasonableness of customs formalities
- p. accessibility of credit
- q. use of informal credit sources

## **Sampling**

The survey sample suggested by Ernest would be drawn randomly from the sampling frame developed for the ARTI survey. Thus, 100 enterprises would be selected from the 762 surveyed by ARTI for follow-on work. No attempt at stratification would be made, each of the 27 types of enterprises having an equal chance of selection.

## **Focus Groups**

Beyond the quantitative results of the survey, Ernest proposes organizing a series of guided discussions with key groups (10 to 15 participants) of entrepreneurs of the Mahaweli areas. Two groups would be selected from those entrepreneurs having attended the entrepreneurial training course, while one would be composed of businessmen who have never attended nor applied for attendance in such a program.

These focus group discussions would be led by "an experienced group discussion leader," who would steer the participants toward consensus or clear positions on the 8 general research questions presented above. The value of this research tool is that it should permit more in-depth probing of the governmental and resource constraints facing actual or would-be businessmen in the Mahaweli.

## **Interviews with Colombo MLEs**

The final element of the Ernest's proposed follow-on research work would consist of structured interviews with 10 to 12 medium and large enterprises in the Colombo area to assess their potential for investment in the Mahaweli. Such a survey is already being planned and need not be discussed further here, since it will not deal with small-scale enterprises of the Mahaweli.

## **Data Analysis**

Reporting on the information obtained from the constraints survey will be in the form of cross-tabulations of interesting variables. Multivariate analysis, such as correlation coefficients or regression analysis, is not planned. Nor is such analysis planned for the ARTI survey.

Full interpretation of the quantitative data will rely heavily on knowledge obtained in the focused discussions with Mahaweli entrepreneurs. The implication is that both quantitative and qualitative data sets would be gathered in the same time period, and that examination of both would provide far broader answers to the research questions than either one alone.

The final report would present two types of information: major constraints to private sector growth in the Mahaweli, particularly the relative roles of resource and policy constraints; and business and government interaction and its implications for future policy actions. Constraints would be ranked and related to key variables, such as business type, size, age, markets, and sector of activity. Actual experiences of businesses with governmental policies and their implementation would be detailed.

Finally, an assessment of politically feasible and cost effective policy change options would be made.

### **RECOMMENDED FOLLOW-ON SURVEY FOR MED DESIGN**

Recommendations were made above that a follow-on survey to the current ARTI baseline enterprises survey was necessary to provide the kind and depth of data necessary to justify the entrepreneurial training program, business incubators, and the business advisory service, all key MED project activities. The PEDS constraints survey covers some of the ground, but is incomplete with respect to much of what we want to know, particularly non-policy constraints.

#### **General Recommendations**

Two fundamental objectives of the follow-on survey are: justifying the need to support small enterprise development in the Mahaweli; and gathering information to design the appropriate project interventions. First, the case must be made that a number of policy and resource constraints exist in the Mahaweli, preventing the birth and growth of entrepreneurial activity in the face of unsatisfied demand for goods and services. Second, enough information must be gathered on would-be entrepreneurs, existing entrepreneurs, and on the dynamics of business start-up and survival, to allow Med project designers to design the correct mix of activities aimed at specific bottlenecks.

The research issues suggested by Ernest concentrate solely on constraints, with, as with the PEDS questionnaire, primary emphasis on policy problems. This is not to say that policy constraints are not important; we do need to appreciate the policy-related issues, and these have probably been neglected up to now. However, major activities of support to small business in the Mahaweli best targeted by the MED project are resource and skills constraints. Therefore, the follow-on survey must gather a far greater range of information than the 8 constraint issues proposed in the Ernest memorandum.

A new list of research issues would, consequently, include, but expand well beyond, the 8 general questions already proposed. The exact wording of questions is less important at this point than a clear exposition of information needs. The specific form of the questionnaire will be crafted by the contractor and must be tailored to language, cultural context, and experience of the respondents. The "implicit frame of reference," in Ernest's terms, must be the same for interviewer and respondent.

A part of the PEDS questionnaire can probably be used as a base for establishing the informational categories to be included in the follow-on survey. This is particularly true of questions on policy constraints. In some cases, specific questions may be borrowed entirely. In most other cases, new questions will need to be devised by the implementing organization, since we are likely to be dealing with small businesses with only marginal involvement with government agencies and representatives.

Much of the survey methodology proposed by Ernest is very useful. A reduced sample of 100 firms drawn from the 762 businesses of the present ARTI survey seems appropriate; a 10 percent sample (76) would probably be sufficient. Some attempt at stratification of these firms into general categories is advisable, however. Moreover, as mentioned earlier, some previously unsurveyed firms should be included in the follow-on sample, because of their interest as elements of MED project activities (e.g., producer associations, ornamental fish farms, etc.). Thus, the survey should stress manufacturing firms, businesses involving producer associations, the types of businesses currently receiving advisory aid under the Peace Corps, private voluntary organizations (PVOs), the Women's Bureau, and the Industrial Development Board, and enterprises indicated as likely choice by aspiring entrepreneurs.

The preponderance of retail outlets and eating establishments (hotels) in the total population of businesses in the Mahaweli (44 percent) requires including a sample of these enterprises, although certainly not in proportion to their number. The same can be said for artisanal rice mills -- 11 percent of all businesses in the Mahaweli, according to ARTI.

Focus groups, similar to those proposed by Ernest, can be the means by which we refine further our understanding of small business birth, survival, expansion, and failure in the Mahaweli. These guided discussions must be undertaken by experienced professionals; this is no work for enumerators. Group discussions should, moreover, not be conducted until the follow-on survey is analyzed. They could even be made a part of the MED project, should time become a constraint.

Focus groups should be composed of two types of participants: existing businessmen, who have not been involved in any entrepreneurial development or business counselling program; and graduates of training courses for aspiring entrepreneurs, of which there will have been at least 4-6 in the Mahaweli by the end of 1988. At a minimum, one focus group should be formed from each category during final stages of MED design, or as one of the initial activities of the small enterprise project component.

### **Recommended Survey Design**

The following survey format is recommended as follow-on to the current ARTI survey. The exact number and wording of questions can be worked out by the contracting firm, which will probably be ARTI (assuming their preliminary work is completed satisfactorily). Many of the questions will need to be open-ended; that is, they will require the enumerator to phrase each question in a way clearly encouraging the respondent to expand upon his answer, extemporaneously and in his own way. Much or all of the elements of these answers will be codable, as patterns emerge which will not have been foreseen in questionnaire design. This technique should not only be used with the focus groups, but, to the extent possible, in the interviews with selected entrepreneurs.

## **MED Follow-on Survey on Mahaweli Small-scale Enterprises**

### **Part I: Nature of Business and Current Situation**

Data from the ARTI survey on firms selected for this survey should have provided much of the background information. Further refinements or filling of data gaps can be done here; this requires prior analysis of the first survey and appropriate selection of the follow-on sample. For firms not covered in the first survey all relevant data need to be collected at this time.

Further information on current operations will need to be collected. A clear, synchronic picture of the present organization and operation of the enterprise is the objective. Open-ended (but focussed) questions should be used to expand upon information obtained in the ARTI survey.

### **Part II: Business Start-up Problems and Solutions**

What is sought here is detailed knowledge of the history of the business, particularly how the entrepreneur began his business, what was the nature of the problems encountered, how he dealt with those problems, and how the business progressed (or stagnated). Questions here should again be open-ended, the objective being to establish fairly comprehensive case histories. The special role of start-up financing must be investigated carefully.

### **Part III: Current Expansion/Growth Plans and Perceived Constraints**

Fairly detailed business expansion (or continued survival) plans should be the first objective here, followed by perceived limitations on growth, expansion, or diversification. The 8 constraints issues proposed by Ernest would be dealt with in this part of the questionnaire. Questions 3-7 of the PEDS survey and Question 8 of the ARTI survey deal with business expansion plans and perceived constraints. Question 5 of PEDS, however, is overly complex and focuses only on policy constraints; consequently, it should be largely replaced by a series of questions focussing on the fine points of resource constraints -- such as knowledge of and past experience with various credit facilities and administrators. The particular constraint posed by lack of capital and the usefulness of various types of credit facilities need to be pinned down in this part of the survey.

### **Part IV: Demand Assessment and Targeting of Markets**

What we want to know is whether and how firms attempt to assess demand for their products or services. Questions here must establish the types of information gaps experienced by entrepreneurs and how, if at all, they have learned to deal with this problem. What evidence is presented that shows the presence of unsatisfied demand for firms' products/services, or that indicates room for new firms to enter the field. While specific, detailed questions can probably be developed here, open-ended responses will yield clearer patterns than if respondents are forced into easily codable boxes.

### **Part V: Business Skills Development**

The final part of the questionnaire will examine in detail the means by which business incubators, business advisory services, and entrepreneurial training courses can be of use to existing or aspiring businessmen. As in the case of Parts II through IV, questions will be addressed to the focus groups as well as to the sample of small businessmen. Once again, an open-ended format is recommended, requiring more than simple "enumeration" of responses.

Questions will be directed to gathering opinions of entrepreneurs on the attractiveness of the incubator concept and of the types of training or skills upgrading which could be useful to them. What is important here is phrasing questions in terms comprehensible and unconstraining to respondents. This requires sensitivity of enumerators to the problems of small businessmen in the Mahaweli. Enumerators must grasp the objectives of their questions, not simply the form. They will find the right way to phrase the question, once they fully understand the reason for it.

#### **Caveat Emptor**

It is strongly recommended to the final designers of the MED project that they closely follow the survey work, if they want to have the level of analysis they need to justify and instruct the activities of the small business component of the project. Educational systems in many developing countries place great importance on knowing factual truths, truths which only schooled persons can acquire. The implication is that answers given by largely uneducated persons to educated enumerators are incorrect, if they differ from the commonly understood truths. In other words, not only will the spontaneity and expansiveness of respondents be stifled, but their answers may be channeled into correct form by well-meaning, but elitist surveyors.

An analogous problem commonly observed -- and there is some sign of this in the ARTI survey -- is the design of a questionnaire protocol in the absence of prior contact with the socio-economic realities of the population to be surveyed. Again, a technocratic image of the correct questions to be directed at respondents tends to alter the reality of the situation, thus detracting from the usefulness of the research tool.

