

**EMPLOYMENT GENERATION, POVERTY ALLEVIATION AND GROWTH
IN PAKISTAN'S RURAL SECTOR:
POLICIES FOR INSTITUTIONAL CHANGE**

By

Akmal Hussain

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Akmal Hussain

Introduction

The decade of the 1990s signifies a watershed in Pakistan's economic history. As overall GDP growth has slowed down, and unemployment and poverty increased, the underlying factors rooted in the institutional structure of Pakistan's economy, have become manifest. Nowhere is this more evident than in the rural sector. Here a slow down in output growth of the major crops has been associated with declining factor productivity and increased instability of output growth. The moment of decline in growth of yields per acre of major crops gives cause for concern. It has come at a time when the extensive margin in the crop sector has been reached, and further growth will have to depend on increasing the efficiency of input use.

Due to their weaker resource position, small farmers are likely to suffer greater adverse impact of declining factor productivity and output instability compared to large farmers. Yet, our estimates suggest that it is precisely in the small farm sector that there is a relatively greater potential for employment generation. Consequently, slower and more unstable growth may be accompanied by a tendency for increasing inequality in income distribution together with growing poverty and unemployment. It may be time, therefore, to address the structural weaknesses of institutions in the rural sector that underlie these trends.

The decay in institutions of government that have sought to 'deliver' development to the people within the top-down paradigm, has been accompanied by the emergence of development NGOs which attempt to overcome poverty through the alternative paradigm of Participatory Development.

In this Report an attempt will be made to examine first the pattern of agriculture growth, and identify the major institutional constraints to its sustainability. A set of policy initiatives would then be proposed with a view to achieving a higher and sustainable growth in the rural sector on the one hand, and enhancing employment generation for poverty alleviation on the other.

In Chapter I, the pattern of agriculture growth will be discussed, the institutional constraints identified, and the nature and magnitude of employment potential indicated. Policy constructs for overcoming the institutional constraints to higher

growth and increased employment generation, will be specified. In Chapter II, Institutional initiatives will be proposed for actualizing the considerable output and employment potential of the non-crop sector in agriculture and the small scale enterprise sector in rural areas. In Chapter III, some of the major recent government initiatives for employment generation and poverty alleviation will be examined, their weaknesses indicated and policies proposed for making them efficacious. In Chapter IV, for the first time, the strategic question of how development NGOs can be taken to scale is posed, with a view to enabling them to play a major role in employment generation and poverty alleviation. In Chapter V, the main policy proposals are presented in terms of their micro level logic and the macroeconomic perspective within which that logic is constituted.

CHAPTER I

GROWTH, EMPLOYMENT AND POLICY CONSTRUCTS FOR OVERCOMING INSTITUTIONAL CONSTRAINTS IN THE CROP SECTOR

In this Chapter the pattern of output growth and employment in the crop sector will be briefly examined to indicate the need to focus policy on the institutional constraints to actualizing the yield potential. Such a policy acquires an urgency in view of evidence that the extensive margin has been reached. Future growth would have to rely on increasing the efficiency of input use where institutional support plays a greater role than in increasing irrigated-cropped acreage, which fueled agriculture growth in the past.

Section 1

Agriculture Growth: Past Pattern and Present Potential

The level and pattern of output growth in the crop sector during the 1990's when viewed in a longer-term perspective suggest the emergence of institutional constraints to sustainability. The average annual growth rate of major crops declined from 3.34 percent during the 1980s to 2.38 percent during the 1990s (see table 1). At the same time, the frequency of negative growth in some of the major crops during the last 17 years has been significantly higher than in the preceding two decades. If we consider wheat, which is by far the largest of the major crops (over 30 percent value added in major crops), we find that average annual growth rates have been steadily declining since the onset of the "Green Revolution": From the high point of 7.42 percent in the 1960's to 2.33 percent in the 1990's (see table 2). Underlying the decline in the growth of wheat output is a steady decline in the growth of wheat yield per hectare: From 4.38 percent in the decade of 1960's to 1.81 percent in the 1990's (see table 2). The frequency of years in which an absolute decline in wheat yield per hectare was 7 in the period 1980 to 1997, compared to 5 in the preceding two decades.

Under conditions of declining input productivity, when higher input use/acre is required to maintain yields, small farmers with fewer resources are likely to suffer a greater than average decline in yields, compared to large farmers. At the same time, due to lack of savings to fall back on, they are relatively more vulnerable to bad harvests under conditions of unstable growth. Consequently, slower and more unstable growth may be accompanied by a tendency for growing inequality in rural

income distribution, poverty and unemployment. This is why it is important to initiate policies (discussed in this Report) to counteract these tendencies in both the farm and off-farm sectors of agriculture.

Underlying the phenomenon of a gradual deceleration of growth and increased frequency of negative growth years¹ may be the emergence of a number of institutional constraints, the major ones being (i) reduced water availability due to deterioration in the canal irrigation system, (ii) poor quality of seeds, inadequate and poorly targeted agriculture research and extension services, (iii) degradation of soils

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1. It has been argued that the increased instability of output in the 1980's in contrast to relative output stability in the preceding decade of the 1970's is due to the fact that:
- (a) The timeliness of input application required in the HYV technology package has introduced an external uncertainty factor (together with weather conditions).
 - (b) The timeliness constraint manifested itself in increased instability of agricultural production in the 1980s, in contrast to the 1970's, due to the presumed "widespread use", of the HYV technology in the 1980's.

Two considerations are relevant here:

- (i) The greater instability of agricultural output in the 1980's compared to the preceding decade cannot be attributed to "widespread use" of the HYV technology in the 1980's (and by implication its presumed relatively restricted use in the 1970's). This is because the HYV technology was already in widespread use in the 1970's. For example, by 1974/75 HYV adoption had occurred in 64 percent of the cropped acreage under wheat, in Pakistan as a whole. In the Punjab and Sind where a greater prevalence of irrigation made these two provinces more amenable to HYV adoption, the figures for the year 1974/75, are 65 percent and 82 percent respectively. Thus, if "widespread use" of HYV technology is to be regarded as a causal factor in output instability then such instability should have occurred in the 1970's as well, which of course the output data shows, was not the case.
- (ii) The question that now arises is, why did the timeliness constraint of the HYV technology manifest itself in the 1980's and not in the 1970's? The answer could perhaps be sought in unpacking the notion of the "timeliness" constraint. It essentially means that the HYV seeds require certain dosages of fertilizer and water at specific moments in the production cycle. This makes a seasonally flexible supply of water necessary for optimum yields of HYV seeds.

It could be hypothesized that the timeliness constraint began to bite in the 1980's and not in the 1970's, because during the 1970's adequate supplies of irrigation water were available to farmers. During the 1980's, however, the irrigation canals and water courses, due to institutional neglect, suffered deterioration, resulting in the reduced availability of irrigation water at the farm gate. (Although tubewell irrigation had increased by 6 percent per annum, it is now well established, that much of the water lost due to seepage from canal irrigation could not be reused by tubewells due to its passage into saline areas). Consequently, an increasing percentage of the water requirement at the farm level had to rely on rain water. Given the timeliness imperative of HYV technology, during the 1980's and 1990's, there was not only an increasing dependence on rain water, but more important, an increasing dependence on rains falling at the required time even in the irrigated regions. It is this factor, the partial shifting of the timely water supply requirement to the vagaries of rain water, that perhaps made the timeliness constraint of HYV technology bite in the 1980's and 1990's, but not in the 1970's.

due to depleting soil nutrients and soil erosion associated with improper agricultural practices. (Each of these constraints will be discussed in Section 2).

We have estimated that currently in the major crops together with fodder and pulses a total of 1361 million person days of employment annually exists (see table 3). (This figure is quite close to the employment demand projection of 1312 million person days for the year 2000, that we made in 1989, based on 1972 data, for the ILO/ARTEP).² Given crop production cycles (where farmers are employed 200 days of the year), the annual employment demand for 5.4 million persons per year currently exists in the crop sector.

Table 3 shows the person days of employment required in selected crops at current levels of cropped acreage in the irrigated and unirrigated areas respectively by size class of farm. The figures suggest that farms below 25 acres in size are generating more than twice as much employment than large size farms in the case of wheat, basmati, cotton and fodder. The employment differential between small and large farms is even higher in the case of HYV rice (three times higher) and maize (5 times higher). The employment differential in the case of pulses, however, is lower (1.5 times). These estimates suggest that if the yield and output potential of the small farm sector could be actualized, a relatively larger increase in employment creation would occur than in the case of large farms.

Table 4 shows by way of illustration the increased employment demand that can be generated if the current yield potential of two major crops (wheat and HYV rice), could be realized through improved agricultural practices, vigorous seeds at current levels of technology and increased water availability through higher delivery efficiency of irrigation. The estimates indicate that an employment potential of only about 16 million person days annually (about 80,600 persons employed for the whole agricultural year) exists in the crop sector for wheat and HYV rice. However, for farms below 25 acres substantially more employment could be generated through the

² Akmal Hussain: Labour Absorption in Pakistan's Agriculture, An Interim Report, paper submitted to ILO/ARTEP, March 1989. The Labour Demand projections upto the year 2000 were published in Akmal Hussain: Poverty Alleviation in Pakistan, (Annexure II, Page 128), Vanguard Books, 1994. Also published in Akmal Hussain: Strategic Issues in Pakistan's Economic Policy, Progressive Publishers, Lahore, 1988.

realization of the yield potential of these crops compared to large farms. These figures suggest that if policies for increasing the yield per acre of major crops were to focus on the small farm sector, a faster and more equitable growth with higher employment generation could be achieved in the crop sector.

The figures in table 3 and 4 indicate that both the level of employment demand as well as the potential for increasing it through the crop sector, are quite limited compared to the size of the rural labour force.³ The brunt of the burden of increasing rural employment generation would therefore have to be borne by the non-crop sector. This would include livestock development especially milk production, food processing, off-farm micro enterprises and industrial clusters in rural areas consisting of small scale units in the fields of light engineering, automotive, electrical and construction. This issue is discussed in Chapter II of the Report.

If a village level institutional support mechanism could be established to enable small farmers to achieve increased water application in the root zone of the crops, application of composite fertilizers in congruence with field specific soil nutrient requirements and better quality seeds, a yield increase of 30 percent in wheat and 50 percent in HYV rice could be achieved within a relatively short period. This implies an additional annual employment potential of about 16 million person days in wheat and rice alone. Substantially higher increases in output and employment could be achieved with improved agricultural practices, replenishment of humus in topsoil, breeding and diffusion of more vigorous seed varieties, and a rehabilitation of the canal irrigation system. The nature of these institutional constraints and possible ways of overcoming them are discussed in the next Section 2.

³ That the possibility of labour absorption in the crop sector would be severely restricted by the year 2000, had been predicted in our paper, Akmal Hussain: Rural Industrialization, Economic Logic and Institutional Requirements. Policy Paper submitted to the Prime Minister 1989, later presented at International Conference on Agricultural Strategies for the 1990s, Pakistan Association of Agricultural Scientists, Islamabad, 7-9 May 1991, published in Akmal Hussain: A Strategy of Poverty Alleviation in Pakistan, op. cit.

Section 2

A Policy Perspective on Institutional Constraints to Growth of Agriculture Output and Employment

2.1. Canal Irrigation

Poor maintenance has resulted in the gradual deterioration in the canal irrigation system whose carrying capacity of water has been reduced due to lack of adequate de-silting and crumbling of canal banks. Delivery efficiency (from the canal head to the root zone of crops) is now as low as 35 to 40 percent.⁴ The annual diversion of water from the rivers into the surface irrigation system is about 93 million-acre feet out of which only about 37 million-acre feet actually reaches the root zone of crops. The remaining 56 million-acre feet is lost to canal seepage, spillage, breaches and watercourse losses.

The improvement of irrigation efficiencies has become a major policy imperative in view of the fact that the extensive margin on irrigated acreage has been reached and future agricultural growth will have to rely on improving the efficiency of water use and other inputs. For example, during the period 1967-68 to 1991-92 irrigated area in Pakistan increased from 12.5 million hectares to 17 million hectares without any significant increase in total cultivated area during the period. This indicates that most of the increase in irrigated area involved conversion of rain-fed cultivated area to irrigated area. Cultivated area has remained virtually constant since the 1960's, while irrigated area has remained virtually constant since the 1980's, indicating that the limits of both cultivable area and irrigated area may have been reached. Opportunities of expanding use of ground water are also limited. Therefore, overcoming the crisis of irrigation efficiency has become a crucial policy challenge for sustainable agricultural growth and employment in the 21st Century.

The poor maintenance and operation of the canal irrigation system is associated with not only a decline in the efficiency of the irrigation department but also a serious shortage of budgetary funds. For example, in the early 1990's the shortfall between

⁴ Pakistan: A strategy for Sustainable Agricultural Growth, World Bank Report No. 13092 Pak, November 1994.

required and actual operations and maintenance expenditure has averaged 25 percent⁵. Given the lack of motivation, management capability, and adequate funding, a restructuring of the role, functioning and organization of the irrigation department may be necessary. It may be time now to develop a more cost effective and decentralized institutional structure involving local communities in the operation and maintenance of canals and watercourses. A development NGO called PIEDAR which has been working in the Khanewal District of Southern Punjab has demonstrated the efficacy and cost effectiveness of improving the operation and maintenance of water courses through the formation of village level community organizations initially and then apex organizations of VOs which has set the stage for irrigation management of a whole distributory. (See Box).⁶

⁵ Rashid Faruqee: Structural and Policy Reforms for Agriculture Growth, the case of Pakistan, Agriculture and Natural Resource Division, South Asia Department 1, The World Bank, October 2, 1995, p. 31.