Finally, a social survey of the type recommended above is too important to be left to its own devices. The skill required to generate the level and type of answers needed to support the design of a major project is not easily found in many developing countries. If USAID is not satisfied with the results of the ARTI survey, it should consider the possibility of having a US-based main contractor sub-contract with ARTI, thus exercising more effective quality control.

Quality control, moreover, begins with USAID project designers. They must know what they want from a social survey of this type, and they must take the time to monitor carefully the survey methodology. Ultimately, careful attention to getting the right product will pay strong dividends in the form of a successfully designed project and an effective monitoring and evaluation tool for the life of project.

## CHAPTER THREE

### FEASIBILITY OF THE ENTREPRENEURIAL DEVELOPMENT AND BUSINESS ADVISORY SERVICE COMPONENTS OF MED

#### INTRODUCTION

The case was made in Chapter One that a presently constrained process of economic development can be accelerated in the Mahaweli, through agricultural diversification on settler lands and employment generation from major outside investment. The process of household economic development, thanks to Scudder's both worldwide and intensive Mahaweli experience, appears understood in general terms and should be set in motion by rising family disposable incomes -- as agricultural development and outside investment bring seriously increased returns to the settler population. The role of MASL in fomenting and accelerating this process is necessary and appreciable.

It has been seen in Chapter One that, based on worldwide comparative studies, small enterprises are a major economic and employment factor in developing countries, especially those which lie on the lower end of the developmental scale. Sri Lanka, with a per capita income of \$360 (1984) and with industry comprising only 25 percent of value added (1986), certainly qualifies as one of the poorer Third World countries, especially by Asian standards.

The survey presently being conducted on Mahaweli enterprises by the Agrarian Research and Training Institute will provide a great deal of new information on the number, types, organization, social composition, capital composition, cash flow, profitability, and expansion plans of small business in the future MED project areas. This survey and a recommended follow-on instrument will be indispensable in designing the final form of MED. They were discussed at length in Chapter Two of this report.

There are presently three small enterprise support activities recommended for MED: entrepreneurial development training, business advisory services, and small business incubators. The incubator concept is dealt with in some detail in Chapter Four. It is by far the most controversial, but, although it shows some promise, a final judgement on its usefulness to the Mahaweli will need to await more detailed feasibility analysis. In like manner, credit for small businesses -- a part of virtually every small enterprise project -- remains a potential fourth activity under small business support. The real need for such credit should become much clearer from the results of the ARTI and follow-on surveys.

Entrepreneurial development training and small business outreach services are both currently offered by EIED in the Mahaweli special areas. Four training programs have been conducted since June, 1987, and Peace Corps volunteers (PCVs) have been counseling small entrepreneurs since 1985 (except in System B). Six new entrepreneurial courses are to be carried out by contractors by September, 1988. The number of PCVs will probably have doubled in the Mahaweli by 1989 (from 6 now to 12).

Entrepreneurial training and business advisory services are clearly on-going EIED activities in the Mahaweli and should be included in the Mahaweli Enterprise Development project, unless the evidence should indicate otherwise. Consequently, a review of the available data on the worldwide experience with these activities will be followed by an evaluation of their success both within the Mahaweli and elsewhere in Sri Lanka.

### SMALL BUSINESS ASSISTANCE: WORLDWIDE EXPERIENCE

In a comparative review of business assistance programs and models, the ARIES project (Assistance to Resource Institutions for Enterprise Support) found that 4 components tend to be found in various combinations and proportions: financial assistance; technical assistance, or extension; training; and social promotion. The study, called *Capacity Building for Resource Institutions for Small and Micro-Enterprises*, examines the worldwide experience with these program and project activities (ARIES, 53-68, 1987).

Of the 4 components normally comprising enterprise assistance programs, two are examined here for their usefulness under the MED project: business advisory services (technical assistance), and entrepreneurial development (training). The somewhat thorny issue of small business credit, an almost universal part of small enterprise support projects, will be addressed elsewhere. Its inclusion in MED will depend on a clear need for such aid, as revealed by the follow-on baseline enterprises survey, now in the design stage, and on the discovery of a proper delivery mechanism. The latter appears to be the greatest hurdle, for it is likely that a need for at least some working capital will be discovered by the survey.

#### Technical Assistance: Business Advisory Services (Extension)

After credit, technical assistance, known also as business extension, is the second most frequent component of small enterprise support programs. It is very often associated with credit delivery schemes. The following definition from the ARIES study is appropriate: "Technical assistance is a broad label that includes assisting small and micro-entrepreneurs with routine business practices such as bookkeeping and costing of inventory and more specialized forms of aid on issues such as marketing, production, and choice of appropriate technology (ARIES, 55, 1987)." Generally, free assistance is provided on a one-on-one basis to entrepreneurs at their place of business. One of the problems associated with free services is that "resource institutions often have no way of knowing if the technical assistance is needed, appropriate, effective, or efficient (ARIES, 55, 1987)."

Comparative studies show that resource institutions have promoters, or extensionists, with generalized business skills, who provide routine counselling to clients. For more specialized services, part or full-time consultants are usually employed. According to ARIES, "technical assistance efforts often are criticized as inappropriate to the needs of beneficiaries or for being carried out in an overly casual or haphazard manner (ARIES, 55, 1987)." The authors go right on to say that "few resource institutions believe they can do an effective job of assisting their clients without it."

On the other hand, the MSU study, in its section on nonfinancial assistance to small enterprises (MSU, 109-115, 1987), states that entrepreneurs tend not to see such assistance as a pressing need. Small businessmen are generally unaware of the value of such business counseling and of the specific benefits they may derive from it. In the 6 countries composing the MSU survey, only marketing of products was given as one of the 3 most pressing problems. Technical and managerial problems were rarely mentioned (MSU, 109-110, 1987).

In contradistinction with the entrepreneur's declared need for working capital, which MSU found often masked other, underlying deficiencies in business operation, the real need for technical assistance is probably greater than the entrepreneur's perception of it. The MSU study points out the wide range in quality and level of managerial and technical capabilities between small business sub-sectors and that "more careful attention needs to be directed towards ascertaining the true need for various non-financial services on the part of the various small industry groups (MSU, 110, 1987)."

The frequent complaint regarding business extension is that it is not cost-effective. A large volume of resources are concentrated on far too few clients. Efficiency is further reduced by the general lack of knowledge and experience in providing such counselling.

Despite a paucity of studies of nonfinancial assistance programs, the available evidence seems to attest to a fairly low level of success in such programs. Two studies reported by MSU found technical assistance schemes cost beneficial in only 5 of 18 projects examined (MSU 111, 1987).

Nevertheless, a few technical assistance efforts have proven to be very successful and were examined by MSU to determine the reasons for success. Four important lessons were derived:

- (1) The fewer the problems addressed the more successful the technical assistance. Most success is to be found when one "missing ingredient" (constraint) can be identified and supplied to firms. When a project attempts to provide "an integrated set of multiple ingredients," results are unlikely to be successful. Moreover, assistance to existing firms is likely to be more successful than to new businesses.

A corollary of the need to focus technical assistance on one or a very few small business constraints is, in MSU's words, "that 'industrial estates' schemes typically have not been effective because too many missing ingredients -- electricity, water, buildings, security, and sometimes technical assistance -- are being provided at high cost to firms that may need only one or two of these services (MSU, 113 1987)."

Very much the same danger probably holds for the small business incubator, although it is not specifically discussed in the MSU or ARIES studies. The MSU study indicates that an alternative to industrial estates (or to business incubators) would be zoning regulations allowing the clustering of firms producing similar products. This would allow the delivery of technical assistance (or other benefits) to groups of firms at substantially reduced cost per firm.

- (2) Successful technical assistance to small enterprises has been tailored to the needs of a particular target group, rather than to a large number of different product groups.
- (3) Successful technical assistance projects have been preceded by surveys designed to "uncover the effective demand for the proposed assistance and particularly the number and type of 'missing ingredients' (MSU, 114, 1987)." This need for more information on business constraints is the major purpose of the MED follow-on survey of Mahaweli enterprises.
- (4) Successful technical assistance has generally been delivered through existing institutions. Governmental institutions, however, usually are overly rigid, understaffed, and characterized by inexperienced personnel and high turnover of managers. Subcontracting with relevant nongovernmental organizations is suggested by MSU as an alternative to government in the delivery of technical assistance to small entrepreneurs.

This is particularly relevant to the MED project, where it is recommended that both technical assistance (business advisory services) and entrepreneurial development training be contracted to qualified, existing nongovernmental firms for implementation.

### **Entrepreneurial Development Training**

The distinction between technical assistance and training is that, while both attempt to impart various business skills to clients, the former emphasizes one-on-one contact at the business site, while the latter relies generally on a more formal, classroom approach. Such a group-learning approach has characterized the entrepreneurial development training program conducted by contractors under EIED.

Entrepreneurial training worldwide typically comprises a strong element of achievement motivation. It is felt that even poorly educated participants can benefit from skills and motivational training, if properly pre-selected. A sequence of courses are sometimes offered, for which would-be entrepreneurs must pay a small fee. Typically, teachers are drawn from other institutions on a part-time basis to supplement the staff of the major resource institution. Group training is sometimes supplemented by follow-on extension services. This profile corresponds to EIED-sponsored entrepreneurial development efforts in the Mahaweli.

Other types of training common in small enterprise support programs are: business skills training, emphasizing the acquisition of managerial tools (bookkeeping, cost accounting, marketing, administration); and job skills training, emphasizing the acquisition of specific technical skills to enhance employment possibilities. Occasionally, self-employment is the objective.

Many of the problems of cost effectiveness associated with the business extension service are probably also applicable to the business and job skills training programs. Training in one or a few business skills is preferable to a "scattergun" approach. In the absence of solid data, however, we really know very little about success rates or cost effectiveness of various types of entrepreneurial or business skills training.

## HISTORY OF ASSISTANCE TO SMALL ENTERPRISE IN SRI LANKA

Presently, a number of governmental and nongovernmental activities support the creation or expansion of small businesses and the training of potential or existing entrepreneurs. The history of such attempts to stimulate small enterprise expansion through training and advisory services has been dominated, since its beginning in the early 1970s, by an unsystematic, short-term (2-3 day) approach, stressing classroom-style training of would-be entrepreneurs or aspiring self-employed.