⁶ I am grateful to Mr. Ayub Qutub, President of PIEDAR, for providing the information which enabled the writing of the PIEDAR case study.

**Improved irrigation efficiency through community management:
The PIEDAR experience**

The Pakistan Institute for Environment, Development Action Research (PIEDAR) is an independent NGO registered under the Societies Act, which began a pioneering support program in the Khanewal district of Southern Punjab in 1992. Using the Participatory Development Methodology, it catalyzed the formation of village organizations of poor peasants and initiated a process for enabling the village communities to build hygienic drinking water facilities, a wide range of micro enterprise projects, (operated in many cases by women) for income generation, increased savings, development of home school for women, and finally lining of water courses for increased irrigation efficiency.

The PIEDAR approach was different from the approach of the government's department of on-farm water management in terms of three features: (a) PIEDAR established multi-purpose VOs instead of single purpose water users associations across a number of villages. (b) Between 30 to 33 percent of the investment cost of the water course lining was financed from the collective savings of the VOs. (c) Instead of the brick lining technique of the government department, PIEDAR used pre-cast concrete segments, manufactured in a local factory. With brick lining, due to non-congruence of the parabolic curve of the water channel and the curvature of the brick lining, cracks emerge after a year, resulting in large water leakage through the spaces between the bricks. By contrast, the pre-cast concrete segments whose internal curvature coincides with that of the water course are not only much more efficient insulators but also have a much longer life (50 years) compared to brick lining.

PIEDAR has been engaged in fostering community based water course management since 1995 and has now achieved coverage of 30 villages and six water courses. The COs have provided 25 percent of the cash cost of the investment from their collective savings and have also contributed the cement and labour themselves. (The total contribution of the poor peasants to the lining of water courses has been estimated at 30 to 33 percent in addition to the labour involved in maintenance. Such a contribution by the villagers and their interest in maintenance is unprecedented in any on-farm water management project under government auspices.

2.2 Seeds, Agriculture Research and Diffusion

It is well known that high yielding varieties of seed introduced at a point in time, gradually lose their potency through reuse, changing micro structure of soils, and changing ecology of micro organisms in the top soil. Therefore, breeding of more vigorous seed varieties adapted to local environmental conditions and their diffusion amongst farmers is required through an effective research and extension program.

At the moment, there is no organized seed industry in Pakistan to meet the needs of farmers for the supply of vigorous varieties of seeds for even the major crops. The existing institutional framework for agriculture research suffers from a proliferation of research institutes, which are inadequately funded, often lack professional expertise, proper equipment and the research environment necessary to produce significant results. Finally, there is considerable overlapping of research responsibilities across institutes. Consequently, research has by and large failed to produce operationally usable results much less increase input efficiency. Seed varieties research where it has produced new seeds has involved a large time lag in getting research to the farmers. In wheat, for example, the average age of seed varieties is 11 years compared to 7 years for all developing countries. It has been shown that there was a sharp decline in growth of total factor productivity in Pakistan after 1975. Pakistan's lower factor productivity growth compared to India can be attributed to the poorer level of research and extension in Pakistan compared to India.⁷

A new dimension to the imperative of improving research capability in the crop sector is indicated by the possibility of declining yield per acre related with global warming. Given the sensitivity of wheat seed to temperature increase, even a 2-degree centigrade increase in average summer temperature could mean an absolute yield decline of between 10 to 16 percent during the 21st century.⁸ With a 2.8 percent population growth even a decline of 5 percent in yield per acre associated with global warming, could mean serious food deficits for Pakistan. It is, therefore, necessary to develop heat resistant varieties of food grains.

The current ineffectiveness of agricultural research and poor diffusion amongst farmers is a cause for concern. This is particularly so in a situation where future agricultural growth and labour absorption will have to depend more on input

⁷ Mark W. Rosegrant and Robert Evenson: "Agricultural Productivity Growth in Pakistan and India: A comparative Analysis", presented at Pakistan Institute of Development Economists Ninth Annual General Meeting, Islamabad, 1993.

⁸ If atmospheric carbon is doubled the average summer temperatures in Pakistan are expected to increase from 1.5 C to 4.5 C (base average of 2.5 C), over the next 70 years. This could lead to a decline in wheat yields from 10 percent to 60 percent, depending on the type of wheat seed, planting time, related atmospheric/weather conditions. See: Qureshi, Ata and Iglesias: Implications of Global Climate Change for Pakistan Agriculture: Impacts on Simulated Wheat Production, Climate Institute, Washington, D. C. USA, 1992.

efficiency than on enlargement of irrigated acreage and input intensification which were the major sources of agriculture growth in the past.

The following issues may be identified for research and subsequent diffusion:

- i) Development of (a) new heat resistant varieties of wheat, (b) short duration and late sowing varieties of wheat to enable multiple cropping, (c) heat resistant, pest resistant, short duration and high yielding varieties of cotton, (d) development of short duration and high yielding varieties of pulses and oilseeds to fit into cropping pattern of late Rabi/late Kharif crops.
- ii) Rehabilitation of agriculture in saline and water logged soils.
- iii) Improvement of barani agriculture by research into designs of low-cost rainwater reservoirs and chalk dams for water-run off, for irrigation and soil conservation.
- iv) Efficient harvest and post harvest handling technology for different crops.
- v) Development of hybrid seeds of Maize, Sorghum, Sunflower and other crops.

On the basis of wide ranging consultations with farmers in the Punjab and Frontier provinces as well as officials concerned with agriculture research during the last two years, it can be proposed that for more effective research and its diffusion amongst farmers it may be necessary to take the following initiatives:

- i) Restructure the existing institutional framework for seed development in particular and agriculture research in general to (a) bring greater professionalism, (b) improve monitoring and evaluation of research work.
- ii) Focus research on improving input productivity at the region specific level. In this context the outcomes of controlled experiments at research institutes need to be tailored to the specific needs and conditions of farms in the region.
- iii) Maintain regular interaction between research workers and farmers in the field by establishing an institutional linkage between research and village level institutions for diffusion of such research. Village level community organizations of farmers for participatory development have demonstrated the ability for a fruitful dialogue with research and extension institutions in the government and non-governmental sector.

Such interactions amongst farmers and agricultural researchers could redirect research to the specific needs and conditions of farmers and also enable a more rapid adoption of improved seeds and agricultural practices. Support organizations such as the PRSP in the Punjab (during August to October 1998), and AKRSP in the northern areas (during the early 1990s) have demonstrated an ability for facilitating the adoption of new knowledge and agricultural practices, particularly in cases where such adoption requires training and credit to farmers at the village level.

2.3. Soils and Agricultural Practices

One of the most important constraints to sustainable growth and employment in the crop sector is the degradation of soils, resulting from improper agricultural practices such as: (i) lack of crop rotation and the resultant loss of humus in the top soil, (ii) stripping of top soil and resultant loss of fertility associated with over-grazing, (iii) water erosion along hillsides and river banks due to cutting down of trees and depletion of natural vegetation which constitutes a water absorber and hence protection against erosion. According to one estimate,⁹ over 11 million hectares have been affected by water erosion and 5 million hectares by wind erosion.

⁹ Alim Mian and Yasin Mirza: Pakistan Soil Resources, National Conservation Strategy, Sector Paper IV, Environment and Urban Affairs Division, with IUCN, 1993.

Degradation of soils may be an important factor in low and declining growth in yields per acre in Pakistan's crop sector. For example, average annual increase in yield per acre of wheat during 1990's in Pakistan has been 1.8 percent compared to 2.9 percent in the Indian Punjab, and 2.7 percent for all developing countries. A recent study suggests that the observed declining yield response to input use in Pakistan's agriculture is indicative of increasing soil degradation.¹⁰ It is clear that in order to create a sustainable basis for accelerating agricultural growth and employment in the future it would be necessary to induce agricultural practices through which the organic material in the top soil can be replenished and maintained. The existing extension services do not have the outreach, motivation and the management capability to achieve the adoption of sustainable agricultural practices at the farm level. What is required is to build village level organizations of farmers, backed by sensitive support institutions which can demonstrate the efficacy of such agricultural practices to their members, together with training and accessing of technical support from government line departments, donor agencies, private sector firms and specialized NGOs. A wide variety of such sensitive support institutions (although with a relatively restricted geographic coverage) have emerged in recent years in the form of development NGOs and rural support programs. In many cases they have produced impressive results in improving agricultural practices and productivity, and accessing technical support and training from diverse sources for farmers at the village level: For example, SUNGI in the NWFP, PIEDAR in Southern Punjab, KIDP in Swat, AKRSP in the Northern Areas and more recently PRSP in the Punjab. The question is how to provide the institutional and policy framework for enabling such support institutions to achieve adequate geographic coverage. (This issue will be dealt with in Chapter IV of the Report).

¹⁰ Derek Byerlee : Agricultural Productivity in Pakistan, Problems and Potential, World Bank Agriculture Sector Review, cited in World Bank Report No. 13092 – PAK, op. Cit.

TABLE 1
AVERAGE ANNUAL GROWTH RATES OF MAJOR CROPS*: 1980-97

Period	1980-81 to 1989-90	1990-91 to 1996-97
Average Annual Growth	3.34%	2.38%

Note: * At constant 1980-81 factor cost

Source: Federal Bureau of Statistics, Government of Pakistan.

TABLE 2
WHEAT
AVERAGE ANNUAL GROWTH RATE OF OUTPUT AND YIELD/ACRE AND THE
FREQUENCY OF NEGATIVE YIELD INCREASE, 1960 TO 1996

PERIOD	AVERAGE ANNUAL GROWTH RATE OF OUTPUT (PERCENT)	AVERAGE ANNUAL GROWTH RATE OF YIELD/ACRE (PERCENT)	FREQUENCY OF NEGATIVE YIELD INCREASE (COMPARED TO PREVIOUS YEAR)
1960-61 TO 1969-70	7.42	4.38	3
1970-71 TO 1979-80	4.43	3.18	2
1980-81 TO 1989-90	3.30	2.06	4
1990-91 TO 1996-97	2.33	1.81	3

Source: Pakistan Economic Survey 1997-98, Government of Pakistan, Finance Division, Economic Advisor's Wing, Islamabad.

TABLE 3
ANNUAL PERSON DAYS OF EMPLOYMENT BY CROP, BY SIZE CLASS OF FARM, 1990

Crops	Size of Farm (Acres)	Irrigated		Unirrigated		All
		Cropped Acreage	Person Days of Employment	Cropped Acreage	Person Days of Employment	Total Person Days Employment
Wheat	Under 7.5	4,575,546	102,309,209	1,342,547	17,278,580	119,587,788
	7.5 to under 25	7,129,095	159,406,564	1,320,371	16,993,175	176,399,739
	25 and above	4,942,941	110,524,161	864,296	11,123,490	121,647,650
Basmati	Under 7.5	775,961	21,393,245			21,393,245
	7.5 to under 25	1,131,580	31,197,661			31,197,661
	25 and above	738,379	20,357,109			20,357,109
HYV Rice	Under 7.5	1,025,728	36,587,718			36,587,718
	7.5 to under 25	1,524,100	54,364,647			54,364,647
	25 and above	782,708	27,919,194			27,919,194
Cotton	Under 7.5	1,565,646	56,018,814			56,018,814
	7.5 to under 25	2,778,527	99,415,696			99,415,696
	25 and above	2,275,585	81,420,431			81,420,431
Fodder (Rabbi and Kharif)	Under 7.5	1,912,598	101,580,973			101,580,973
	7.5 to under 25	3,130,554	153,401,131			153,401,131
	25 and above	1,748,339	77,876,811			77,876,811
Sugar Cane	Under 7.5	433,670	26,618,665			26,618,665
	7.5 to under 25	812,894	49,895,434			49,895,434
	25 and above	514,833	31,600,450			31,600,450
Pulses	Under 7.5	124,564	1,276,781	158,772	1,389,255	2,666,036
	7.5 to under 25	355,874	3,647,709	648,962	5,678,418	9,326,126
	25 and above	303,651	3,112,423	1,007,494	8,815,573	11,927,995
Maize	Under 7.5	512,778	16,537,091	655,644	10,490,304	27,027,395
	7.5 to under 25	334,681	10,793,462	283,655	4,538,480	15,331,942
	25 and above	182,264	5,878,014	65,773	1,052,368	6,930,382
					Total Person Days of Employment	1,360,493,030

Source: i) 1990 Census of Agriculture, Government of Pakistan, Economic Affairs and Statistics Division, Agricultural Census organization.

ii) Employment Coefficients based on WAPDA XAES and Dilawar Ali Khan, PERI, 1980.

Note: Calculations Mine

TABLE 4
EMPLOYMENT POTENTIAL IN THE CROP SECTOR, BY SIZE
CLASS OF FARM

Crop	Size of Farm (Acres)	Annual Person Days of Employment	Potential for Additional Person Days of Employment Associated with Yield Increase
Wheat	Under 7.5	102,309,209	4,296,987
	7.5 to under 25	159,406,564	4,463,384
	25 and above	110,524,161	1,547,338
HYV Rice	Under 7.5	36,587,718	2,195,263
	7.5 to under 25	54,364,647	2,609,503
	25 and above	27,919,194	1,005,091
		Total	16,117,566

- Sources: i) Pakistan Economic Survey 1997-98, Government of Pakistan, Finance Division, Economic Advisor's Wing, Islamabad.
ii) WAPDA XAES, (Unpublished data)
iii) Shamim A. Namdar: Employment Implications of Agricultural Growth Occasional Study, Punjab Economic Research Institute, Lahore, March 1980.
iv) World Bank Report No. 13092 - Pak, November 1994.

Note: Calculations Mine.

CHAPTER II

EMPLOYMENT GENERATION AND POVERTY ALLEVIATION IN THE OFF-FARM RURAL SECTOR

In this Chapter we will examine the possible role of the off-farm sector in achieving some of the macroeconomic objectives such as accelerating GDP growth, employment, poverty alleviation and relieving pressures on the balance of payments. The two main off-farm sectors in rural areas, i.e., livestock development with reference to milk production and small manufacturing enterprises, will be analyzed in terms of their major features to show how (if their potential is actualized) they can help to not only accelerate GDP growth, but to restructure it so as to enhance its capacity to increase employment, alleviate poverty and reduce the balance of payments deficit. In this context, new policy initiatives will be proposed and the institutional framework for actualizing the potential of both milk production and small manufacturing enterprises will be specified.

Section 1

Livestock Development, Poverty Alleviation and Employment Generation: A Policy Construct

Pakistan's largest farm product is milk, with an annual output of 11.069 billion litres valued at Rs. 177 billion. The value is even higher than wheat, the largest of the major crops, with an output of 18.6 million tonnes, (1997/98), valued at Rs. 111.6 billion, (wheat constitutes 30.78 percent of total value added of major crops). What is even more significant is that the potential for increasing output in the next five years is far greater in the case of milk, than in the crop sector. Average yields of milch animals in Pakistan are one-fifth the European average. Discussions with farmers and the staff of Nestle Milkpak which has a large network of milk purchasing centres at the village level suggest that milk output can be doubled with improved breeding, feeding, preventive health and marketing.

Equally important is the fact that the incomes of poor peasant households can be substantially increased through the acquisition of additional milch animals and increased milk yield per animal. At current levels of milk output of a moderately productive buffalo a poor peasant can earn a net income of about 2500 per month per

milch animal. There is considerable potential for increasing household employment and income if a participatory support system at the village and tehsil levels could be established for the provision of credit, training in breeding, veterinary medicine and access over marketing services to poor peasants. If such an institutional framework is linked up with private sector milk purchasing centres in village clusters, then a rapid growth of milk output in Pakistan could be achieved together with increased income and employment of poor peasant households.

Given the huge potential export market for milk in Central Asia and the Middle East, a doubling of milk output in Pakistan with adequate refrigerated transport (both road and air) and milk packaging services, could potentially increase Pakistan's export earnings by over 4 billion US dollars annually. This would solve Pakistan's balance of payments problem (the balance of trade deficit in 1997-98 was US\$ 3.15 billion), while at the same time alleviating rural poverty, increasing employment and improving rural income distribution.

A Dairy Development Organization (DDO), registered under the Companies Act as a non-profit company, needs to be established in each province as an apex organization that can coordinate the provision of animal husbandry facilities, training in breeding, feeding and disease control together with credit and marketing facilities to peasant households through village/tehsil level participatory support institutions. The DDO should have an independent Board of Directors, consisting of individuals of commitment and integrity and with a variety of backgrounds covering experience in private sector firms working in agriculture related fields, NGOs involved in rural poverty alleviation, village level CBOs, and international experts in dairy development.

The DDO could have the following functions: (i) Bring to bear available research and international as well as local expertise in support of a major program for increasing the number and productivity of milch animals of poor peasant households. (ii) provide a forum for various village level community based organizations (CBOs), district level NGOs and other rural support organizations to share their experiences, improve their effectiveness in facilitating increased milk production and sale, of poor peasant households. (iii) Coordinate with the provincial governments to provide refrigerated road transport facilities and refrigerated storage facilities at airports, (iv) coordinate

with private sector firms for packaging and international air cargo facilities for exports. The export of milk, apart from existing private sector milk packaging firms, could also be undertaken by apex organizations of village level CBOs.

The work of the DDO, that is directly related with poverty alleviation, could be funded by income from an endowment fund that could be created by grants from: (i) The recently established Pakistan Poverty Alleviation Fund (PPAF), (ii) multilateral development agencies such as the ILO, CIDA, UNDP and the World Bank, (iii) the Annual Development Programs of the provincial governments, (iv) private sector firms such as Nestle Milkpak Limited (Milk Pak), Chaudhry Industries Limited (Haleeb milk), Prime Service Group (Prime Fresh Milk), United Dairy Farms (Pakpure milk).

Section 2

A Policy Framework for Accelerating Growth of Small Scale Enterprises

2.1 Small Scale Enterprises in the Context of Macroeconomic Issues

In spite of a high trend rate of growth of GDP (6 percent annual growth rate during 1960 to 1990), its impact on poverty and unemployment is relatively modest.¹¹ It has been argued that the capacity of GDP growth in Pakistan to reduce poverty and generate employment is constrained by the structure of the economy.¹² While GDP growth has neither generated adequate employment nor overcome poverty in the real economy, it has involved such a sharp increase in loan dependence, that debt

¹¹ For example, Indonesia with a growth rate close to Pakistan's, in just one decade (1972-84), was able to reduce its population below the poverty line from 58 percent in 1972 to only 17 percent in 1984. By contrast, Pakistan in three decades (1962-92) could reduce its poverty figure to a much lesser extent from 40 percent in 1962 to 22 percent in 1992. See Report of the Task Force on Poverty Eradication, op. cit.

¹² For a discussion on how the structure of Pakistan's economic growth process constrains its capacity to alleviate poverty, see: Overcoming Poverty, Report of the Task Force on Poverty Eradication, May 1997.
For a discussion on the low employment elasticity in the manufacturing sector, and the fact that it originates in the structural features of this sector, see: Pakistan: An Employment Strategy, ILO/SAAT, December 1997.

servicing has become a critical problem in the financial sphere.¹³ At the same time, there is concern that rural-urban migration into large urban centres has reached a magnitude that is far greater than the existing financial and administrative capability of government to provide for with even a minimum level of basic services.

When the major features of Small Scale Enterprises (SSEs) in Pakistan are examined in the context of macroeconomic pressures, the prospect emerges of relieving these pressures to some extent through inducing an accelerated growth of SSEs.

Let us consider SSEs with respect to their capabilities for efficiency of capital use, employment generation, poverty alleviation, and import dependence.

There is evidence to suggest that in the case of Pakistan, small-scale industry generates both more employment per unit of investment as well as more value added per unit of capital compared to the large scale manufacturing sector. A comparison of Capital/Labour, Value Added/Capital and employment cost ratios for large and small scale industries suggest that the number of jobs generated in small scale industry per unit of capital is 5 times more than in large scale manufacturing. Similarly, when we compare the efficiency of capital use in the two sectors, i.e., value added per unit of capital (VA/K), we discover that VA/K is almost twice as much in small scale industry compared to large scale industry.¹⁴ More recent evidence suggests that over 80 percent of employment in the manufacturing sector as a whole can be attributed to SSEs even in 1990-91.¹⁵ This percentage does not appear to have changed much since 1977-78. However, the percentage share of SSEs in the value added in manufacturing as a whole is only about 30 percent,¹⁶ and their share in total manufactured exports is 27 percent.¹⁷

¹³ Pakistan's debt servicing burden as a percentage of federal government revenues had reached 61.5 percent by the year 1997-98. See: State Bank of Pakistan, Annual Report, 1997-98.

¹⁴ ILO/ARTEP: Employment and Structural Change, Issues for the Eighties, Report for the Planning Commission, (Mimeo), 1983.

¹⁵ M. Mahmood, cited in: ILO/SAAT, 1997 (Mimeo).

¹⁶ Ibid.

¹⁷ See Report of the Sub-Committee on Cottage Industries, Punjab, 1999.

It appears that the secondary multiplier effects of investment in small-scale enterprises on output and employment are also relatively greater. For example, the available evidence shows that small-scale enterprises use locally manufactured machinery and equipment to a much greater extent than LSM enterprises.

Moreover, a significant proportion of SSEs are export oriented in the fields of apparel, leather products, surgical instruments, sports goods, carpets and wood working. Thus, small-scale industry, in a number of sectors, is both export-oriented and/or import substituting (where vending enterprises in the small-scale sector enable deletion programs in the large scale manufacturing sector).

2.2 Strategic Objectives of the Growth of SSEs

The growth of SSEs needs to be not only accelerated substantially but also induced towards a geographic disposition that results in the emergence of SSE based growth nodes in the small rural towns of Pakistan. Such a process would enable a geographically diversified growth that is relatively cheap in terms of infrastructural investment and also oriented towards employment generation. These growth nodes of SSEs in small towns should be linked with the agriculture sector (producing farm implements and food processing) on the one hand, and with the Large Scale Manufacturing Sector (through sub-contracting of components manufacture) on the other. Such forward and backward linkages would enable both an increase in agricultural productivity and also a reduction in the import costs of the large scale-manufacturing sector. The objectives of rapid growth of SSEs would be four fold, (i) to help accelerate employment generation in the off-farm sector in rural areas, (ii) to enable a regionally balanced industrial growth with relatively low infrastructural investment, (iii) SSEs in small rural towns would help slow down migration into large urban centres. Such enterprises require a relatively low infrastructure input and can provide skilled employment to the rural workforce close to their homes. (iv) To reduce the foreign exchange costs of large-scale industry through subcontracting components manufacture with domestic SSEs. At the same time given the relatively greater export orientation of SSEs with appropriate institutional support they can help alleviate balance of payments problems, (v) to increase value added and productivity of labour in the rural sector, and thereby improve the overall distribution of income.

2.3 Constraints to the Rapid Growth of SSEs

Field visits to a large number of SSE units in the Punjab and NWFP during the last five years, have revealed that while their technical potential in many cases is high, the units are actually producing low value added items like steel shutters or car exhaust pipes, instead of components for LSM, or high quality farm implements. This results in low profitability, low savings and slow growth. The major constraints to accelerating growth of SSI's in small towns, may be identified as follows:

- i) Inability of small units to get orders for components manufacture from LSM and farm implements from agriculture.
- ii) Inability to achieve quality control and to meet tight delivery schedules.
- iii) Lack of specific skills like advanced millwork, metal fabrication, precision welding, all of which are needed for producing quality products with low tolerances and precise dimensional control. In other cases accounting and management skills may be inadequate.
- iv) Difficulty faced by small units in getting good quality raw materials, which often can only be ordered in bulk (for which the small entrepreneurs do not have the working capital).
- v) Absence of fabrication facilities such as forging, heat treatment and surface treatment, which are required to achieve dimensional precision for manufacture of high value added products, but are too expensive for any one small unit to set up.
- vi) Lack of credit facilities.

2.4 Proposed Institutional Structure for Overcoming the Constraints: Industrial Support Centres (ISCs) at the Local Level, and Enabling Institutions at the National/Provincial Level

The Concept

The concept of the Industrial support Centres is based on the fact that small-scale industrialists in Pakistan have already demonstrated a high degree of entrepreneurship, flexibility, innovation and ability to work hard. The ISC would provide an opportunity for rapid growth to SSEs through a demand driven and decentralized support system, which ensures continuous easy access to a comprehensive package of support services such as credit, skill training, marketing, managerial advice and technical assistance. The ISC would also be linked up with the

recently formed SMEDA, VTIs, national research centres, and donor agencies for drawing upon technical expertise, training and financial resources of these agencies in the service of SSEs.

Both the Punjab Small Industries Corporation (PSIC) and Sarhad Small Industries Corporation have a number of “Common Facilities Centres (CFCs) located near regional specific clusters of small scale enterprises. For example, PSIC has 13 CFCs in fields such as wood products, metal, leather and ceramics goods. However, these CFCs suffer from four problems which constrain their ability to perform an effective role in catalyzing SSEs: (a) their focus is almost entirely on providing specialized fabrication facilities, prototype development, and to a lesser extent, credit. They are not designed to provide marketing link-up with LSM for subcontracting jobs, or organizing unit clusters for diffusion and adoption of prototypes.¹⁸ (ii) Even their specialized fabrication facilities (which is their main focus) are in many cases obsolete and have failed to keep pace with changing market conditions and production techniques. This lack of technological dynamism and responsiveness to market conditions is due to the rigid structure within which government sponsored corporations’ function.¹⁹ (iii) They are suffering from lack of systematic and continuous contact with clusters of SSE units near the CFCs, thereby constraining their ability to provide effective support. (iv) When faced with financial problems, they tend to start producing “prototypes” on a commercial scale, thereby becoming competitors of SSE cluster units rather than acting as support institutions.

Institutional Structure of ISCs

The ISC’s should be located in specified growth nodes where a potential exists for major rural industrialization activities. (Proposed growth nodes for each of the provinces of Pakistan are given in Appendix 2). It would be necessary to ensure that they are market driven, efficient and independent of patronage based pressures from bureaucrats and politicians. In the pursuit of this objective, it may be advisable to institute the ISCs as private limited companies with independent boards of directors.

¹⁸ See Case Study on the CFC in Mian Channu, Punjab, Appendix 4. Also see Akmal Hussain and Omer Asghar Khan: PHMP Project Proposal for Phase II, SIDB, NWFP and D.G for International Cooperation, Netherlands.

¹⁹ Report of the Sub-Committee on Cottage and Small Scale Industry in Punjab, 1999, Page 42.

This initiative can be taken by the newly established Small and Medium Enterprise Development Authority (SMEDA) in collaboration with provincial governments, multilateral agencies and industry specific associations. SMEDA has included amongst its objectives the provision of catalytic institutional support in the light engineering sector of SMEs. However, it has yet to prepare a policy program for intervention in this sector. Since SMEDA is reporting directly to the Prime Minister and also has a competent set of professionals it has both the political and professional capability to undertake the initiative proposed in this section. (A profile of SMEDA is discussed in the following Section III of this Report).