The entrepreneur development (ED) programs for existing and aspiring entrepreneurs developed by the SLBDC in the middle 1980s were the first systematic and lengthy (4-7 weeks) exercises in entrepreneurial development in Sri Lanka. Judging from their own documents, especially *Some Aspects of Sri Lankan Experience in Entrepreneur Development* (SLBDC, 1986), initial attempts at achievement motivation and business games led to a number of communicational and cultural problems. Their programs were pioneering efforts in adapting training techniques from somewhat more advanced socio-economic contexts, such as India, Thailand, and the Philippines. The history of the SLBDC programs in Sri Lanka and in the Mahaweli will be covered in detail below.

The first attempts at ED in Sri Lanka had been initiated by the Industrial Development Board in the early 1970s. These were awareness development programs of 2-3 days duration, which included basic instruction in management, finances, marketing, and sometimes limited technical training. Participants were selected unsystematically from registers of existing businessmen provided by the Ministry of Industries and Scientific Affairs. There was no systematic methodology to the training programs and no attempt at follow-up or evaluation of results.

With the liberalization of the Sri Lankan economy in 1977, a surge of new business creation and a governmental desire to help formerly protected industries adapt to new conditions of competition led to the creation of new business assistance and entrepreneurial development programs, most of which continue to the present.

A study in 1982 of existing ED programs in Sri Lanka by Technonet Asia Singapore and University of the Philippines found the following short-duration activities:

### (1) National Youth Services Council (NYSC)

A Youth in Business Seminar for unemployed youth from 18-30 years old presented basic business concepts, but the objective appears to have been self-employment of graduates.

### (2) National Apprenticeship Board (NAB)

A Craft Training Course for high school leavers involved trainees in on-the-job training as part of a multi-year skills development program.

### **(3) National Institute of Business Management (NIBM)**

Specialized courses in production, marketing, and financial and personnel management for managers and administrators were conducted throughout Sri Lanka.

### **(4) Industrial Development Board (IDB)**

- a. A Familiarization Seminar for new entrepreneurs sought to create an awareness of various government assistance sources and business opportunities.
- b. A Seminar for Skills Development and Transfer of Technology demonstrated to would-be entrepreneurs the use of modern technologies and informed them of relevant government policies and assistance targeting the creation of new businesses.
- c. An Entrepreneurial Development Seminar for existing businessmen provided training in finance, production, marketing, and personnel management, as well as offering information on government incentives, taxation, labor legislation, etc.

### **(5) Bank of Ceylon**

A proposed ED program targeted educated youth, technical people, and potential entrepreneurs. This was to be a two-week course with components of achievement motivation, basic management, and entrepreneurial skills. The course was to be followed by 3 weeks of on-the-job training. It appears that this program was never implemented. Nevertheless, Technonet Asia Singapore evaluated this course as the only ED program approximating the generally accepted model.

Until 1983 the IDB, the leader in entrepreneurial development and business support activities, had not been able to develop systematic programs for entrepreneurial training. The advent of the World Bank financed Small and Medium Industry II project was to change this. Under this project, 5 IDB industrial extension coaches were trained and instructed to seek out and identify promising entrepreneurs in their regions. By the end of one year 226 new businesses had been launched in the 9 IDB regions. Not all entrepreneurs received the same assistance, although most received aid in project formulation (74 percent) and in obtaining finance (52 percent). The 7 assistance components were:

- a. assistance in project formulation
- b. counselling on site selection
- c. assistance in obtaining finance with a project proposal
- d. assistance in machinery selection
- e. advice on raw material selection

- f. market planning
- g. entrepreneurship and management training

The IDB program under the first year of SMI II also developed 218 existing businesses. This, then, was a business advisory service, although apparently not so called. Most entrepreneurs received a diagnostic study of their businesses (72 percent) and assistance in obtaining finance (56 percent). The 7 components of this extension effort were:

- a. diagnostic study
- b. assistance on process and technology improvement
- c. advice on productivity upgrading
- d. assistance in obtaining finance
- e. marketing assistance
- f. quality improvement
- g. management development and training

By 1983-84, a certain momentum in the development of business and entrepreneurial support activities had developed in Sri Lanka. The National Youth Services Council (NYSC) broadened its youth self-employment program, and the Ministry of Youth Affairs and Employment established the Small Scale Enterprise Development Division (SSEDD) which, in spite of its title, largely focussed on preparing rural youths for self-employment. Finally, in association with the Asia Foundation, the Chamber of Small Industries developed and conducted during 1983-84 a program entitled "How to Start an Industry," which stressed the development of a rapport between the participants and service organizations and a relationship between trainees and established businessmen of the Chamber. The Chamber did not have adequate personnel to conduct follow-up activities with its graduates, and the entire program was transferred to the newly-created Sri Lanka Business Development Center in October, 1984.

#### **Current Status of Small Enterprise Assistance Programs in Sri Lanka**

The most active governmental and nongovernmental organizations in the promotion of small business and entrepreneurial activities are reviewed in the annex (Entrepreneurial Development Organizations in Sri Lanka). Little systematically collected data are available from these sources; what is available consists of performance statistics only, numbers of people trained, advised, who started projects, etc. No systematic follow-up or evaluation of results is, apparently, being done.

In sum, a number of efforts are being made by a wide variety of organizations -- many with foreign donor financing -- to address the issues of unemployment and poor small business performance. Group training is generally of extremely short duration, 1 to 5 days only. While there appears to be some business extension work still conducted by IDB, SSEDD, and Sarvodaya, in the absence of serious and sustained monitoring and evaluation efforts, the success of these activities cannot be judged.

### **Current Status of Business Extension in the Mahaweli**

The current Peace Corps initiative in the Mahaweli focusses on building a program of business outreach. There are now 3 volunteers in System H, 1 in System G, and 2 in System C. Six more volunteers are expected by next year. A total of 18 advisors is targeted by the Peace Corps for 1990.

Interviews with PCVs in System C indicate that a strong need exists for an expansion of the program. On the other hand, the lack of a credit facility limits the attractiveness of business advisors to small business persons. This is not to say that a credit line is necessary, for credit, as indicated earlier, may simply mask underlying managerial weaknesses. Nevertheless, one of the important activities of future business extensionists will be to aid entrepreneurs in accessing one of the many existing credit sources. If project bankability is the stumbling block to credit release -- as bankers claim, business advisors of the type currently provided by the Peace Corps should have a significant impact on removing this constraint.

This does not mean that future business advisors in the Mahaweli should only be PCVs. Quite the contrary, Sri Lankan advisors are a necessary part of any extension service proposed under the MED project.

### **HISTORY OF THE SLBDC ENTREPRENEUR DEVELOPMENT PROGRAMS**

The first elements of the future SLBDC entrepreneur development (ED) programs were proposed in its report to MASL, entitled: *Sub-task 3: Recommendations for a Mahaweli Small and Medium Scale Enterprise/Human Resource Development Plan* (SLBDC, 1985). The concepts of "package deal" and "multidisciplinary integrated/co-operative approach" are presented there.

These concepts stressed the following approach to ED (cf. also SLBDC, pp. 23-24, 1986):

- (1) Correct identification (selection) of trainees
- (2) Adjustment of course content and training modules to the appropriate social, cultural, and educational level of participants
- (3) Achievement motivation training
- (4) Systematic implementation stressing rapport between participants and organizations and between the latter

- (5) Problem-solving and result-achieving approach in training
- (6) Use of expert consultants
- (7) Continuous follow-up of graduates for "as long as the entrepreneur may need it."

The first ED programs carried out by SLBDC were in Hambantota district between April-October, 1986. A complete sequence of training courses was given, that is Program I for existing businessmen, followed by a combined Program II and III, for educated and less educated aspiring entrepreneurs. For details of general methodology and specific Hambantota experience, the reader is referred to *Some Aspects of Sri Lankan Experience in Entrepreneur Development* (SLBDC, pp. 26-51, 1986).

### The Hambantota Experience

The Hambantota ED began in April, 1986 with training of existing entrepreneurs, which "included most of the well recognized businessmen and industrialists" from throughout the district. 220 applications had been received -- considered disappointing -- from which 40 were selected.

The course consisted of 4 modules, each of about one week's duration. Module I was achievement motivation, followed by modules on general awareness, managing the enterprise, and managing finances. The module on achievement motivation appears to have introduced the use of this concept to Sri Lankan ED (SLBDC, 40, 1986).

Following the 4-week course for existing entrepreneurs, two groups of aspiring entrepreneurs, one more educated and one less so (cut-off was about Grade 8) were given a combined 7-week training. This course contained the first 4 modules, plus one on identification and development of individual projects (1 week) and in-plant training (2 weeks). In-plant training consisted of practical training under the supervision of the coaches and the proprietor of the business. (SLBDC, 35, 1986). The proprietor of the business was a graduate from the first course for existing entrepreneurs.

Due to publicity from the first program, 623 applications were received for the ED aspiring course, from which 79 were selected. The 2 groups of educated and less educated generally received separate lectures, although they were occasionally brought together for discussions and interaction. As in the case of existing entrepreneurs, attendance and punctuality were reportedly very high.

Following the ED programs, graduates formed the District Chamber of Entrepreneurs of Hambantota in November, 1986. This Chamber is presently being developed with NORAD support into a facilitation center for all interested entrepreneurs in the Hambantota district.

### **Training Difficulties at Hambantota**

The self-evaluation of the Hambantota ED reveals both successes and some difficulties, especially with the use of achievement motivation and the general awareness module (business games). Achievement motivation consisted of: self-assessment, achievement syndrome, interpersonal support, and goal setting (see SLBDC, 40-41 and 46-48, 1986). The general awareness module, which followed directly upon that for achievement motivation, was a "business education programme with practical and simulate exercises followed by lectures and discussions" (SLBDC, 33, 1987).

Achievement motivation (AMT) posed particular problems for participants and their trainers when it came to "goal setting." The first time it was tried with existing entrepreneurs more than 50 percent of trainees were unable to indicate future plans or goals. As SLBDC puts it: "This clearly showed the lapses that were there in them and their capacity for future planning." (SLBDC, 40, 1986). A second attempt at goal setting with existing entrepreneurs also could not be completed.

Much of the blame for this initial failure has been ascribed to problems of translation from English to Sinhala, lack of experienced trainers in AMT (and business game simulation), previous inexperience of even existing businessmen with systematic goal setting, and a lack of previous experience with concepts of business management.