Functions

The Industrial Support Centres would have the following functions:

- (i) Catalyzing the process of organizing industry specific organizations of SSEs in nearby clusters, and providing a support institution for marketing, quality control, technical facilities, prototype development and credit. The ISC would maintain continuous contact with members of associations to facilitate diffusion of ideas and prototypes as they are developed.
- (ii) Marketing: Provision of orders from the large scale-manufacturing sector for components, and from farmers for farm implements. These orders would then be sub-contracted to the cluster of SSE units that the ISC is supposed to serve. The individual order would be sub-contracted to the SSI on the basis of the skills and potential strengths of the unit concerned.
- (iii) Monitoring and Quality Control: Having given the sub-contract, the ISC would then monitor the units closely and help pinpoint and overcome unit specific bottlenecks to the timely delivery and quality control of the manufactured products. These bottlenecks may be specialized skills, equipment, good quality raw material or credit.
- (iv) Skill Training and Product Development: The ISC would provide specialized supplementary skill training on its premises or in one of the new Vocational Training Institutes (VTIs) that are now emerging, to workers in the SSE units when required. At the same time, it would provide advice on jigs, fixtures, special tools and product development where required.
- (v) Forging and Heat Treatment Facilities: The ISC's would establish at their premises plants for forging, heat treatment and surface treatment. The SSI units could come to the ISC to get such fabrication done on the products they

are manufacturing on sub-contract, and pay a mutually agreed price for this job to the ISC.

- (vi) Credit: The ISC would provide credit to the SSEs for purchase of new equipment and raw materials. This credit could be accessed from the recently formed SMEDA, Small Business Finance Corporation, and nationalized commercial banks who are currently developing special windows for credit to small and micro enterprises. In cases where raw materials are available in bulk supply, the ISC could buy it from the source, stock it on its premises and sell at a reasonable price to units as and when they need the raw materials. Alternatively, it could access raw materials as required from local branches of the proposed Raw Material Bank (see next sub-section).

The specific technical facilities required by ISCs in the metal based and light engineering industries by way of illustration are indicated in appendix 1, together with product groups.

Enabling Institutions at the National/Provincial Level

To initiate and sustain interventions for accelerating the growth of SMEs an enabling set of institutions at the national level would be necessary. The following three institutions can be candidates for such a role:

- (i) Small and Medium Enterprise Development Authority (SMEDA). This institution is already in place and has just begun work. The two key objectives of SMEDA are to: (a) represent the interests of SMEs in the process of national policy formulation at the highest level to create an enabling policy environment for the growth of SMEs, and (b) to formulate a comprehensive package of institutional changes and support services in nine selected industries in the SMEs sector and coordinate from various sources the provision of such support services in the fields of technology up-gradation, credit, marketing, and management expertise.
- (ii) Demand driven industry specific Vocational Training Institutes (VTIs) initiated by a Vocational Training Council (VTC) at the provincial level. (See Chapter III, Section 5 for a more detailed discussion on the VTIs project).

An important element in enabling the growth of SMEs would be the provision of industry specific skills at a level of competence required by the SMEs. As the other institutional constraints to SMEs growth, are overcome, the availability of technicians would facilitate not only a higher growth of SMEs, but also a higher growth of productivity and overall improvement in the distribution of income.

The government of Punjab has recently undertaken a major initiative in this regard by setting up a Vocational Training Council (VTC) which has brought together expertise from the private sector, government and donors in devising a program for the establishment of 50 VTIs in different districts of the Punjab. Each of the VTIs would have an independent Board of Directors and professional management drawn from the relevant industries. The courses for each VTI have been designed by the best practice private sector industries and some of these industries have guaranteed employment to the graduates of such VTIs. The VTIs are initially funded by Rs. 3.4 billion from Zakat fund and will train young men and women from poor families who would otherwise be eligible for Zakat donations. Three of the VTIs have already been established and started functioning. If this undertaking proves to be a success, it could become a model for other provinces in the country, for employment generation and poverty alleviation on a sustainable basis through Zakat Funds. SMEDA is already closely coordinating with the VTC and its associated VTIs.

iii) Establishment of Raw Material Banks for SMEs

The provision of quality raw materials to SMEs is essential if they are to achieve quality control of finished goods and conform to the quality control norms of ISO-9000 and ISO-14000. Currently, there is a severe problem of acquiring quality raw materials for SMEs, particularly, in the light engineering sector. This is partly due to the fact that the minimum sale lot is higher than the requirements of any one SME. On the basis of hearings that we conducted with different groups of SME owners in different districts of the Punjab the following problems facing SMEs in acquiring raw materials were identified:²⁰

²⁰ Report of the Sub-Committee (of which the author was a member), on Cottage and Small Scale Industry, op. cit., Pages 31-34.

- Because of the high minimum sale lot of metal-based raw materials, SMEs have to depend on commercial importers thus incurring a higher cost.
- Commercial importers in an attempt to maximize profits often pick up stock lots of materials which are sub-standard, thereby, adversely affecting the quality of finished goods.
- Traders do not give sales tax invoices to the buyers of small quantities of raw materials, and thus, SMEs cannot claim reimbursement of sales tax that is built into the price of inputs. This means a loss of 8 to 10 percent on sale revenues compared to the larger manufacturers.

A new policy initiative through which the problems associated with raw materials for SMEs can be resolved, is to set up Raw Material Banks near clusters of SMEs, managed by Industrial Support Centres (proposed above), in collaboration with the respective associations of industries. Information regarding sources of raw materials, prices and quality specifications, management expertise for running the banks and credit could be coordinated by SMEDA.

CHAPTER III

RECENT GOVERNMENT INITIATIVES FOR EMPLOYMENT GENERATION AND POVERTY ALLEVIATION

In this Chapter, five government initiatives for employment generation and/or poverty alleviation are examined, some of their structural weaknesses identified, and policies proposed for overcoming them in those cases where the schemes are potentially viable: (i) SMEDA, (ii) Self-employment Scheme, (iii) PRSP, (iv) PPAF, (v) Zakat as a safety net for the indigent, and (vi) VTIs.

Section 1

Small and Medium Enterprise Development Authority (SMEDA): An Assessment

1.1 Origins

SMEDA represents a major government initiative at the federal level to establish an apex institution for coordinating support to SMEs in order to rapidly accelerate their growth. In this Sub-section the goal, objectives and modus operandi of SMEDA will be examined. Since it was established only a few months ago and it has yet to produce results on the ground it is too early to make an evaluation of its performance. However, an assessment will be made of the prospects of its success in the context of the pitfalls it faces in the foreseeable future and some of the necessary conditions required to avoid them.

The origins of the establishment of SMEDA lay in the recognition that the provincial level small industries corporations (there is one in each province), are bureaucratized and starved of resources to a point that they are incapable of playing a lead role in the transformation of the SMEs sector. It was successfully argued at the highest level in the government that an apex body was required which had the professionalism and energy necessary to induce a quantum jump in the performance of SMEs to achieve a significant impact on employment, GDP growth and exports.

1.2 Goal

SMEDA is expected to produce a corpus of detailed support policies and act as a lobby group for SMEs in the highest policy making echelons of the government on

the one hand, and provide an apex support system to coordinate the provision of a range of services for strategic sectors of small scale industry, on the other.

1.3 Objectives

SMEDA hopes to achieve the following objectives:

- i) To provide a range of services “directly” to SMEs such as technical, financial, managerial and marketing services.
- ii) To strengthen, network and coordinate existing support institutions to “assist” SMEDA in the provision of the above mentioned services to SMEs.
- iii) To develop a firm level data base on the problems faced by SMEs and to provide information on technologies, financial intermediaries, marketing sources and management systems.
- iv) To provide key institutions and stakeholders in the government, a policy perspective on SMEs, in order to create an enabling policy environment for SMEs. In this regard, heads of key policy making institutions in the government would be periodically briefed on the work of SMEDA and the role of SMEs. The purpose is to sensitize various government institutions to the role and problems of SMEs in order to get the support of such institutions.

1.4 Mode of Functioning

For purposes of SMEDA’s work, SMEs are defined as all businesses in the manufacturing and service sectors with an investment in productive assets (exclusive of land and building) of upto Rs. 40 million. (This figure would be periodically revised to take account of changing economic conditions).

SMEDA will select strategic sectors which have the potential for high value added production to make a significant contribution to accelerating GDP, exports and employment generation. The sectors that SMEDA has selected to start with are: Light engineering, fisheries, livestock development for both milk and meat production, fruits and vegetables, sports goods, surgical instruments, apparel, gems and jewelry, transport, and information technology.

For each of the selected sectors, a strategic plan would be developed with the participation of relevant SMEs and their representative organizations, on the basis of: (i) the size of the international market for its products, (ii) potential comparative advantage based on the strengths and weaknesses of existing SMEs in the sector, (iii) a detailed assessment of the technological, institutional, managerial and financial constraints to increasing efficiency, quality and output at each stage of the production process, (iv) the analysis of (i) to (iii) would be used to develop firm and industry level operational programs to achieve the objectives of the strategic plan.

After completion of the sector specific strategic plan it will be submitted to the Prime Minister for approval. SMEDA then hopes to bring to bear the support of government, provincial level government support institutions for SMEs, parastatal institutions, banks, DFIs, trade and industry associations and the private sector in the fulfillment of the strategic plan.

SMEDA plans to establish 10 sector teams. Each sector team consists of a Sector Head who is a senior management expert with 5 to 6 years experience, two Sector Specialists with masters degrees in business and engineering with three to four years experience, and two Sector Councilors. The Sector teams are backed by a support staff consisting of specialists in the following fields: Marketing, Management Support Services, Technical Support Services and Financial Support Services.

1.5 Current Work

SMEDA has currently established two sector teams. One team will work on livestock, fruits and vegetables and the other on light engineering. Apart from these two fully established teams, SMEDA staff is also working on the fisheries sector under the direct leadership of the Chief Executive Officer.

1.6 Work in Process: An Illustrative Example

At the moment, SMEDA is in the process of developing a strategic plan for marine fisheries, to increase exports from US\$170 million last year to US\$500 million in the foreseeable future. (The current annual global demand has been estimated at US\$ 52 billion). In this regard, through consultation with a wide range of stakeholders, SMEDA has developed plans to overcome the technological, managerial, financial

and institutional constraints at each stage of the value chain from the catching of fish, transportation, storage, domestic and foreign sale, to the infrastructure and governance of the Karachi fish harbour. For example, to increase the fish catch per launch for each outward trip, the existing out-dated communication system is hoped to be replaced with a GPS system with a two-way radio facility. (This will involve getting permission from the Pakistan Navy to use a two-way radio within Pakistan territorial waters by fishermen); the large volume of fish wastage, and deterioration of quality is to some extent due to the fact that layers of fish are alternated with layers of hard, sharp edged ice. During transportation on the sea, the sharp edged ice cuts into the fish causing the resultant blood to percolate down to the lower layers of the fish resulting in putrefaction. At the same time, the fish in the lower layers are crushed by the weight of fish in the upper layers. This is another factor in bacterial growth in the lower layers. (By EU quality standards much of the fish sold in the Karachi harbour is unfit even for animal consumption).

SMEDA has planned to help develop a factory for flake ice which is much softer and to use sliding steel trays for each layer of fish in order to substantially reduce losses and quality deterioration. (The production of steel trays can be contracted to local SMEs in the light engineering sector). Similarly, the auctioning procedure is hoped to be made more transparent and improved storage facilities for fish established at the Karachi harbour to meet with ISO-9000 standards for exports. A major change in the governance of the Karachi fish harbour will be required. Due to the danger of coming into clash with the Karachi fish mafia, it is envisaged that a Rear Admiral of the Pakistan Navy would be appointed to restructure the governance of the Karachi fish harbour. A consortium of banks is hoped to be created to finance the up-gradation of the physical infrastructure of the fish harbour, and provide credit to associations of fishermen to upgrade their communication technology. A total of 6 billion rupees is estimated to be required for turning around the fisheries sector at the Karachi harbour.

1.7 Some Pitfalls: Can they be avoided?

From the perspective of achieving its objectives, SMEDA faces a number of pitfalls that are inherent in its design:

- i) While SMEDA has or can develop capabilities for devising strategic plans for each of the selected sectors, the ability to implement them is severely

constrained by: (a) lack of its institutional outreach to the large number of SME clusters which are geographically widely dispersed across the country. (SMEDA's claim that it can provide support services to SMEs "directly" is not realistic in view of the appropriately small number of its personnel and lack of a direct outreach capability to the SME clusters across the country. See Appendix 2, for a list of SME cluster locations), (b) lack of a formal structured relationship even with regional support institutions such as small industries corporations at the provincial level (for light engineering), livestock development boards, or community based support organizations in the rural sector (for SMEDA's forthcoming sectoral strategic plan for livestock), and the Karachi fish harbour authorities (for SMEDA's marine fisheries development plan). The stated objective of coordinating existing support institutions to "assist" SMEDA in the provision of services to SMEs is also unrealistic in view of the fact that these institutions are not designed to provide the fast track high quality services envisaged by SMEDA, and would in any case resist SMEDA's attempt to establish control over autonomous provincial level institutions.

- ii) Yet the cooperation of such institutions and their willing integration into SMEDA's plan implementation process would be necessary if the wide range of services envisaged under the plans are to reach SME units on the ground. Their support may also be needed to build the unit specific data base which is included in SMEDA's objectives in order to develop support policies for SMEs. What makes an effective relationship between SMEDA and these regional and location specific support institutions particularly complex, is that they are at the moment rigid, bureaucratic structures, characterized in most cases by low competence level of personnel, absence of performance based evaluation and lack of motivation. A major restructuring of provincial Small Industries Corporations is necessary, not only to increase their effectiveness with respect to SMEs, but also to link up effectively with SMEDA's planning and implementation process. Some of them are already perceiving SMEDA, either as a source of getting a share of federal government resources, or as a threat to their turf. That is why, quite understandably the first battle that SMEDA is fighting, is to win the support of as many influential members of the government as possible to acquire the necessary leverage with regard to

provincial and local institutions. (Hence the current intense public relations effort of “getting the major actors on board”).

One of the ways in which SMEDA can develop an outreach mechanism is to foster the establishment of ISCs (proposed in Section II.2.4) and coordinating their work through ISC monitoring cells especially set up as autonomous units located at provincial Small Industries Corporations. These ISCs would be providing a range of services to SME clusters within their geographic range. Included amongst SMEs receiving support from ISCs would be some that had earlier been established under the auspices of provincial Small Industries Corporations. Thus SMEDA, by fostering the establishment of ISCs, would give a sense of participation to provincial Small Industries Corporations and, at the same time, through its monitoring cells located at their premises, SMEDA could lay the basis of ultimately helping to professionalize and restructure these provincial support institutions.

- iii) SMEDA represents a high profile initiative by the Prime Minister, and is directly dependent on him for approval of strategic plans and fast track implementation. Therein lies both its current strength and its possible weakness with a possible change of the regime in the future. Precisely because SMEDA is seen to have been established by the incumbent Prime Minister, the wide range of government and parastatal support institutions upon which SMEDA will depend for its outreach may cease to cooperate with SMEDA once a change of regime takes place. Equally unfortunate is the possibility that the new regime may try to consciously undo the autonomy and professionalism that SMEDA currently enjoys. This has been the sad tradition in Pakistan since late 1977 when each new regime tries to target with its own political appointments those institutions which are seen to be the creation of the earlier regime. In order to prevent such an eventuality or to reduce its probability, it is necessary for SMEDA to resist government sponsored appointments within its organization and at the same time to systematically build working links with a wide range of non-governmental and parastatal institutions to show in practice that its nature and working is derived entirely from its public service objectives. At the same time, SMEDA needs to demonstrate the nature of its work, its efficacy and its broad based linkages with institutions in government, parastatal, non-governmental organizations,

private sector and civil society through an effective communication system. Ultimately, the source of SMEDA's strength and sustainability will lie in its impact on the growth of SMEs, and its integrity, professionalism and commitment, as perceived by the SMEs themselves.

Section 2

Self Employment Scheme

The Self Employment Scheme launched six months ago stipulates the provision of loans to the unemployed and those with existing micro-enterprise units seeking business expansion. This scheme is an enlarged and more lenient version of the small business scheme launched under the auspices of the Small Business Finance Corporation (SBFC) in 1992. The collateral requirements of the new SES scheme are even more lenient than in the earlier scheme. During the period 1992-1996 when the earlier version of the scheme was in operation SBFC suffered a 50 percent default rate on its disbursed loans.

The Self Employment Scheme has a planned disbursement target of Rs. 7 billion initially, which could go up to Rs. 250 billion subsequently. The range of individual loans varies from Rs. 50,000 to Rs. 500,000, at an interest rate of 15 percent which is about 5 percent lower than the current bank interest rate on loans to commercial borrowers outside the scheme. The applicants under the SES are required to show that they are at or above a minimum age of 18 years (no upper limit). However, there is no requirement either of literacy, any prior experience in the business he/she seeks to undertake or even a rigorous project feasibility. The SES scheme does not include any arrangements for provision of training to borrowers in the business they wish to undertake for the first time, nor of technical support, marketing or even unit specific monitoring. SMEDA has recently been given the responsibility of monitoring the banks which are disbursing the loans.

The SBFC and five nationalized banks are required to aggregatively reach the target disbursement figure of Rs. 7 billion. So far, six months after launching the SES Rs. 5 billion have been sanctioned by various banks and just over Rs. 3 billion actually disbursed to about 7,000 borrowers, in the first five months. The borrowers are concentrated in the Punjab province, especially in Lahore and Rawalpindi. The

nationalized commercial banks having acquiesced to the request during a high level meeting to allocate part of their credit for this scheme have subsequently shown, quite understandably, a certain hesitation in actually disbursing the loans. In response to the initial slow pace of disbursement (relative to the targets) the Prime Minister began listening to complaints of applicants once a week and then issuing necessary instructions to the relevant banks. Since then the pace of disbursement has accelerated to reach almost Rs. 5 billion in the first six months.

It has been well-established in Pakistan and other South Asian countries over the last two decades, that micro enterprise loans result in increased incomes of the poor and have a low default rate, only when these loans are accompanied by a package of services to the borrowers. These include careful evaluation of micro enterprise project proposals, social mobilization or group formation, technical training, technical support and marketing facilities at the community level, as part of a process of Participatory Development.²¹ Where these conditions have been met, (e.g., AKRSP, SUNGI, PIEDAR, PRSP and OPP), the default rate has been less than five percent, and the loans have had a substantial impact on the incomes of the borrowers. The most important reason why the small business finance scheme had such a high default rate (50 percent) during the period 1992-96 (even though the loans were primarily disbursed to existing small businesses) was that the institutionalized provision of support services at the local level, so vital for the success of micro finance was not included in the design of the scheme.

In designing the new Self Employment Scheme, even the lessons from the failure of the earlier scheme were not learnt, let alone, the well-documented positive experiences of a wide range of NGO initiatives in micro finance in Pakistan. Consequently, the new scheme cannot be expected either to have a positive impact on the poor in terms of creating a sustainable basis for income generation and

²¹ See: Akmal Hussain:
- Poverty Alleviation in Pakistan, Vanguard Books, Lahore 1994.
- Punjab Rural Support Programme: The First Four Months, Report of the Honorary Chief Executive Officer, November 1998.
Ponna Wignaraja, et. al:
- Participatory Development, Learning from South Asia, United Nations University Press, Tokyo and Oxford University Press, Karachi, 1991.
- Report of the Independent South Asian Commission on Poverty, 1994.

employment or to have a lower default rate than the earlier SBFC operated scheme. At best, it is primarily a one-time handout to the poor. In actual fact the scheme may not achieve even this purpose since the mechanism of disbursement is such that it cannot ensure that the loans actually reach the poor and are not misappropriated by the relatively affluent. Even in cases where the loans reach the poor, the absence of support services and high default rates means that the poor in so far as they may invest their own savings alongwith the loans into unsuccessful projects, may actually lose their savings and become worse off than they were before borrowing the loan.

Section 3 **Punjab Rural Support Programme (PRSP)²²**

The Punjab Rural Support Programme represents not only the largest provincial level poverty alleviation programme, but also achieved results on the ground faster than any other poverty alleviation initiative in the country. For example, in its first six months of operation the PRSP established 1100 community organizations of the rural poor, compared to NRSP, which managed to form 787 in its first four years of work. PRSP could also be distinguished from other large scale support organizations in terms of its management approach and the role of synergy and consciousness in changing the material conditions of the poor as measured through verifiable indicators. PRSP perhaps also represents significant lessons on how the politics of power and intrigue within a decaying elite begins to intervene, when the potential of the poor is unleashed. In this section we will briefly indicate the objectives of the PRSP, the specific management principles and mode of its functioning and the verifiable indicators of performance at the end of the first four months of its work.

3.1 Origin

Subsequent to the adoption by the Federal Government of the main proposals contained in the Report of the Task Force on Poverty Eradication²³, the Chief Minister Punjab decided to take a major initiative to finance the setting up of the PRSP through

²² This sub-section is based on the Report of the Honorary Chief Executive Officer of PRSP to the Board of Directors, November 1998. The full text of the CEO's Report is given as Appendix 4.

²³ Report of the Task Force on Poverty Eradication, May 1998.

a Rs. 500 million grant. The PRSP was established as a non-profit private limited company registered under the Companies Act. The grant from the Punjab Government was placed into an endowment fund and it was decided to finance the operations of the Company through interest income from the endowment fund and on-lend to the poor through a credit line initially from the NRSP and then from a commercial bank. An Honorary Chief Executive Officer was appointed and work began in May 1998 for hiring and training the staff of PRSP and at the same time developing a five year plan of work. By June 1998, eight regional teams had been developed and deployed in eight divisions of the Punjab, coordinated and supported by a Camp Head Office in Lahore. Each team consisted of a Regional General Manager, three to four social mobilizers, and a credit control officer, trained in operating computerized accounts.

3.2 Goal

The goal of the PRSP is to overcome poverty in rural Punjab within a decade by actualizing the potential of the poor through a regional support system. The system is designed to enable organization of poor village communities, through rediscovery of community consciousness, and provide access to skill training, credit and technical support. The purpose of such a support system is to initiate and sustain a process of diversified growth of income and the human, natural and economic resources of the poor.

3.3 Objectives of the Programme:

- i) Organize approximately 1.63 million households, into approximately 29,681 community organizations with approximately half of them female COs, in 13,629 villages, to achieve 100 percent coverage of the poor population in the target regions.
- ii) On the basis of a series of dialogues with COs, identify a portfolio of diversified income generation projects in agriculture, livestock, micro enterprises and small-scale infrastructure. Through implementation of these projects, achieve a 50 percent increase in income levels of the poor population in the target region in five years, on a sustainable basis.
- iii) Enable the provision of training to 107,372, men and women amongst the poor population in the target districts over a five year period, in the following

fields: Community Management, Livestock, Agriculture and Forestry, Poultry, Technical/Industrial Training, and Micro-enterprise development.

- iv) On the basis of social mobilization, skill training and provision of technical support, provide credit of Rs. 6.66 billion to Rs. 486,240 beneficiaries over a five-year period, and achieve 95 percent pay back.
- v) Achieve a savings fund of COs of approximately Rs. 428.51million in the target regions.

3.4 Consciousness, Management Culture and Work Procedures:

The defining feature of the Programme which perhaps distinguished it from the other rural support programmes in the country was the participatory approach to management within the PRSP team. The challenge was to create a work environment in which each individual could become a centre of independent thought and action and yet create a synergy through which collective reflection could catalyze thought and coordinate action for social change. Given the magnitude of the task before PRSP and the pace and energy required, such a management culture was essential to a new passion: A passion which impelled those who worked in the PRSP team, and those for whom it worked. It comes from transcending the ego and relating with the community through love. Thus, passionate consciousness is both a cohering force of the community and also the synergy through which the PRSP team engages in a process of action and reflection. This principal is the basis of the work culture and the methodology of action of PRSP. It was illustrated by the dialogues that occurred between PRSP personnel and rural communities, on the one hand and between the members of PRSP team on the other. The dialogues were designed to identify and actualize the creative potential of individuals.

3.5 Verifiable Indicators

In a program whose defining feature was to enable the formation of community organizations and the development of community consciousness, the most important verifiable indicator was the number of community organizations formed. A CO was deemed to have been formed only when it had acquired the ability to hold regular meetings (at least three) with proper documentation of the meetings and to have opened a savings account with contributions from each of its members.

The number of CO meetings held (with over sixty percent attendance) became the second indicator and the amount of CO savings was the third indicator of program performance.

Household level portfolios of investment were developed by the regional teams through detailed dialogues with communities. These portfolios of investment indicated the income generating activity that households wished to undertake. The obstacles to undertaking such projects and successfully completing them were identified. The number of portfolios of investment completed, thus became the fourth indicator of program performance.

The basis of the credit appraisal of the portfolios of investment was the assessment of their viability first by the CO and then by program staff members. Credit disbursements therefore represented collective evaluation of individual projects and became the fifth indicator of program performance.

Training needs in the context of both household level projects and collective projects were identified as an essential element in the process of localized capital accumulation. Training needs were identified on the basis of dialogues between program personnel and COs. The number of persons trained in various fields thus became the sixth indicator of program performance.

Finally, credit payback performance indicated not only the success of income generation projects but also the capacity of the CO to bring to bear its collective identity in ensuring timely payback of borrowed money by the individual households.

In the long run the ability of COs to design and implement collective projects and to resolve social conflicts at the CO level would become an important indicator of program performance.

3.6 Programme Progress July to October 1998

In the period July to October 1998 the PRSP had, by the Grace of God, not only established eight regional teams in the target divisions but had formed 764 community organizations with a collective savings fund of Rs. 2.758 million. (By December 1998, six months after start up, PRSP had formed 1100 community organizations). The PRSP had disbursed Rs. 22.41 million of credit to 1403 beneficiaries in a wide

range of fields including agriculture, livestock and micro-enterprises. The recovery rate of credit was 100 percent. Training had been imparted to 782 village activists in community management skills, agriculture and livestock.

Underlying the quantitative achievement, in terms of verifiable indicators, was the fact that a change had begun to take place in the quality of life of the rural poor in the areas of operation. Across the eight regions, it was apparent, that the organization of poor village communities and the initiation of income generation projects had not only given a new confidence and collective purpose, but had also significantly increased their individual incomes. For example, small household *durri* producers in one region were locked into an exploitative relationship of dependence on *arhtis*. The *durri* manufacturers were provided with raw materials at higher than market prices by the *arhtis*, while *durris* were acquired by the *arhtis* at less than market prices. After the PRSP intervention, these *durri* manufacturers started buying raw materials and sold *durris* independently, which led to an increase in their incomes typically from about Rs. 2,500/- per month previously to about Rs. 4,500/- per month. Similarly, in other regions, poor households had set up small village retail shops, acquired buffaloes, small goats, set up bicycle repair shops and Chikkh producing units. A total of 1403 households had benefited from such interventions. Beyond the income dimension a change in social consciousness was noticeable: For example, in Multan a village community reported that they were beginning to settle their disputes within the CO and had even resolved amicably the disputes, which they had earlier registered at the local police station. A women's CO in the same area had set up a girls school, indicated the beginning of collective action for the collective benefit of the community.