A final attempt at goal setting among existing entrepreneurs was apparently successful two days before the end of the seminar. "By this time they had developed their systematic plans and goals and they knew what really business management is . . . (SLBDC, 47, 1986)." It is not stated what happened to AMT with the aspiring groups, although similar problems must have occurred.

Other problems mentioned in the SLBDC self-evaluation are quite revealing of socio-cultural barriers to the effectiveness of imported Western concepts, such as business simulation and achievement motivation. One such problem was the persistence of what SLBDC calls the traditional teacher-pupil relationship. On the final day some of the participants knelt in worship of their teachers, who had done their best over 4 or 7 weeks to break down inhibitions from caste and class distinctions.

A corollary of the teacher-pupil relationship was the persistence during the training of attempts by trainees to develop a relationship of privileged subordination with their trainers. Some sought special, daily personalized attention and favoritism. As SLBDC puts it: "After some time the participants (especially the second group) requested the trainers not to call them or treat them as adults (SLBDC 47, 1986)." On the day of closing ceremonies most participants from the group of existing entrepreneurs and some of the aspiring businessmen cried in taking leave of their mentors.

Leadership development among participants was stressed in the ED courses. Although little information is given in the self-evaluation on the success of such attempts, it is stated that women had some difficulty in overcoming educational and

socio-cultural barriers. However, 8 women in the aspiring groups, where they apparently composed 19 of 79 trainees (24 percent), "were able to develop excellent leadership qualities."

### **Training Successes at Hambantota**

In spite of the problems frankly presented by SLBDC in its self-evaluation--most of which should have come as no surprise to the managers of the programs, this first attempt at achievement motivation and business simulation seems to have been completed successfully. The quality of the project proposals was, apparently, remarkably high. In SLBDC's words: "But without exaggeration, it has to be mentioned here that some of the reports were in par [sic] with those made by qualified paid consultants (SLBDC, 49, 1986)." However, as expected, the project reports from the less educated group were of lesser quality than of the more educated aspiring group.

It is certain that 119 course completers got something unique out of the Hambantota experience. Attendance, punctuality, and enthusiasm were all very high. Results, as indicated by the level of final project reports, seem more than satisfactory. It is also very likely that the 4 or 7 week courses achieved far more than the usual 1-3 day seminars, conducted by other organizations throughout Sri Lanka.

In November, 1986 SLBDC conducted its first follow-up survey. Indications were that 15 of 43 (35 percent) existing entrepreneur graduates had started new projects or had diversified their businesses into new areas (approximately 5 1/2 months after training). Of the aspiring entrepreneurs, 53 of 76 (70 percent) had taken "positive steps to establish their ventures," approximately one month after completing the ED course. Eight persons from this group (11 percent) had already "commenced their business ventures (SLBDC, 45, 1986)."

### **Evaluation of the Hambantota Experience for MED**

The creators of the SLBDC ED programs have pioneered certain concepts in Sri Lanka, and they have learned a great deal from their initial experiences at Hambantota. They have certainly put a great deal of effort into designing their integrated programs. However, it was seen in an earlier section on worldwide experience that business assistance, including very likely formal business skills training, is usually only successful when one missing ingredient to successful operation is addressed intensively.

On the other hand, ED is not meant to be technical assistance to small enterprises, but is supposed to be both something different and something more: **entrepreneurial development**, whose principal tasks are to build basic awareness of opportunities, activate the urge to achieve and to excel, and impart enough skills to empower the participants for their future endeavors in the world of private business.

SLBDC states (verbal communication) that in April, 1988, 1 1/2 years after the Hambantota experience, 54 of the 119 graduates were contacted for follow-up. Of these 54, 41 (76 percent) had on-going businesses, which had been started or

expanded as a result of the original training. No clear explanation was given of the fate of the other 65 participants, who should have been easily traceable.

Yet, if only 41 of a total of 119 participants (34 percent) were still in business 1 1/2 years after ED, this can be considered no mean achievement. Furthermore, their combined investment is estimated by SLBDC at between Rs. 2-4 million (\$65,575-\$131,150), some of which was generated by 9 bank loans (something of an achievement in itself). New employment created is estimated at 168 jobs.

Results such as these, if true and sustainable, would seem to justify the cost effectiveness of SLBDC ED programs under the recently concluded (February, 1988) cooperative agreement with USAID. Under this contract, SLBDC has pledged *inter alia* to conduct ED programs for 160 aspiring and existing entrepreneurs in two districts, provide extension follow-up to same, and to create 60 new businesses and expand 50 existing enterprises (69 percent success rate, if sustained). If this can all be done in 20 months for \$164,000 (in addition to 4 other activities), the investment would appear worthwhile and worthy of replication (by someone) under MED.

#### SLBDC ED Programs in the Mahaweli (1987)

Between May and November, 1987 SLBDC conducted two ED programs in Mahaweli Systems H (Tambuttegama) and C (Girandurukotte). Both courses were for existing entrepreneurs and were to be the first part of the sequence carried out one year earlier at Hambantota. The follow-on courses for aspiring entrepreneurs were, however, not done.

There appear to have been no major changes from the ED methodology used at Hambantota for existing entrepreneurs. However, a technique called levelling (also known as unfreezing), developed by the University of the Philippines, was employed to remove "barriers between participants themselves and the resource persons and is an internationally accepted socio-cultural methodology used to prepare a group of people to actively participate in group activities, without any reservations or inhibitions (SLBDC, 2, 1987c)."

The goal setting component of the Achievement Motivation Laboratory seems to have gone more smoothly than at Hambantota, presumably due to the prior use of levelling. The live-in Development Center at Girandurukotte, not available at Tambutteagama, seems to have facilitated outside discussions of life plans and goals between participants and trainers. In general, however: "It was observed that the participants were at ease and able to identify and determine their goals more effectively when they do not have to discuss same with the facilitators (SLBDC, 3, 1987c)."

Business game playing, apparently, went off a bit better than at Hambantota, where participants had at times nearly come to blows. In the words of SLBDC: "Business games were planned systematically to involve the entire group. Both mature and young participants actively participated in the business games and compared their practical experiences to business game situations. It was concluded that the games enabled them to grasp the learning points and use them as a measure to judge their level of business knowledge (SLBDC, 3, 1987c)."

A system of trainee-written evaluations of each lecture, called instant feedback, apparently enabled the trainers to remain aware of the degree to which proper communication existed. The effectiveness of the training was presumably borne out by the relatively high level of the final project reports.

On the final day of the program at both Tambuttegama and Girandurukotte, the participants got together as at Hambantota and established an "Association of Entrepreneurs." The first meeting of the association is held one month after training and then quarterly for a period of one year. It is at these meetings, principally, that SLBDC personnel monitor the progress of entrepreneurs, although they also try to respond to correspondence and receive visits from former trainees.

The only data available on the establishment of new business activities by graduates of these two programs is from the first quarter follow-up report on the group at Tambuttegama (SLBDC, 1987b). Data on the progress of the Girandurukotte group should be forthcoming, but are not likely to differ significantly from those for the first program.

Detailed reports on the progress of all 39 graduates of the Tambuttegama ED are provided in the first quarter report, but it really is too early to draw conclusions. There would appear to be some activity to improve the existing businesses, such as new bookkeeping methods, planning for expansion, new locales found, marketing studies made, credit sought, etc. In fact, if true, the results seem impressive.

With regard to the diversification of present business activities, progress after 3 months would seem to be more than satisfactory. Of course, many of the diversification plans may have been already under way before the training. In order to evaluate effectively the progress of these entrepreneurs, we will have to wait at least 6 months to 1 year more. At that time we should have a much clearer idea of what real impact a 4-week course for existing entrepreneurs is likely to have on sustainable business diversification.

#### **CURRENT ED PROGRAMS IN THE MAHAWELI (1988)**

EIED has, since the first two SLBDC programs, found less costly training organizations for its most recent and current rounds of training in the Mahaweli special areas. Coopers and Lybrand conducted two courses for aspiring entrepreneurs in Systems H (Galnewa) and G (Bakamune) between December, 1987 and February, 1988 and will be training 4 more groups of 50 each, between June and August, 1988 (1 group of existing, 3 groups of aspiring entrepreneurs). These will be held in System C (2 in Girandurukotte), System B (Aralaganwila), and in System H (Tambuttegama). The firm of Teams Private Limited also has been granted two programs for existing entrepreneurs during the same time period, one in System B (Aralaganwila) and one in System H (Nochchiyagama).

### **Coopers and Lybrand Program Content**

Four types of target participants are identified, based on original criteria established by EIED: Group A are established businessmen for whom a 25-day course is designed (166 hours normal work, 74 hours practical work); Groups B and C consist of educated and less educated aspiring entrepreneurs, respectively, receiving a 40-day course (344 hours of theory/writing, 146 of practical sessions); and a Group B (s), a special group of educated, aspiring entrepreneurs, who are likely to go on to open businesses in the small business incubator (also a 40-day course).

The ED course modules consist of the following:

- (1) Orientation
- (2) Systematic Approach to Achieving Objectives
- (3) Entrepreneurship
- (4) Small Business
- (5) Business Enterprise
- (6) Identification of Business Opportunities
- (7) Preparation of Project Feasibility Study
- (8) Process Demonstrations
- (9) Market Studies/Marketing
- (10) Promotion
- (11) Distribution
- (12) Pricing
- (13) Sales Forecast
- (14) Financial Management
- (15) Personnel Management
- (16) Labor Laws and Legal Requirements
- (17) Leadership Workshop
- (18) Problem Solving
- (19) Production Management
- (20) Field Assignments: Market/Consumer Survey

- (21) Field Visits to Manufacturing Concerns
- (22) Preparation of Feasibility Study under Supervision
- (23) Banks and Schemes of Assistance

As in the case of the SLBDC follow-up, Coopers and Lybrand will monitor the progress of its graduates for a year. In Coopers' words: "The follow-up activity during the 12 month period after the termination of the training program will be based on a programme of work prepared by each participant at the end of the programme (Coopers and Lybrand, III.6, 1988)." This program is actually a schedule for carrying out the objective of starting a new business or improving an existing one. Following this: "Coopers and Lybrand in co-operation with the EIED will monitor the progress of achieving targets set by the entrepreneur on a monthly basis mainly through visits to the areas where one day workshops aimed at assisting progress will be conducted (C & L, III.63, 1988)."