The PRSP had also succeeded, by the grace of God, in establishing linkages with government line departments and the private sector to bring their expertise to bear for poverty alleviation at the village level. For example, the Department of Livestock and Dairy Development had been mobilized to provide training to village activists in improved livestock management, the Department of Agriculture had been mobilized to give advice on pesticide use and the Department of Health had been mobilized to provide their expertise at a community managed health camp for 650 members of

various COs. In the private sector arrangements had been made with AEFSCO²⁴ leading to the holding of workshops in all regional offices to inform CO members about the importance of soil testing and how a composite fertilizer that was congruent with the nutrient requirements of each farm could increase yield per acre by 15 to 50 percent. AEFSCO offered to do soil testing in the target areas and provide custom-made composite fertilizer to farmers on demand. Similarly, Nestle Milkpak had been persuaded to offer their services to show to poor farmers how a scientific mix of cattle feed could both reduce the costs of feed and double milk yields of buffaloes and cows. They had also offered to pick up milk from villages on a pilot basis initially at Sahiwal.

In short, across the eight regions of the Punjab, the seed had been planted of community organization, improvement in incomes, skills, systematic provision of technical support at the village level, and a change in social consciousness.

3.7 Lessons Learnt, and Implications for ‘Scaling up’

The experience of the PRSP in its first six months (July to December 1998) has demonstrated the potential of the Punjab peasantry to pursue liberation from the bonds of economic dependency through creative action. Equally manifest was the relentless pursuit of power, patronage and political control by the ruling elite. The discourse of love and the perception that a sense of community consciousness could become the basis of changing their material conditions, elicited an enthusiastic response from the poor peasantry. Underlying their operative psyche deployed for functioning in an atmosphere of deceit, dependency and desperation, there is a deeply rooted consciousness of love, integrity and creative action. This can be seen in the living folk tradition of the Punjab peasantry. It lies just below the surface of language use, in their silences as much as the cadences of their speech.²⁵ Once this counter-consciousness of relatedness, integrity and creative action is brought to the surface, a new recognition comes into play. The challenge in the dialogues undertaken by PRSP was to bring about this gestalt switch in consciousness, through word, gesture and work procedures. The awakening of this consciousness and the promise it held of an

²⁴ AEFSCO is a private sector firm specializing in soil testing and production of composite fertilizers.

²⁵ For a more detailed discussion of this issue see: Appendix 4.

alternative way of being for the poor, was a major factor in the unprecedented pace of PRSP's achievements in terms of verifiable indicators. (Number of COs formed, level of collective savings, loan recovery rates and number of income generation projects undertaken).

The progressive development of a sense of community consciousness, improved skills, increased productivity, incomes and savings, enable the poor to become active subjects in a process of overcoming their economic deprivation and social bonds of dependency. This perhaps constitutes 'empowerment' of the poor. By contrast, the power of the ruling elite is constituted by fragmenting and isolating those they 'govern', and locking them into a relationship of dependence, in which each handout of resources to the poor reinforces their dependency and reproduces their poverty. The enterprise of poverty alleviation, therefore, brings into focus two counter-posed conceptions of power. The issue of taking 'poverty alleviation' to scale, raises the question of how a different space is to be created, in which the process of reproducing the power of the ruling elite is replaced by a process of 'empowerment' of the poor.

The very concept of 'empowerment' of the poor, is problematic in a form of governance in which political support is to some extent acquired and maintained through patron-client relations between the 'governors' and the 'governed'. In this context, disbursement of the state's financial resources and provision of employment opportunities are used as a means of enlarging patronage and power. Even some of those who are heading large government initiated, but autonomous poverty programmes, tend to operate them as fiefdoms and form alliances with politicians and the bureaucracy by granting them unwarranted access over resources and employment decisions within their 'demesnes'. Consequently, resources (whether granted by donors or government) apparently provided to create a space of empowerment for the poor, tend to get re-appropriated by the ruling elite. The space of empowerment for the poor tends to get restructured into a more complex space which appears to be empowering the poor while actually reinforcing their dependency through patron-client relations. PRSP has begun to be subjected to this dialectic. From its very inception the bureaucracy and politicians made demands to appoint their favoured clients to different positions within the PRSP team. When these demands were resisted, and PRSP achieved results beyond their expectations, actions were initiated

in December 1998 to undermine the autonomy of the PRSP and subtly integrate it into the bureaucracy and its domain of power.

The question that arises is how scaling up of support organizations for Participatory Development is to be achieved without bureaucratizing the support organizations and the space 'allocated' for the empowerment of the poor, prevented from being used for the exercise of patron-client relations. This possibility occurs whenever governments create large support organizations which while being formally autonomous are actually subordinate to the ruling elite and its mechanisms of reproducing dependency.

Section 4 **Pakistan Poverty Alleviation Fund (PPAF)**

4.1 Origin

The Pakistan Poverty Alleviation Fund is in the process of being established as an autonomous institution with a Rs. 500 million (US\$ 8 million) grant committed by the Federal Government and US\$ 97 million expected from the World Bank. The PPAF has a Governing Council already in place which has elected a Board of Directors. Included in the Board are two nominees of the Federal Government in their ex-officio positions.

4.2. Goal

The project goal is to alleviate poverty and empower the poor at the all Pakistan level, by providing them with access to resources and services, using NGOs as partner organizations (or intermediaries) for the provision of micro credit, community infrastructure and 'capacity building'. The project is not designed to directly engage in social mobilization and village level institution building of the poor. Therefore, its goal of 'capacity building' of the poor will presumably be achieved through selected NGOs who would act as partner organizations for the PPAF.

4.3. Objectives

The project has three inter-related objectives:

- (i) Provide micro credit to the poor through NGOs which have a track record of micro credit of at least two years. It is presumed that the loans would be accompanied by technical support in order to enable households to translate such loans into increased incomes. However, it is not yet clear how such technical support would be provided.
- (ii) Support small scale community infrastructure schemes at the local level on the basis of organizing communities who would identify, prepare, implement and manage the schemes. The PPAF would provide funds as grants to partner organizations for financing such community infrastructure projects. However, the communities would be responsible for recovering operations and maintenance costs of these schemes. The average size of these schemes is expected to be about Rs. 500,000. In view of the fact that community organizations need to have reached a certain level of maturity and management capability for collective projects, the infrastructure schemes are to be delayed for at least one year.
- (iii) PPAF would provide grants to partner organizations and communities in order to strengthen their institutional capacity to engage in social mobilization, and implement and manage development projects at the local level. The PPAF has not yet developed a management system for selection and need assessment of NGO candidates applying for such grants.

4.5. PPAF: Pitfalls and Possibilities in the Future

Pakistan today may be at a conjunctural moment in its endeavour of overcoming poverty: Over the last decade the concept of Participatory Development²⁶ and the associated need for building independent and innovative support organizations has become a part of main stream development thinking in government, civil society and several multilateral development agencies. At the same, a large number of NGOs, using a variety of innovative approaches to Participatory Development have demonstrated significant results on the ground, although on a relatively small scale. A number of rural support programmes have also been established by the government. These RSPs while formally adopting the Participatory Development methodology

²⁶ The methodological and operation foundations of this concept were propounded in: Ponna Wignaraja, Akmal Hussain, Harsh Sethi and Ganeshan Wignaraja: Participatory Development, Lessons from South Asia, United Nations University Press Tokyo and Oxford University Press, Karachi, 1991.

have in practice exhibited the tendency to get bureaucratized and reintegrated into the patron-client structures of power. The former (Participatory Development NGOs) for a variety of reasons are constrained either from reaching scale, or being replicated rapidly, or both.

PPAF has the potential to become a major apex support organization for catalyzing the development and replication of NGOs, to take the enterprise of overcoming poverty in Pakistan through Participatory Development to a national scale. It can also act as a forum for careful evaluation of existing Rural Support Programmes (RSPs): Through cross-fertilizing dialogues with the NGO sector PPAF can help RSPs restructure themselves wherever possible and sustain their creative growth as genuinely Participatory Development organizations.

If PPAF is to perform this role, the following conditions may be necessary:

- (i) The single most important factor would be to achieve a genuine autonomy from the structures of governmental power. It must emerge not merely as an organization for disbursing credit and grants to micro finance institutions, but as an independent centre for catalyzing and coordinating innovative poverty alleviation initiatives on a national scale. This will involve (in addition to providing credits and grants to partner organizations), building the capacity for: (a) coordinating training of both village level specialists as well as social mobilizers and middle level management professionals for development NGOs, and (b) providing a forum for development NGOs to engage in collective reflection and research.
- (ii) PPAF will need to develop a minimum in-house capacity to rigorously evaluate its partner organizations and access technical resources from other institutions to monitor the performance of partner organizations and to provide them with management support and training on demand.
- (iii) An independent apex training institution at the national level may be required for training a variety of village level specialists in fields such as community management, animal husbandry, sustainable agricultural practices, and off-farm micro enterprises. As existing NGOs replicate rapidly and/or reach scale, a large number of such village level specialists will be required for which an apex training institution may be necessary.

- (iv) An independent monitoring and evaluation institution for NGOs/RSPs engaged in Participatory Development, would be helpful in providing PPAF with systematically collected information on the performance of existing and potential partner organizations, as well as give an impact assessment of the poverty alleviation effort. Such an evaluation and monitoring institution can be a lean outfit, accessing the skills of research and data collection institutions such as the Federal Bureau of Statistics, PIDE, SDPI, SPDC, and engaging active NGOs in participatory evaluation exercises. A corpus of data and research could be developed on the basis of: (a) Household level patterns of expenditure, consumption, economic activity, access over basic services, rights of women and security, (b) identifying the mechanism through which people shift out of poverty (this is already being done in a pilot project called Pakistan Poverty Assessment (PPA)), (c) Developing a poverty map showing the specific tehsil level and thana level location of the poor population, its social composition, forms of activity and nature of dependency relations through which their poverty is being reproduced, (d) a record of the discourse of the poor indicating how the poor themselves articulate their changing human condition.
- (v) Provide a national forum for policy dialogues on poverty. This forum would periodically bring together key policy makers, donor agencies, NGOs, RSPs, community based organizations (CBOs), and development professionals and researchers both from Pakistan and abroad. The purpose of the dialogues would be to engage in collective reflection on the lessons learnt from experience, help sensitize and coordinate poverty alleviation policies of both government and donor agencies and to identify new policy issues at both the national and local levels.

Section 5

Zakat and Ushr System and the New VTIs

The Zakat and Ushr System is supposed to be a safety net for the poor and indigent designed ostensibly with reference to the *Shariah*. Recently, the Punjab government has launched a major Rs. 3.4 billion program for vocational training in a variety of industrial skills for the poor on the basis of financing from Zakat Funds. In this Section we will briefly discuss both these programs.

5.1 Zakat and Ushr System

The Zakat and Ushr System in Pakistan while laying down a rigorous procedure for disbursement of funds through the government's administrative system, neither involves systematic participation of local communities in the identification of beneficiaries, nor does it have sufficient financial scale and geographic coverage to constitute an adequate safety net for the poor and indigent.

5.1.1 Administrative Framework and criteria for disbursement

Zakat funds are collected (as a tax at source) and disbursed under the Zakat and Usher Ordinance 1980. The purpose of the Zakat and Bait-ul-Maal is 'to assist the needy, the indigent and the poor'. There are four types of Zakat funds: (a) Central Zakat Fund, (b) Provincial Zakat Fund (c) District Zakat Fund (d) Local Zakat Fund.

The Central Zakat Fund which collects the funds at source may transfer funds to the Provincial Zakat Fund (which in turn can transfer funds to district and local funds), and at the same time, directly disburse grants to eligible individuals. The disbursement is made by Zakat Councils at the Central and Provincial levels and by Committees at the District and Local levels. The disbursement mechanism is essentially a top-down one with the Central Zakat Council preparing its annual budget for the utilization of funds and then the various disbursement councils and committees, preparing lists of individuals whom they think are eligible. The Zakat budget allocates funds in the following five categories: (a) Assistance to the needy, the indigent and the poor, particularly orphans and widows, the handicapped and disabled, (b) assistance to those affected or rendered homeless due to natural calamities, (c) to finance expenditure incurred in connection with collections, disbursement and administration of the Fund, (d) investment in any non-interest bearing financial instruments, (e) any other purpose permitted by Shariah.

Under category (e) above, a Food Stamp Scheme was recently initiated under the auspices of the Punjab government on an experimental basis. It was designed and implemented by Professor Sajjad Haider, who was a retired professor of Economics, at Government College Lahore, and a man of great integrity and single minded devotion. He was able to mobilize Assistant Commissioners, Deputy Commissioners, members of Local Bodies, the members of the Provincial Assembly and reputable persons from civil society at the local level, to prepare lists of indigent people who by

all accounts were deserving of Zakat funds. Food Stamps were issued to such persons who could use the Food Stamps to buy a fixed quantity of Atta (flour) on a monthly basis at subsidized rates. The Scheme was tried in three districts and after evaluation of its great success, it was extended to nine districts of the Punjab. Professor Sajjad Haider died in a helicopter crash in December 1998 while returning from a field trip in Bahawalpur, undertaken in connection with the implementation of the extended scheme. This experiment showed that Food Stamp schemes, if they are operated on the basis of integrity, dedication, broad based consultations with stakeholders especially poor communities, then it can contribute to provide cheaper food to the indigent. It could perhaps be strengthened if it is combined with a scheme for encouraging the savings of the recipients, training wherever possible and credit for micro enterprises in the homes of the indigent.