An innovation offered by Coopers is a system of monitoring of graduates through monthly questionnaires, with the purpose of maintaining a comprehensive data basis on former trainees. The data base will permit timely report writing (quarterly for a year) and allow Coopers to take "appropriate action as necessary in order to help them overcome problems, bottlenecks in achieving targets (C & L, III.64, 1988)." Data gathered will be on the following areas of interest:

- a. achievement of targets in the work plan (schedule)
- b. constraints encountered in carrying out plan
- c. new developments or changes in work plan
- d. further assistance requested (or necessary)

#### **TEAMS (Pvt) Limited Program Content**

The TEAMS program will consist of 3 phases: instructive phase, interactive and participatory phase, and a final independent decision-making phase. As in the Coopers program, various target groups of participants will be identified and course content varied to suit each. Group A (existing entrepreneurs) will receive 135 hours of instruction and 38 hours of practical work. Groups B and C (aspiring entrepreneurs) will receive 181 hours of instruction and 155 hours of practical exercises. The length of the courses is between 35 and 40 workdays.

TEAMS proposes to stress 5 components in its programs:

- a. awareness development
- b. achievement motivation
- c. management skills development

- d. attachment training
- e. training of trainers

Awareness development and achievement motivation are similar to those in the SLBDC programs and were, apparently, not called for by EIED in its request for proposals. Management skills training is similar to that in Coopers' proposal, placing stress on familiarity with the total range of business skills needs.

Attachment training is basically on-the-job training, where the participant is "immersed in the actual situation and is provided the opportunities to apply the learning he has acquired (TEAMS, 33, 1988). Enterprises will be observed by trainees and business games will be built on these observations.

Training of trainers is not a part of the ED course *per se*, but is designed to train a group of "extension officers, development officers and consultants to carry out practical orientation and subsequent follow-up . . . (TEAMS, 33, 1988)." The idea, apparently, is that trainers will continue to be available as "consultants," or extension officers, to graduates during the follow-up time. Thus, an embryonic business advisory service is proposed here, an innovative approach compared to others, although Coopers leans in the same direction.

TEAMS proposes the following modules for its programs:

- a. Entrepreneurship
- b. Entrepreneurial Motivation
- c. Small Enterprise
- d. Identification of Business and Market Potential
- e. Business Management
- f. Leadership and Communication
- g. Financial Management
- h. Marketing
- i. Project Preparation and Feasibility Study
- j. Organizing a Small Business

Cost per trainee (45 per course) is estimated at Rs. 7,058 for Group A and Rs. 7,481 for the others. At about \$240 per trainee, such programs could be considered cost beneficial (direct benefits), if about 15 percent of graduates started (or expanded) truly sustainable, minimum-wage level businesses. Coopers' costs per trainee, moreover, are comparable, ranging from Rs. 6,110 for Group A to Rs. 8,729 for Groups B and C.

Follow-up work proposed for graduates is similar to Coopers', but hints at the potential for more one-on-one contact. According to TEAMS: "Providing assistance, guidance, advice, and consultancy services in general to increase their entrepreneurial actions within their own aspirations and potentials will form the major task of the follow-up work (TEAMS, 53, 1988)." Continuous communication will be kept with graduates "in order to comprehend their needs and difficulties and then to provide them the required guidance." The TEAMS proposal goes on to specify that: "Our consultants will be providing guidelines specially in the fields of: setting up of ventures, obtaining credit facilities, purchasing raw materials, production and marketing (TEAMS, 53, 1988)." Consultants will initially spend 2 days per week in the field with graduates until problems diminish; subsequently, field time will be reduced to one day every two weeks, then to one day per month. These consultants will have been trained for this purpose in the training of trainers activity discussed above. However, it is not clear how many of these will be involved in follow-up extension work.

### APPRAISAL OF CURRENT ED PROGRAMS

Although too early to evaluate the effectiveness of the current ED programs, the impression is that on paper they should be more than adequate -- if conducted appropriately -- to the tasks proposed. One danger is that they may be trying to do too much, that trainees may be bombarded with information on all aspects of business start-up, operation, feasibility, as well as pronged into business games, factory visits, project report writing, etc. If properly presented, and not too demanding or intimidating, the course material seems highly promising. Again, whether Mahaweli entrepreneurs can assimilate all this in a few weeks time is yet to be demonstrated. One is forced to assume that the trainee selection process will eliminate those unable to keep up with what must surely be a very demanding curriculum.

While Coopers focusses on business skills training and pays little attention to awareness and achievement motivation, TEAMS, on the other hand, has insisted on continuing in the tradition of SLBDC and other Asian programs (e.g., Technonet/University of Philippines). We have here an excellent opportunity to observe empirically the value of adding AMT and confidence-building awareness components to a generalized business skills/project development program.

Another question is whether follow-up will be any more effective than in all previous ED programs. Such follow-up has been, frankly, very weak and the tendency has been to neglect this potentially counter-productive activity in favor of moving on to greener pastures.

In spite of doubts about the number of successful graduates from the preceding 4 ED efforts in the Mahaweli (or elsewhere), the cost per beneficiary does not seem excessively high. If only 15 percent of graduates actually succeeded, the direct--and especially indirect, ripple benefits -- would seem to be well worth this investment. Unfortunately, we cannot now evaluate the results of these programs. Success rates from Hambantota, which should tell us something by now, appear both overstated and collected in an unscientific manner. On the other hand, nothing indicates that ED programs are not ultimately cost beneficial.

## **CONCLUSIONS AND RECOMMENDATIONS FOR THE MED PROJECT**

### **Business Extension Service**

A business advisory (extension) service, capable of having more than a token presence in Sri Lanka, does not yet exist. The handful of officers attached to the 9 regional offices of IDB or the community development workers of Sarvodaya are the closest equivalent to such a service, but the scope of their efforts is extremely modest. In any case, neither organization has more than peripheral involvement in the Mahaweli.

The 6 Peace Corps volunteers presently working in the Mahaweli areas constitute the embryo of a future extension service. They appear to have been well received by MASL field staff and have worked alongside them in their outreach activities, not the least of which has been the organization of farmers into at least 10 types of producer associations (*samitiya*).

It is recommended that business advisors under the MED project concentrate their efforts on graduates of the ED programs, some of whom will be existing entrepreneurs. This will focus their efforts on motivated individuals, who will be expecting continued support. The opportunity to take the entrepreneur on as client from the beginning of his business effort is likely to greatly increase chances of success -- success rates for graduates of ED programs will be raised, while chances of advisory effectiveness are heightened. The pay-offs for both investment in ED training and business extension will be synergistic.

The Peace Corps plans to triple the number of its business advisors in the Mahaweli by 1990, which is a good start toward increased coverage. However, there will be need for far more advisors than that, and Sri Lankan extensionists must also be recruited for similar duties. The number of graduates of all previous ED programs will have reached about 420 by the end of this year. Should only half of these finally get under way with their business plans, and assuming each advisor, Peace Corps or Sri Lankan, can take responsibility for 10 clients on a sustained basis, about 21 advisors would be needed by the end of this year alone.

If, as will be recommended below, the current level of ED training is reduced to one course per year in each Mahaweli system under the 5-year MED project, approximately 200 businessmen each year will have been launched on the road to success. This will require a matching build-up of about 10 new advisors per year. Thus, by the end of 1990 about 40 advisors will be needed, approximately half of which will be supplied by the Peace Corps.

It is recommended that the business advisory service be contracted out exactly as the ED programs have been. The proficiency with which these programs have been planned and carried out by SLBDC and Coopers, and the impressive content of the Coopers and TEAMS proposals, militates in favor of organizing a serious extension service in the Mahaweli areas under contract to one or more of these firms. The current level of follow-up work which, in spite of good intentions, does not appear sufficient to the needs and problems likely to be experienced by ED

graduates, should, consequently, be expanded into a true business advisory extension service.

Rather than weekly or biweekly visits by Colombo-based consultants, advisors would need to live in the Mahaweli areas -- or at least nearby. If housing continues to be a shortage in the Mahaweli, advisors could surely find adequate quarters in nearby centers, such as Anuradhapura (H), Polonnaruwa (B), Mahiyangana (C), and Dambulla (G). While not ideal, advisors lodged there could still be effective in the Mahaweli systems.

The TEAMS proposal speaks of training of trainers, who will continue to aid graduates after completion of ED. Training of advisors may be handled by a Sri Lankan firm, such as TEAMS. However, it is recommended that business advisors receive extensive training of the type currently given to Peace Corps volunteers. This may require hiring an expatriate firm, if resources do not exist in Sri Lanka. Coordination with the Peace Corps program would be essential.

### **Entrepreneurial Development Training**

The ED programs underway seem professionally organized and potentially cost beneficial, although long-term evaluation has yet to be carried out. Data do not exist which help us evaluate the success rate of the graduates of these ED programs. Nor do we have any idea of which training components are most effective. In like manner, the question of the value to aspiring businessmen of achievement motivation and business simulation modules needs to be tested.

Nevertheless, it is recommended that these programs continue under the future MED project, if proper attention to results and content evaluation can be assured. It is further recommended that a serious monitoring and evaluation effort be carried out under MED of the success or failure of ED graduates. While this should be contracted to a Sri Lankan firm, it should not be given to the same firms engaged in the ED training (nor to their business rivals). An organization specialized in survey work, such as the ARTI, would be a likely choice.

Furthermore, data should be available over the next few years from other ED programs outside the Mahaweli. The SLBDC, as already discussed, has a 20-month USAID contract, and a major effort at entrepreneurial development and assistance is to be made under the upcoming ILO-sponsored Integrated Entrepreneurship Development Programme. This 3-year, \$571,000 program will conduct 4-day Awareness Creation Seminars for 9,000 rural youths. Of these, 1,625 will be selected for 3 to 5 week entrepreneurial development courses, of the type currently being done by SLBDC and Coopers and Lybrand. ILO will implement this program through existing governmental agencies, including NYSCO and IDB. One hopes that a serious attempt at monitoring the fate of graduates will be a project component.

It is recommended that ED courses under MED be similar to those presently being conducted in the Mahaweli under the current USAID bridge loan financing. However, it is recommended that the number of training courses be limited to one per system per year. Four ED programs per year over a 5-year life of project will produce about 1,000 trained businessmen in the Mahaweli. While perhaps 25 percent of these will be existing entrepreneurs, nevertheless the output of new, aspiring

businessmen will be significant, when we consider that the Mahaweli only has about 4,600 total existing enterprises.

It is recommended that contracting firms be given the tasks of both entrepreneurial development training and business advisory services, since they should constitute a package. Management of business incubators, if any, should fall under the same blanket contract. Since this is a heavy load, at least two firms should be engaged to implement these services. One firm would tailor its programs to the older, more advanced Mahaweli systems (H and G), while one would concentrate on the zone of new settlement (Systems C and B).

**CHAPTER FOUR**  
**REVIEW AND EVALUATION OF THE BUSINESS INCUBATOR**  
**CONCEPT FOR THE MED PROJECT**

**PROBLEM**

Serious questions have been raised, both in AID/Washington and in USAID/Colombo, about the soundness and viability of the business incubator component of the Mahaweli Enterprise Development project. Concerns expressed by the Project Review Committee and ANPAC (October, 1987) focus primarily on restricting the role of government in the creation and management of these facilities to the "minimum absolutely necessary to promote regional investment in viable enterprises." Conversely, in order to reduce the risks of creating another parastatal institution, the MED project must ensure the "maximum extent of private-sector control over these facilities that is feasible from the outset, as well as achieving full privatization by the end of project." A second concern is the danger of high recurrent costs associated with governmental investment in inappropriate capital equipment and structures in the incubator facilities.

Other doubts regarding the appropriateness of business incubators in the Mahaweli have been raised by USAID/Colombo. These include concerns with respect to the lack of satisfactory information on potential participants, on the level of demand for their products, and on the absorptive capacity of the local economy for similar or identical new small businesses.

There remain numerous questions about the form and functions of the business incubator, itself only one of three components of the Small Enterprise Development Facility (SEDF) (formerly Unit). The entrepreneurial training program, underway in the Mahaweli since July, 1987, and the business advisory service, constituted primarily of PCVs, are SEDF components with some track record. Since the only model available for the incubator is one borrowed from the United States by visiting managers of EIED, it is obvious that this project component is highly experimental.

While the concept of the incubator is unique in Sri Lanka, broadly similar facilities exist or are planned for areas in and outside the Mahaweli. None stresses the nurturing of a true small business, but all include elements which may help us evaluate the appropriateness of the incubator concept. The Home Development Centers of the Women's Bureau, and the Common Service Centers and Rural Technology Centers of the Industrial Development Board are three such facilities.

The balance of this paper will address itself to two tasks: present and evaluate what is known about the incubator concept, as revealed by background documents and interviews with managers in the field and at the EIED home office; make recommendations concerning the form and functions of incubators in the MED project, with particular attention to the issues of private sector participation, recurrent costs, and lack of sufficient study, raised by USAID/Colombo and AID/Washington.

## **BACKGROUND**

Since the creation of the EIED division of MASL in January, 1986, four documents have been produced explaining the form and objectives of this new institution. Two action programs and two workplans trace a fairly clear path with respect to the business incubator within the SEDF, of which it is the most visible and costly component. Through name changes and budgetary alterations the basic, if sketchy, concept has remained relatively constant.

### **First Mahaweli Action Program**

In February, 1986, the Planning and Monitoring Unit of the Mahaweli Authority published the first action program for the newly created EIED. In this document is found the rationale for launching a program to stimulate economic development in the Mahaweli areas, following the earlier phases of construction of irrigation works and the arrival of settlers.

The four cornerstones of the MED project were: governmental policy changes; financial incentives to investors; business and industrial infrastructural support; and development of an appropriate investment and institutional environment. Each of these program components was elaborated upon at length.

Under the heading of infrastructure development the Action Program proposed four activities: "installation of electrical generation equipment at Maduru Oya; industrial estates in six townships; construction of eight planned household enterprise development centers; upgrading facilities of the Girandurukotte Development Centre; and the construction of three nucleus enterprise services centers." Of the 4 types of infrastructural development proposed, only industrial estates and Household Enterprise Development Centers -- now renamed SEDF -- remain as possible components of the MED project.

Originally, 9 Household Enterprise Development Centers were planned throughout the Mahaweli special areas, including Uda Walawe. One center at Girandurukotte (System C) was considered already constructed, but this was premature, since major refurbishing continues to the present (April, 1988).

In this first definition of the form and functions of the future "business incubators" (the term was not yet in vogue), it was stated that:

"These centers would cater to small and cottage-scale enterprise and would provide product development, training in business development skills, venture development support and facilitating services over and above those activities that are already envisaged under existing programmes. Training offered would include basic managerial skills such as book-keeping, market review, product development and personnel management. These centers would house small-scale facilities to assist settlers and small-scale entrepreneurs in gaining access to credit, transport, packaging, preserving, storage and raw materials as they start their enterprises. As with industrial estates, these facilities would be phased-in using the knowledge

gained by expanding the facility at Girandurokotte (MASL/PMU, pp. 16-17, 1986)."

The 9 Household Enterprise Development Centers were to be located at the following sites:

| <u>System H</u>                          | <u>System G</u> | <u>System C</u>                   | <u>System B</u>           | <u>Uda Walawe</u> |
|--|-----------------|-----------------------------------|---------------------------|-------------------|
| Galnewa<br>Nochchiyagama<br>Tambuttegama | Bakamune        | Dehiattakandiya<br>Girandurukotte | Aralaganwila<br>Welikanda | Embilipitiya      |

The 5-year development program (1986-1990) envisaged a total expenditure of Rs. 139,400,000 (\$4,557,045 in 4/88) for the 9 centers, divided into capital cost (59 percent), equipment (19 percent), and operation and maintenance (2 percent). The projected budget for these centers represented about 7 percent of the total program (before adjustments for inflation and contingencies).

#### **First EIED Workplan**

In April, 1987, EIED published its first comprehensive 5-year workplan (1987-1991) and budget. Under the heading of infrastructure projects, the activities of the Small Enterprise Development Project (one of four infrastructure programs) are described. It is here that a distinction is made between the Small Enterprise Development Unit (SEDU), an organizational unit, and the incubator production facility, the Small Enterprise Production Facility (MASL/EIED, pp.18-20, 1987a).

The business incubator (the term is first used here) was expected to be but one of three components of the SEDU, which also included the entrepreneurial development training program and the small business advisory service. The entrepreneurial training courses would be conducted in the production facilities or in other relevant sites throughout the Mahaweli. The business advisory service would operate out of the production facilities and be closely linked to "larger groups of volunteer advisors in each community." Then, as now, the latter has meant Peace Corps volunteers, loosely supervised by EIED or MEA field managers.

The incubators (now called SEPFs) were to "provide small scale, flexible factory and warehousing environments for use by entrepreneurs who do not possess the capital for initial outlays in plant and equipment." It was stipulated that all users of these facilities be graduates of the entrepreneurial training programs and that "they would undergo subsequent training on the equipment which they will use in their businesses, and they will schedule time on the SEPFs equipment to process their raw materials."

The temporary nature of the entrepreneurs' residency in the production facility (maximum of two years) was stressed, as well as the need to have them participate in defraying operational charges (monthly rental for storage space and charges based on usage time of equipment).

The budget for all functions of the SEDUs (including consultant assistance and entrepreneur training costs) over the 5-year action program was now revised to Rs. 546,379,000 (Rs. 17,914,065 in 4/88). The lion's share of this (89 percent) was reserved for the incubators proper (Rs. 485,303,000). It was made up of capital cost (61 percent), operating cost (35 percent), and manpower (personnel) cost (4 percent). It is interesting to note that the budget for incubators alone in this first EIED workplan was nearly 4 times greater than that for the Household Enterprise Development Centers proposed in the first action program one year earlier.

#### **Revised EIED Action Program**

In June, 1987, EIED published its own Action Program, the first having been prepared by the PMU of MASL. Few modifications to the text of the first program appear here, except that the term Small Enterprise Development Unit has, in keeping with the terminology of the Workplan, replaced that of Household Enterprise Development Center.

The budget for the SEDUs, excluding that for entrepreneur training (and the business advisory service), was projected at Rs. 121,900,000 (\$3,996,720 in 4/88) for the 5-year program period (now 1988-1992). This represented about 9 percent of the total program, before adjustments for contingencies and inflation. The SEDU budget was divided into capital cost (90 percent) and operation and maintenance (10 percent). The emphasis was clearly on getting the physical plant into operational order, but the total sum budgeted for incubators has dropped back to below that in the first Action Program -- it is, in fact, only 25 percent of the budget proposed in the Workplan a few months earlier.

#### **Revised EIED Workplan**

The Revised Workplan of September, 1987, consisted almost entirely of updated budgets for the current year -- 1987-88; no substantive changes in the concept of the SEDU are to be noted here. The projected budget for the SEDUs (excluding entrepreneurial training) over this one-year period (1987/88) were revised upward to a total of Rs. 52,946,000 (\$1,735,935) from Rs. 19,602,000 (\$642,690) five months earlier (2.7 times greater). All of the increase came from capital cost, now composing 91 percent of the total, up from 74 percent in the First Workplan.

#### **Conclusion**

The preceding review of the official programmatic and working documents of EIED has been made to show the evolution of the concept of incubator and SEDU from home enterprise center to the three-in-one small business development unit. The budgeting has been erratic, but the image of the incubator has held relatively

constant since the end of 1986, when the major conceptualizing for the SEDU -- now called SEDF -- was formulated by EIED. The current conception is given in the next section.

## **CURRENT EIED CONCEPT OF THE BUSINESS INCUBATOR**

### **Introduction**

The following description of the form and functions of the small business incubator within the SEDF is drawn from writings by and interviews with Basil Pereira, Manager of the Infrastructure Support Unit, EIED. Mr. Pereira has adapted the concept of the small business incubator to the Mahaweli from examples he has seen while in the United States. He recognizes the pilot nature of this concept in Sri Lanka and feels that the experience in System C at Girandurukotte should be carefully evaluated before proceeding to the establishment of other incubators.

Since no incubator has yet begun to function in the Mahaweli, the model outlined below applies to the first facility, nearing physical completion at Girandurukotte. The major descriptive document for this first incubator facility, entitled "Proposal for the Establishment of a Small Enterprise Development Facility at Girandurukotte, Zone 2 of System "C," was written by Mr. Pereira in late 1986. In spite of a persistent confusion in this document between the overall SEDF and the business incubator proper, it is clear from conversations with Mr. Pereira that entrepreneurial training and the business advisory (outreach) service will also operate out of these facilities. Just how that will occur is not yet clear.