5.1.2 Limitations of Existing Scheme and Policy Constructs for Greater Effectiveness

The scale of Zakat funds available and the present administrative mechanism of disbursement, are such that the Zakat and Bait-ul-Maal institutions, cannot be expected to alleviate the condition of the indigent and handicapped, in a significant and sustainable way:

First, there is the problem of inadequate coverage. The disbursement of Zakat funds annually is about Rs. 2.5 billion in a situation where approximately 28 million people are living below the poverty line (defined in terms of a minimum calorific norm). Consequently, Zakat funds, even as a top-down cash handout of Rs. 300 per month per person, would cover only 2.5 percent of the poor population on an annual basis. To provide even the minimum food requirements to the poor population through a cash handout would require an annual Zakat disbursement of Rs. 14 billion (not including the administrative costs) annually. Even if Zakat funds were available on such a scale, given the present centralized mechanism of disbursement it is highly unlikely that the money would actually reach the mustahqeen (the eligible persons) in all cases.

Second, the top-down disbursement procedure in which the Central Zakat Council transfers the funds to Provincial Zakat Fund and thence to District and Local Zakat Funds suffers from the problem of accurate identification of the beneficiaries. The

lists of beneficiaries prepared by the Central and Provincial Zakat Councils do not even include the participation of the lower Zakat bodies, let alone the poor. Therefore, the lists of beneficiaries far from being based on any consultation with poor communities, actually suffer from a certain arbitrariness and inadequate assessment of the actual needs of the poor. Moreover, since the Central Zakat Council strives to achieve uniform distribution of funds throughout its jurisdiction, the question of assessing the relative needs of the poor, does not arise.

Third, the disbursement procedure which is at best a cash handout to a small fraction of the poor population, does not take into account the possibility, that the funds could be used for enabling the poor to achieve a sustainable increase in their incomes.

Fourth, at the moment the administration of Zakat and Usher seems to be split between the conservative elements at the Central Zakat Council level who are trying to safeguard the system with tight checks and balances to ensure complete control over the distribution of funds and the more 'progressive' elements at the provincial level who want the system to be less rigid and be more responsive to the needs of the poor. The latter contend that while tight checks and balances are necessary to prevent misuse of funds, they have not contributed enough to the main cause which is to alleviate poverty. Recently, a committee has been formed, headed by a Justice of the Lahore High Court to address some of these issues.

5.2 Vocation Training Institutes (VTIs)

5.2.1 Objective and Scale

The Vocational Training Institutes Program aims to establish 50 VTIs in the Punjab at an estimated capital cost of Rs. 3.4 billion financed from Zakat Funds. Its objective is to provide industry specific technical training to matriculates primarily from poor families. It is estimated that 20,000 skilled persons will graduate from these institutes in two shifts, annually. The location of the institutes will be mainly in the rural areas, with 32 out of the 50 planned institutes located in tehsil headquarters in various districts of the Punjab.

5.2.2 Implementation Mechanism

The program has been designed and is being implemented by the Vocational Training Council (VTC), an autonomous body consisting of individuals from the private sector industry, and professionals from various disciplines and also secretaries from the following provincial government departments: Zakat and Ushr, Local Government and Rural Development and Finance. The implementation process consists of the VTC facilitating the establishment of an independent Board of Directors for each VTI, its principal and faculty and helping to design courses that correspond to the needs of respective industries.

5.2.3 Distinguishing Features

The concept of the VTI's project is distinct from the earlier vocational training centres in the sense that they are supposed to be demand driven and operationally integrated with the needs of industry. Specifically, the VTI's project has the following distinguishing characteristics: (i) Execution of the project is being done mainly by corporate managers and proprietors from reputed private sector companies, (ii) the Board of Directors of each VTI is expected to be exclusively drawn from reputed industrial concerns, (iii) the trainees are required to spend one-third of their training period on internship in various private sector units in the industry concerned, (iv) each member of the teaching staff of each VTI is expected to be attached to individual industrial units for a specific period each year in addition to attending regular teaching staff development programs for updating their knowledge on the state of the art in each industry, (v) the students would also be provided with entrepreneurial/small unit management training to enable self-employment after graduation if the student chooses to set up his/her own enterprise after graduation. There are plans to link up with the banking sector and SMEDA, to access loans for those graduates of VTIs who wish to become small scale entrepreneurs, (vi) there will be a vocational counselling and placement cell in each VTI which will be in continuous liaison with private sector industry to ensure that all those who graduate from the VTIs get jobs in the relevant industry. For example, as soon as the first VTI, (for computer software training and hardware maintenance) was established, private sector industry offered to employ all the graduates as soon as they completed their course.

5.2.4 Prospects and Hazards

Pakistan's manufacturing sector, apart from other factors, is constrained by a shortage of industry specific technicians at the shop floor level. The applicants, in most cases, have general skills, either picked up on the job elsewhere, or are graduates from vocational training centres which in most cases impart general and often outdated industrial skills. Consequently, industrial units are obliged to provide on job training often in an unstructured fashion and suffer significant losses in machine breakdown and loss of productivity. At the same time, due to the poorly trained shop floor personnel, industries in Pakistan, in most cases, find it difficult to introduce shop floor adaptations and innovations, and also to achieve and maintain high quality standards necessary for competitive exports. In this sense, the VTIs as they are presently conceived can play a significant role for private sector industry to help improve productivity, provide a basis for technical change and introduction of improved quality control systems. At the same time, the VTIs will contribute to shifting the labour force from low skill, low value added sectors to high skill, high value added sectors, thereby, improving average incomes of workers.

The catch however, is that the effectiveness of VTIs critically depends upon: (i) the appointment on the basis of merit alone of high quality professional management and training staff, with the relevant industry experience and training skills, to achieve a qualitative improvement in the professional standards of shop floor technicians, (ii) a training the trainers program through which a pool of high quality trainers with the latest skills in each industry can be created. There are plans at the moment of getting training staff from Germany to develop an initial pool of trainers. Whether or not this plan comes to successful fruition may have a significant bearing on the overall success of the VTI's program, (iii) successful integration of industry specific VTIs with best practice industrial units which can help in designing courses, provide independent evaluation of training standards, provide internship facilities to VTIs students and finally provide job opportunities to VTIs graduates. Successful integration of VTIs with industry, will depend not only on having a dynamic counselling and placement cell in each VTI, but also on the professional quality and reputation of VTIs staff and their individual links with industries, (iv) the independence, professional standing and commitment of members of the Board of Directors and senior management of each VTI, (v) adequate financing on a sustainable basis of the recurring costs of each VTI, as well as the timely replacement

of machines and equipment used for training, to ensure that it meets with the latest industrial standards and is in good working order. Obsolete and poorly maintained machines at VTIs will not only induce a deterioration in the quality and relevance of the training but also the morale of the training staff and reputation of the VTIs amongst the relevant industries. If these imperatives are met, they will considerably raise the training cost per student and the overheads of the VTIs. To be able to meet the recurring costs an adequate framework for financing them through contributions from private sector industry, government and donors will have to be made. The implication for the implementation of the VTIs program is that instead of emphasizing the establishment of a large number of VTIs quickly, greater attention needs to be paid to the financial sustainability and professional excellence of those VTIs which do get established.

CHAPTER IV

EMPLOYMENT GENERATION AND POVERTY ALLEVIATION THROUGH NGOs

Over the last two decades the tightening financial constraints on the government²⁷ and growing awareness of the limitations of top-down development programmes to alleviate poverty,²⁸ have created the space for non-governmental organizations and an alternative approach to development action, called Participatory Development.²⁹ During this period a variety of NGOs have established support programmes aimed at developing community organizations at the village level, institution building, providing training and accessing credit and technical support.

The question that arises at this juncture is whether these alternative institutional forms can achieve sufficient coverage of the poor population, and cost effectiveness, to become a credible framework for achieving a significant impact on the overall employment and poverty problem in the country. In addressing this question it may be useful to examine broadly the different types of Participatory Development NGOs and their antecedents and to then identify the conditions under which NGOs can be (a) effective, (b) reach scale both in terms of population and geographic area covered, and (c) achieve and maintain cost effectiveness. An examination of these issues would provide the basis for proposing national level apex organizations and a broad policy environment within which the replication and up-scaling of NGOs can be facilitated.

Section 1

Types of Development NGOs and their Advantages Compared to Government

Compared with the other South Asian countries the development NGO sector in Pakistan has been slow to mature. Until well into the 1980s the bulk of NGOs in Pakistan were small charitable or social welfare oriented bodies. Of these, a distinct segment were rural cooperatives, registered under the Cooperative Act. These would

²⁷ The government's annual development programme as a percentage of GDP has declined from seven percent in the 1970s to 2.5 percent this year.

²⁸ For a discussion on the limitations of top-down development programmes see: Akmal Hussain, *Poverty Alleviation in Pakistan*, op. cit., pages 23 –26.

²⁹ *Ibid.*, pages 27-28, for a discussion on the theory of Participatory Development.

have merited attention inasmuch as the Cooperatives Act is one of the possible, indeed one of the logical means of constitution of a non-profit NGO. There are historical reasons however, why cooperatives in the form in which they have existed in Pakistan with Government support, are distrusted by the bulk of the rural population. Apart from the tendency of rural cooperatives to be dominated by rural elites which manipulated their policies and monopolized their resources and benefits, there has been generalized outright fraud in the cooperative sector.³⁰ This has led development professionals to explore other possible means of NGO formation, such as a charitable trust (the form chosen by NGOs such as Orangi Pilot Project)³¹ and non-profit private limited companies (which is the form chosen by RSPs) or a society under the Societies Act, (the form chosen by PIEDAR).³²

³⁰ The Cooperatives scandal in Pakistan, which wiped out the savings of tens of thousands of small investors, came to a head in 1993. There were two main types of scams: Financing cooperatives that swindled small private investors through "pyramid" schemes that collapsed or by outright theft, and agricultural societies that have embezzled public money, provided through laxly administered loans at heavily subsidized rates using grossly overvalued assets as collateral. In general the majority of both types of offenders have escaped legal sanction.

³¹ The Orangi Charitable Trust (OCT) which is the micro-credit agency for the Orangi Pilot Project (OPP) group has found the Trust format particularly useful because "OCT could take greater risks and bear losses of defaults and bad debts because it was neither the custodian of depositors (it did not accept any deposits), nor profit maker for shareholders (it had no shareholders and gave no dividends)." (from Micro Enterprise Credit, Dr. A.H. Khan, OCT, Karachi 1996).

³² There are five ways in which a development NGO can register itself as a legal entity:

- i) a voluntary social welfare agency under the Voluntary Social Welfare Agencies Registration and Control Ordinance;
- ii) a society under the Societies Registration Act, 1860; this is the route taken by most of the NGOs since the provisions of the Act provide legal cover without the more stringent requirements of the Companies Ordinance;
- iii) a co-operative society under the Co-operative Societies Act, 1925;
- iv) a public and charitable trust; while restrictive for multi-sectoral development NGOs, this suits certain specialised organisations such as the Aga Khan Foundation, the Orangi Charitable Trust and the Trust for Voluntary Organisations;³²
- v) a non-profit company, as provided for by Section 42 of the Companies Ordinance of 1984; this allows flexibility of operation, but imposes strict legal requirements that mandate financial and managerial discipline including regular reporting requirements. This is the route chosen by the RSPs.

Development NGOs exist in a variety of sizes and forms, from large centralized bodies spanning a number of districts and even provinces, such as the Rural Support Programs (RSPs) to smaller organizations supporting a relatively small number of Community Based Organizations (CBOs) in two or three regions within the same province (such as SUNGI) or in more than one province (such as PIEDAR). They range from multi-function NGOs that support a wide range of activities in fields such as income generation, natural resource management and the social sector, (e.g. PIEDAR, SUNGI and RSPs) to a particular limited set of operations such as KASHEFF (which is essentially a micro-credit support NGO), or which target a particular disadvantaged group such as women (e.g. Shirkatgah).

Development NGOs operating in rural areas may be classified into three broad groups by scale of operation:

- i) The RSPs, instituted by government which are multi-functional and also have a wide area of operation at a national level (NRSP), or a provincial level (SRSC and PRSP). The RSPs start functioning on a large scale and in a wide geographic area by simultaneously establishing regional offices in a number of districts.
- ii) Smaller NGOs such as SUNGI and PIEDAR which are independently created and multi-functional³³ start operating on a small scale, and in a single location. They gradually increase their scale of operations in terms of both population covered and geographic area. Nevertheless, they remain much smaller than RSPs.
- iii) CBOs which operate on a very local scale either at the village level or a cluster village level, and which are supported not by NGOs of types (i) and (ii) above, but directly by donors such as the Aga Khan Foundation (as distinct from the Aga Khan Rural Support Programme).

³³ Certain NGOs such as SUNGI combined their development work with active advocacy on issues of both public and local interest. Other NGOs such as PIEDAR engage in policy dialogue at the national and also South Asian level. While these dimensions may be important in the overall development context, they are beyond the scope of this study.