### **Objectives of the Business Incubator**

The long-run goal is to increase off-farm settler family income. The immediate objectives are to support the establishment of small-scale and cottage enterprises by providing a place for entrepreneurs to launch "new enterprises which demand modest space, equipment, vocational training, and development of business management skills (Pereira, 13, 1986). The success of the concept "will not be how big it is, how well it is run, but, rather, how many entrepreneurs have started their own enterprises as a result of the assistance and training provided at the SEDF (Pereira, 12, 1986)."

The incubator facility is clearly not to be just a factory shell or a means for entrepreneurs to share onerous overhead costs; it will offer a range of instruction and services to would-be businessmen. Such functions of the incubator include: aiding in product development, training in business management, facilitating access to credit, transportation, packaging, procuring raw materials, and storage.

The specific selection of activities will stress the use of available raw materials and resources, use of existing skills, the marketability of products, low capital start-up need, profit potential, and appropriateness for targeted participants, particularly school leavers and women. Initial activities at Girandurukotte, for example, will include fruit processing and canning, chili and maize grinding and packaging, and the production of garments, particularly school uniforms (industrial sewing). Eventually, numerous other activities will be added, as the other buildings are released. A list

of 18 such future activities is presented in the proposal for the Girandurukotte incubator, stressing light engineering, assembly and repair activities, and production of a variety of handicrafts and school materials (Pereira, 15, 1986).

### **Target Area and Participants**

The participants selected to use the incubator will be drawn principally from those applicants who indicate potential as small businessmen. Emphasis will be placed on youth, particularly school leavers, and women. The selection process, however, has not been made clear, the proposal stating only that "participants would be selected upon certain criteria," or "initially target groups will be settlers/entrepreneurs in the Batalayaya and Heberawa Blocks" and "a few selected participants from each of these areas will be the first to take part in the start-up activities (Pereira, 14, 1986)." The number of participants in the incubator at Girandurukotte is estimated by Mr. Pereira at about 20.

The target area for the first incubator at Girandurukotte will be the settler population of Batalayaya and Heberawa blocks of Zone 2, System C. This zone contains about 4,460 families, with a total population of approximately 20,000. Based on data in the SLBDC report on Sub-task 3, which proposes a plan for small/medium-scale enterprise development for EIED, it is estimated that about 3.3 percent of these individuals (660) could invest at least Rs. 10,000 (\$330) in new enterprises (SLBDC, 12-13, 1985). This is the population which should be targeted for the small business incubators, but it appears that unemployed school leavers and women are the target beneficiaries. Further details on target population, future number of businesses to be started (within and outside the incubators), and expansion to other zones of System C (where up to 1,875 individuals should theoretically -- according to SLBDC -- have the means to invest Rs. 10,000 or more) are simply not available.

### **Physical Plant**

Ten former storehouses have been made available to the SEDF in the area of Girandurukotte reserved for industrial development. Currently, 10 buildings are being refurbished, 5 of which should be ready for the installation of equipment within a few months. Work on the remaining 5 buildings has begun, but it is not clear when they will be included in SEDF activities.

The five buildings nearing completion will have the following functions: administration/laboratory/classroom; industrial sewing; chili/maize grinding and packaging; storage; and fruit processing and canning. Future buildings are likely to include one or more building shells only, entrepreneurs being required to furnish their own equipment.

The three-year budget (1987-89) called for in late 1986 proposed a total outlay for construction and other infrastructure of Rs. 15,430,000 (\$505,900). Of this sum, Rs. 6,440,000 (42 percent) was for the first year (called Stage I), and Rs. 4,450,000 (29 percent) was to be spent for each of the next two years (Stages II and III).

The latest revised first year budget (1988) indicates a total capital cost outlay of Rs. 8,137,000, as indicated in Table 1 below.

**TABLE 1**  
**CAPITAL COST BUDGET FOR GIRANDURUKOTTE SEDF**  
**(rupees)**

| <u>Expenditure Type</u>     | <u>Amount</u>           |
|-----------------------------|-------------------------|
| Refurbishing buildings (10) | 2,766,000               |
| Machinery/Equipment         | 2,500,000               |
| Infrastructure development  | 1,371,000               |
| Water supply                | 500,000                 |
| Electricity supply          | 500,000                 |
| Vehicles                    | 500,000                 |
| <b>TOTAL:</b>               | <b><u>8,137,000</u></b> |
|                             | <b>(\$266,785)</b>      |

### **Equipment**

According to the 1986 proposal, three kinds of equipment are envisaged initially for the incubator at Girandurukotte: fruit processing and canning equipment for an investment of Rs. 695, 500 (\$22,805 in 4/88); machines for industrial sewing for Rs. 161,000 (\$5,280); and equipment for chili/maize grinding worth Rs. 218,000 (\$7,150). The sewing and chili grinding equipment appear to be only one set each; that is, the equipment required for 2 to possibly 3 small businesses. The fruit processing and canning equipment appear to be more varied, including mills, crushers, canning, and bottling apparatus (see Pereira, pp. 26-29, 1986).

The budget for the installation of equipment in the first year of operation (1988) is given in Table 2 below.

**TABLE 2**  
**EQUIPMENT AT GIRANDURUKOTTE SEDF**  
(rupees)

| <u>Business Activity</u>                         | <u>Equipment value</u>  |
|--|-------------------------|
| Fruit processing and canning                     | 695,500                 |
| Chili/maize grinding and packaging               | 218,000                 |
| Industrial sewing                                | 161,000                 |
| Provision for additional equipment and machinery | 1,425,500               |
| <b>TOTAL:</b>                                    | <b><u>2,500,000</u></b> |
|  | (\$81,970)              |

### **Management and Staffing**

In the 1986 proposal staff personnel at Girandurukotte was to number 20 people, for a first year administrative cost of about Rs. 667,000 (\$21,870). These salaries were projected to rise 9.5 percent per year in succeeding years.

This personnel has been trimmed to about 15 in the latest budget revision for 1988. The most recent figures provided by EIED are presented in Table 3.

Six food technologists have presently been hired and have just completed training. They will all begin their work at the SEDF in Girandurukotte, although eventually 5 will be placed in future incubator facilities elsewhere.

The manager of the SEDF will not be the deputy field manager for System C (presently Mr. Wikeramasinghe), and he will report directly to the manager, Infrastructure Support Unit (Mr. Basil Pereira) of EIED in Colombo. Current plans call for the transfer of the deputy field manager, System B (Mr. Jayasinghe) to head the SEDF at Girandurukotte, until a suitable replacement can be found.

Overall supervision of the functioning of the SEDF will be carried out by a council, which is to have representatives from the MASL, MEA, and EIED. The director of EIED will be a member of this supervisory and policy-making council.

**TABLE 3**  
**PERSONNEL (FIXED) COSTS FOR GIRANDURUKOTTE SEDF**  
 (rupees)

| <u>Employee Type</u>    | <u>Number</u> | <u>Annual Expenditure</u> |
|-------------------------|---------------|---------------------------|
| Manager                 | 1             | 60,000                    |
| Food technologist       | 1             | 42,000                    |
| Lab technicians         | 4             | 120,000                   |
| Supervisor              | 2             | 72,000                    |
| Storekeeper             | 1             | 30,000                    |
| Driver                  | 1             | 18,000                    |
| General handyman        | 1             | 24,000                    |
| Watchman                | 4             | 57,600                    |
| Employee benefits (15%) |               | 63,540                    |
| <b>TOTAL:</b>           |               | <b><u>487,140</u></b>     |
|                         |               | <b>(\$15,970)</b>         |

#### **Recurrent Costs and Beneficiary Cost Sharing**

Operational costs, including salaries and variable costs, were estimated in late 1986 at a total of Rs. 10,100,000 (\$331,150) over a three-year period. This was broken down into Rs. 2,100,000 (21 percent) in Stage I (1987), Rs. 3,000,000 (30 percent) in Stage II (1988), and Rs. 5,000,000 (49 percent) in Stage III (1989).

Revised personnel fixed costs have been presented in Table 3 above. Revised 1988 variable costs (annualized from 9-month figures) are given in Table 4.

Gross annual profit from the businesses of participants in the SEDF -- based on analyses for fruit processing and chili grinding equipment costing Rs. 913,500 -- are estimated to be: Rs. 1,002,825 (Rs. 552,645 from fruit processing and canning, and Rs. 450,180 from chili/maize grinding). No estimates are available for industrial sewing or for other potential activities in the 10 buildings of the SEDF.

User fees for participants are called "proportionate charges for overheads of the SEDF." A portion of fixed, variable, and equipment costs is charged to the entrepreneurs; for the cost and revenue analyses given in the 1986 proposal (based on a total equipment investment of Rs. 913,500), the total overhead charge amounted to about 62 percent of net revenues from sale of produce.

**TABLE 4**  
**VARIABLE COSTS FOR GIRANDURUKOTTE SEDF (1988)**  
**(rupees)**

| <u>Expenditure Type</u> | <u>Amount</u>  |
|-------------------------|----------------|
| Transportation          | 134,665        |
| Working capital         | 133,335        |
| Promotion               | 133,335        |
| Electricity/Power       | 120,000        |
| Equipment maintenance   | 80,000         |
| Water                   | 13,335         |
| Vehicle maintenance     | 12,000         |
| Contingencies (10%)     | 62,665         |
| <b>TOTAL:</b>           | <u>689,335</u> |
|                         | (\$22,600)     |

While this participation in overhead cost does include a substantial allowance for depreciation of relevant equipment, it does not touch the hidden cost of depreciating the physical plant (and related capital costs, including vehicle) for 1988, an investment estimated at about Rs. 5,637,000 (\$184,820).

Depreciated over 25 years, this major capital investment cost (primarily buildings and personnel quarters) in 1988 at Girandurukotte (Rs. 5,637,000) would be about Rs. 225,480 (\$12,625) per year. If beneficiaries participated in such depreciation at the modest rate of 30 percent, this would add Rs. 67,645 (\$2,220) annually to overhead charges, or about Rs. 3,380 for each of the 20 individuals using the SEDF.

#### **Incubator Profitability**

Annual gross profits for the 20 entrepreneurs in the Girandurukotte SEDF are estimated by EIED at about Rs. 1,002,825 (\$32,880), with an equipment cost of Rs. 913,500. In order to calculate net annual income when the incubator is fully operational, we will assume all 20 participants will be involved in just those two activities for which cost and return data are available (fruit processing and chili/maize grinding and packaging), and we will assume all additional budgeted equipment and machinery is installed, increasing gross margins, overhead charges, and

net profits proportionately. Therefore, gross profits when all equipment is installed (a total of Rs. 2,500,000), may be expected to rise to about Rs. 2,744,460 (\$89,980). Against this last figure must be arrayed annual fixed costs (salaries) of Rs. 487,140 (\$15,970), variable costs of Rs. 689,335 (\$22,600), and annual straight-line (7-year) depreciation of Rs. 357,140 (\$11,710) for machinery and equipment and Rs. 225,480 (\$7,395) for physical plant and other capital cost (25-year depreciation).

Tables 5 and 6 present the economic and financial analyses for the Girandurukotte incubator. The economic analysis (Table 5) indicates the real profitability of the incubator as a global business enterprise (benefit/cost ratio = 1.61), while the financial analysis gives the actual revenue-cost situation (b/c = .97), when profits are retained by participant beneficiaries.

TABLE 5

ECONOMIC ANALYSIS OF THE GIRANDURUKOTTE SEDF  
(rupees)

| <u>Net Revenues</u>             | <u>Fixed &amp; Variable Costs</u> | <u>Equipment Depreciation</u> | <u>Physical Plant Depreciation</u> | <u>Net Profit</u> |
|---------------------------------|-----------------------------------|-------------------------------|------------------------------------|-------------------|
| 2,744,460                       | (1,176,475)                       | (357,140)                     | (225,480)                          | 985,365           |
|                                 |                                   |                               |                                    | (\$32,305)        |
| <u>Benefit/cost ratio:</u> 1.56 |                                   |                               |                                    |                   |

TABLE 6

FINANCIAL ANALYSIS OF THE GIRANDURUKOTTE SEDF  
(rupees)

| <u>Revenues from Participants</u> | <u>Fixed &amp; Variable Costs</u> | <u>Equipment Depreciation</u> | <u>Physical Plant Depreciation</u> | <u>Net Loss</u> |
|-----------------------------------|-----------------------------------|-------------------------------|------------------------------------|-----------------|
| 1,704,980                         | (1,176,475)                       | (357,140)                     | (225,480)                          | (54,115)        |
|                                   |                                   |                               |                                    | (\$1,775)       |
| <u>Benefit/cost ratio:</u> .97    |                                   |                               |                                    |                 |

A consequence of the participation of beneficiaries in overhead charges is that collective annual net profits fall to about 38 percent of net revenues (sales proceeds less cost of goods sold). Nevertheless, Table 7 indicates that total annual net income per businessman participant is about Rs. 51,975, or an average of some Rs. 4,330 per month (\$142). Using a figure of 26 workdays per month, this yields a daily wage figure of about Rs. 165, about 4 times higher than the daily agricultural wage (Rs. 40) in the Mahaweli areas.

**TABLE 7**  
**ANNUAL COSTS AND PROFITS OF PARTICIPANTS**  
(rupees)

| <u>Gross Profit</u>             | <u>Overhead Participation</u> | <u>Net Profit</u> | <u>Participants</u> | <u>Profit per participant</u> |
|---------------------------------|-------------------------------|-------------------|---------------------|-------------------------------|
| 2,744,460                       | 1,704,980                     | 1,039,480         | 20                  | 51,975                        |
|                                 |                               |                   |                     | (\$1,705)                     |
| <u>Benefit/cost ratio:</u> 1.61 |                               |                   |                     |                               |

If we ask beneficiaries to participate in overall capital cost depreciation -- which they certainly would have to do if operating as independent businessmen -- even at the modest rate of 30 percent of a 25-year write-off, additional charges would take only about 7 percent of their net profits. They would still be making substantially more than the existing agricultural wage. Participation in depreciation costs is therefore recommended for Girandurukotte and other incubators.

## CONCLUSIONS AND RECOMMENDATIONS FOR THE MED PROJECT

### General Conclusion

The general impression gained from examining the 1986 proposal and related materials, such as the Small Enterprise/Human Resource Development Plan (Pereira, 1988), is that the current EIED concept of the small business incubator -- and of the somewhat nebulous SEDF, of which it the principal component -- is still evolving and may change substantially over time. No very detailed benefit/cost accounting, such as that attempted above, has been done. Nor, apparently, has this been necessary for the European community, which will pick up the entire capital and equipment cost for establishing the SEDF at Girandurukotte.

Notably lacking is convincing analysis of the participant population to be served by the incubator, nature and size of the markets to be tapped by the graduates, and the appropriateness of size of staff and capital expenditures. It appears likely that costs will be scaled back in the future, through reduction in redundant personnel and

elimination of certain equipment and vehicles. The latest budget figures obtained from EIED for 1988 are a first step in this direction.

The selection process for incubator participants is virtually ignored, as is the choice of future business activities, for markets will surely become glutted with a continuing stream of graduates all producing much the same product or service. All that can be said is that school leavers, unemployed youth, and women are to be target beneficiaries. The markets are presumed; no studies have been made, although such is presumably one of the skills participants will learn in the SEDF.

It appears that, while the Western industrial ideal of business incubator has guided the conceptualization of the facility at Girandurukotte, what is emerging is far more an on-the-job training center. The difference between the types of activities proposed for the participants, which include a considerable degree of basic vocational and business training exercises and support, and the relatively simple requirements of entrepreneurs who need only shared overhead, factory shell, and (sometimes) machinery to launch themselves into a successful enterprise, are striking here. The clientele-to-be, probably well-meaning but inexperienced youth and women, far from having the social and economic power necessary to proceed directly into business from the interior of the incubator, are, unfortunately, the most likely to fail. The dilemma between launching successful businesses and aiding the upcoming second generation of settlers is likely to become very real for the managers of future business incubators.

In spite of these and other weaknesses, the data provided by EIED, although incomplete and requiring a number of somewhat optimistic assumptions, indicate that the Girandurukotte incubator is not far from breaking even financially. It is possible that, with some operational experience, certain cuts in overhead expenses may be made. This, coupled with the level of income claimed for participants in the EIED analysis -- always assuming they will remain ready to turn over about 2/3 of it to incubator management -- may yet turn the incubator into a "paying operation."

The current incubator model is certainly not the type of enterprise a private firm would want to purchase, or manage. Yet there would seem to be some potential here that, with proper study, could result in private sector management (and eventual profit).

### **Specific Conclusions**

1. Data presented for the incubator concept and for the first model at Girandurukotte are vague, incomplete, and apparently ungrounded empirically. Projections of income and costs for two activities, chili grinding and fruit processing, are given, but are probably optimistic. Fixed, variable, and capital costs have been sharply reduced recently, without, however, any convincing nor systematic study to back up these or earlier projections. A serious study needs to be made of the Girandurukotte incubator, since preliminary data appear to indicate potential economic and financial viability of the concept.
2. Beyond the lack of a convincing feasibility study of the financial operation of the incubator, there is an even more serious lack of other supportive studies: market studies for the products or services to be offered by participants; and

the socioeconomic profile of potential successful incubator users. Clearly, one should know the marketing potential for various products, if entrepreneurs are really to run successful businesses and establish themselves independently one day. Furthermore, the entrepreneurs selected must show real entrepreneurial potential; they must have a track record, and may already be operating a business.

3. The contradiction of independent businesses being run out of a government institution, with a personnel and management likely to dominate decision making and interfere with normal entrepreneurial activity, militates in favor of launching privately-run incubators in the future. Whether or not the Girandurukotte facility can be converted to private management, new incubators should be planned for such private control, even ownership. Failing this, the tendency will be for incubators to be managed as glorified training centers.
4. The idea of the incubator as a special, holistic, on-the-job business training center is, perhaps, not such a bad one. The running of a business -- albeit with a wide spectrum of support training -- for a period of time in a protected (but not really independent) environment, could be very useful to a number of would-be entrepreneurs. It is unlikely, in any case, that the Girandurukotte model can be an incubator in the Western sense, since public sector management will most certainly distort the true functioning of a small business. These distortions will come in several types: a variety of helping hands will alter the true economic environment; systematic information will not be gathered, or will be gathered not by the entrepreneur, but by well-meaning, but disinterested, public sector officials; the Mahaweli Authority will most certainly assert its well-meaning, but patronistic control of the businessmen in the SEDF; and public-sector officials will intervene constantly to make the "independent businesses" successful in the eyes of their superiors.

#### **Recommendations for MED**

1. The data available on the incubator at Girandurukotte is interesting enough to warrant further professional study. A firm should be hired, such as Coopers and Lybrand, to develop an incubator model for Tambuttegama or other sites in the Mahaweli, that would be cost-effective, even profit-making. The model at Girandurukotte will generate interesting operational data, but seems more likely to become a special training center than a place for free entrepreneurial operation of the type necessary for business success once outside the sanctuary.
2. The MED project should begin by funding a detailed, feasibility study of one or more models of true incubators for the Mahaweli. If such a model or models seem truly viable -- i.e., run by nongovernmental entities likely to produce profitable small businesses capable of fending for themselves within 1-2 years-- one such incubator could be built, probably in Tambuttegama, and closely monitored for 2-3 years. If the experience seems successful, MED could authorize release of funds for other incubators, if convincing feasibility studies are done beforehand.

3. Management of the incubators under MED must be done by a private firm. As recommended in the amended version of the small enterprise component of the MED project paper, one firm should manage the incubator, the entrepreneurial development program, and the business advisory (outreach) service in the same project zone. MED would have two zones, one combining Systems H and G, one centered on B and C. Since System C is presently setting up a SEDF at Girandurukotte, Tambuttegama is the place to start under the MED project.
4. Firms submitting proposals to manage incubator facilities should show how they will integrate the three project activities of advisory service, entrepreneurial development, and business incubation.
5. A careful monitoring and evaluation system needs to be set up under MED, so that the experience of the first two incubators can be carefully studied and evaluated. This M&E system should be quite explicit in the final MED project paper. At the midterm evaluation, a recommendation concerning the construction of further incubators can be made, based on empirical -- not simply feasibility -- data.

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