Development NGOs using the Participatory method have four main advantages over government in fostering rural development through the participation of village communities: (i) Penetration, (ii) targeting, (iii) cost-sharing and sustainability of development initiatives, (iv) human resource development, consciousness and empowerment. Let us briefly consider each of these features:

- i) Penetration: Despite the supposed universal availability of services provided by government, its actual coverage of the population is generally very low. In fact, the RSPs were set up on the premise, (accepted by government), that the federal and provincial governments do not have the organizational reach to bring a range of development activities to the majority of the nation's rural population and that even if it were possible, the recurring budget for the development activities would be beyond the financial capacity of the government. There is also a tendency on the part of government to make intended beneficiaries come to a service provider often over a considerable distance, rather than bring the service to the community. This attitude emanates from a concept of power endemic to governance in Pakistan, whereby service provision is regarded as a means of perpetuating dependency relations. Thus the provision of services through government functionaries becomes an instrument of bringing those dependent on such services into their domain of power. NGOs by contrast are able to penetrate to the level of village, hamlet or community. This is integral to their approach (counterposed to that of government), which is to enable the poor to empower themselves and become both subjects and the object of development effort.
- ii) Targeting: Most government programmes work on a scale and through an administrative approach that encourages provision of resources and services to be misdirected beyond the target group, reach high levels of leakage and sometimes get misappropriated by government functionaries and local power brokers such as landlords, influential traders and politicians. For example, according to the field visit report of the Swiss Development Corporation, "at most five to fifteen percent of the target group of small farmers benefit directly from research, extension, credit and seed supply service in Pakistan".³⁴ NGOs by contrast are able to target disadvantaged regions,

³⁴ Government of N.W.F.P. and Swiss Development Corporation: Report of the Project Preparation Mission, January 1990.

communities, groups and even individuals more precisely. This arises, out of their institutional orientation, greater understanding of the complexity of the social and economic process within which they are intervening, and finally, their operating methodology. The latter, in some cases, includes compiling and updating community data bases such as village profiles, which include both physical and social geography, community histories, land ownership and irrigation patterns, crop, livestock, village trade and production, and basic consumption and income data.

- iii) Cost-sharing and sustainability of development initiatives: Rural development NGOs seek to organize communities into basic participatory organizations variously called village organizations, self-help organizations, community organizations and community based organizations. These village level organizations which are based on decision making by the general body of their membership rather than by the elected office bearers, identify projects and activities that are of priority to the villagers and which they are willing to help sustain from their own resources. Such projects, whether income generating or social sector are prioritized and selected through an intensive, interactive process involving the whole membership of a community organization. Since members have agreed to contribute labour materials or money to their building and upkeep, they reflect the community's greatest needs. The community will therefore continue the maintenance and upkeep of the project even if the NGO no longer operates there. This is in sharp contrast to government aided projects that are 'orphaned' at birth because government itself seldom has funds for operation and maintenance (O&M), and villagers who were not consulted during project selection, siting, technology choice and construction, will not assume responsibility for O&M.
- iv) Human resource development, consciousness and empowerment: The NGO development intervention does not merely aim to provide service delivery or other tangible benefits at a point in time as the government does. It is a process of empowerment: By raising consciousness, acquiring new skills, increasing productivity, incomes, savings and investment, the poor community acquires a new power over the economic and social forces that fashion their daily lives. Thus the tangible benefits acquired by the community are part of a process in which the community begins to take initiatives for its own material welfare, and develops its human, natural and economic resource base to sustain it.

Section 2

Strategic Issues in taking Development NGOs to Scale

The question of how NGOs are to achieve scale in both their demographic and geographic coverage, focuses attention on six inter-related issues: (i) The only large NGOs which start by operating in a number of different districts and provinces simultaneously, are RSPs which have been established by the government. The issue here is whether these RSPs can remain participatory development organizations autonomous of government, and whether they can achieve adequate coverage of the poor population in Pakistan, cost effectively and within a credible time frame. (ii) How can a small NGO which has achieved success in Participatory Development in a few villages, upscale its coverage without losing the key features which defined its character and determined its earlier success? These are, institutional autonomy, participatory decision making both within the NGO as well as in its relations with village communities, innovativeness, and cost effectiveness. (iii) How can small but successful NGOs be multiplied quickly in a large number of different locations to achieve a much larger coverage, and yet maintain cost effectiveness? (iv) What are the conditions under which NGOs, as they enlarge geographic coverage, divest themselves of village level community organizations which have achieved maturity and which can develop their own organization clusters and support systems? (v) What are the strategic macro level constraints in terms of training of personnel, financial resources and geographically diversified monitoring and impact assessment capabilities? (vi) an enabling policy environment at the national level.

The ensuing discussion examines these issues in the context of key features of the RSPs, (which are designed as large scale organizations) and successful small NGOs, respectively.

Section 3

Participatory Development through Rural Support Programmes: Are they Feasible?

3.1 The Nature of RSPs and their Approach

The Rural Support Programmes in Pakistan consist of the National Rural Support Programme (NRSP), Baluchistan Rural Support Programme (BRSP), Sarhad Rural

Support Corporation (SRSC), and Aga Khan Rural Support Programme (AKRSP).³⁵ More recently the Punjab Rural Support Programme (PRSP) had been established with a different management approach and much lower overheads compared to other RSPs. However, since December 1998, PRSP too has been taken over by the RSP system (for details of PRSP's distinct management approach and budget evaluation, see Appendix 4). The RSP system which except for BRSP shares a common leadership at Board level, has also begun setting up RSPs at the district level in response to regional interests of the government and availability of new donors with district specific interests.

The RSPs having been set up with government help, were occasionally described by observers as 'GONGOS' for government organized NGOs, as much to outline their ambiguous status vis a vis government, as descriptive of their origins. Lately, however, at least NRSP has characterized itself as being not an NGO but as falling somewhere in between NGOs and Government.

The RSPs are based on the principle of social mobilization which was first used in its rudimentary form in Comilla (Bangladesh) during the 1960s and later developed in the Saemul Dong Movement (South Korea) and the Bhoomi Sena Movement in Maharashtra (India), and the Aga Khan Rural Support Programme (Pakistan) during the mid-1980s.³⁶ The approach of social mobilization was formulated into a rigorous methodology called Participatory Development,³⁷ under the auspices of the United Nations University South Asian Perspective Project during the 1980s. RSPs today using the Participatory Development methodology have approached the poverty issue from the vantage point of scale seeing themselves as an alternative framework (counterposed to the government's top-down approach) for overcoming poverty at the

³⁵ BRSP, SRSC, AKRSP and PRSP have mandate to work in Baluchistan, NWFP, the Northern Areas and Chitral, and Punjab respectively. NRSP's activities, however, span all four provinces and Azad Kashmir, but not the Northern Areas.

³⁶ For a discussion on the genesis of the approach, see: Ponna Wignaraja: Genesis of the Intellectual Quest: An Overview, in: Participatory Development, Learning from South Asia, op. cit. Chapter 1.

³⁷ See: - Akmal Hussain: Poverty Alleviation in Pakistan, op. cit. Chapter III.2.
- Wignaraja et.al. Participatory Development, Learning from South Asia, op. cit.

national level. They focus on the process of social organizations at the village level, development of group identity, capacity building for managing COs, human resource development at the village level, capital formation and credit discipline. The operational linchpin of this approach is the formation of community organizations (COs) at the village level, in which all decision making is the responsibility of the general body of members.³⁸ The process of helping to form and strengthening the capacity of the CO is a responsibility of the RSP. One of the key roles of RSPs is to facilitate linkages between its village organizations and government line departments and occasionally with the private sector. Operationally, RSPs perform these functions by establishing regional programme offices (at the district level) and then field unit offices at the village cluster level. These district level offices are controlled and administered by a large Head Office staff which apart from general management executives includes a central human resource development team, a monitoring assessment and planning team and finance and accounts staff.

The three RSPs (NRSP, BRSP, SRSC) are incorporated under the Companies Act and include both serving and retired government officers on their Boards, in their personal and ex-officio capacity. This was originally done to neutralize opposition from the bureaucracy, which might otherwise resent the NGO as an intrusion on their ‘turf’, and a duplication of their activities entailing a loss of power and responsibility.³⁹

3.2 RSPs as a Framework for Poverty Alleviation at the National Level: The Question of Time and Money

Rural Support Programmes distinguish themselves from NGOs and place themselves into a separate category defined by the scale of the coverage they propose to achieve. The *raison d’être* of the NRSP, for example, is the claim that they can achieve a hundred percent coverage of the poor population in the foreseeable future. Therefore,

³⁸ There can be no delegation of this responsibility to office-bearers of the CO. That would be called the “representative” approach, a wider example of which would be decision making by legislators/elected representatives on behalf of the electorate, or to outside agencies whether Government or NGO – which would be characterized as the “top-down” approach.

³⁹ The PRSP had a different composition of Board membership to start with, compared to other RSPs, with a relatively greater weight assigned to the private sector members. However, once the PRSP had achieved success on the ground, the bureaucracy re-asserted itself and took over effective control. This change was

it may be useful to examine the credibility of their claim in the light of their organizational cost per beneficiary and the pace at which they have increased coverage so far. According to their own figures, NRSP, during the six year period from their inception in 1992 to the end of 1997 formed 4510 community organizations (COs) consisting of 107,869 members, with 58 percent of the COs being formed in the last year (1997). Even if we assume that one-third of the members within COs have shifted out of poverty permanently (this is a generous assumption since most of the COs are only one year old), NRSP can at best claim to have overcome poverty for only 1.3 percent of the poor population of Pakistan so far. At this pace it will take NRSP just over 462 years to cover the current poor population of Pakistan.

Let us now consider the expenditure aspect of the RSP's claim that through their framework poverty can be overcome for the entire poor population of Pakistan. The expenditure incurred by NRSP in 1997 alone was Rs. 318 million. Assuming that in earlier years the expenditure was close to the interest earnings on their endowment fund (Rs. 90 million per year) and expenditure increased only gradually, even then the estimated NRSP expenditure per person shifted out of poverty was Rs. 33,777. Let us make the further optimistic assumption that as coverage increases, average costs remain constant (they will actually tend to increase given the fact that NRSP expansion geographically, involves setting up new field units and sharply increasing overheads). Even then the total cost of covering the current poor population of Pakistan through NRSP operations comes to Rs. 924 billion, at 1997 prices. (It may be pertinent to mention that the total development expenditure incurred by the government in the year 1996-97 was Rs. 85 billion). It appears, therefore, that the enterprise of overcoming poverty exclusively through the framework of RSPs in Pakistan is neither feasible in terms of time taken, nor in terms of the resources required.

3.3 Structural Weaknesses of the RSP Model

- i) The administrative structure of the RSPs is designed to provide a permanent support infrastructure without any provision for encouraging cluster formation

accompanied by a change in both operational and financial policies, resulting in sharply increased overheads and centralized control.

amongst COs let alone devolving organizational responsibilities to such apex formations at the local level. Instead there is a tendency to set up more and more offices and a growing cadre of management staff at the central, regional and field unit levels. Consequently, RSPs are characterized by high and growing overheads as their operations expand. The financial implications of this aspect of the RSPs organizational structure have been discussed in earlier Section 3.2.

- (ii) The sustainability of maintaining its management structure becomes problematic as operations expand in widely dispersed geographic locations. The heavy reliance on RSPs staff in mobilizing communities and building community organizations could be both costly and counter-productive in terms of the objective of empowering village communities. This approach can be contrasted with relying on a process of identifying, training and supporting village activists to perform these services for their communities with long term recurring costs borne by the communities themselves. This internal dynamic within communities reduces dependence and is more likely to produce a self-sustaining community organization capable of taking charge of its own development. At the regional level also, instead of maintaining and continuously enlarging regional offices it may be more cost-effective to encourage formation of sub-regional apex organizations of autonomous CO clusters. These could provide a more decentralized and self-financing support system at the regional level.
- (iii) The linkage of RSPs with provincial governments has produced another set of problems. There is no clear recognition within government of the independent role of an RSP. On the contrary, there is a tendency to regard the RSP as a slightly different version of a government department with much higher salaries, and which could be used to provide relatively high wage employment to civil servants, politicians and their clients. At best, RSPs are seen by the government as vehicles for attracting donor funding and taking on many of the development responsibilities of government departments while still being subject to institutionalized control by senior civil servants and politicians. There is a tendency for RSPs to fall in with government demands, whether in terms of staff appointments, allocations of funds to particular sub-regions, or taking on in a top-down fashion, government designed projects in the social sector such as health and education. This tendency is facilitated by the

presence of ex-officio and other serving government officers on the Boards and management of the RSPs.

- (iv) A problem not unique to RSPs but exaggerated by their large scale is the handling of credit operations. As large multi-sectoral development organizations they view credit as an integral part of their other interventions such as social mobilization, training and institutional capacity building of RSPs themselves. Therefore, RSPs in their accounting systems tend to avoid separating costs specific to the credit program. This alters the perception of their credit program at the policy level, by seeking subsidized credit for on-lending at market rates to the poor, as a means for facilitating their overall multi-sectoral program. At the same time, it becomes difficult for them to calculate cost recovery and break-even points for the credit operation.

Section 4

Taking Small NGOs to Scale: Some Necessary Conditions for Success

Of the large number of multi-sectoral NGOs with small beginnings, using the Participatory Development methodology, at least three can be said to have grown to a significant size and achieved national prominence. These are SUNGI, PIEDAR and BANH BELI. Three questions arise in the context of their success: (a) What are the common factors in their success? (b) At this stage of their growth, what are the constraints they face to further up-scaling and/or rapid replication? (c) What are the elements of an enabling environment at the national level which could let a “hundred flowers bloom”, in the sense of nurturing the rapid growth/replication of development NGOs, enable mutually catalyzing interaction and yet maintain the unique character of each of them?

4.1 Success Criteria

Apart from the efficacy of the Participatory Development methodology adopted by the above mentioned NGOs, perhaps the single most important factor in their success is the quality of leadership. Specifically, it is the ability to relate with humility and love with the poor. It is to build a team which while being internally coordinated, at the same time, enables each member to become a centre of thought and action. The successful NGO leader creates the team synergy to develop innovative responses to each new problem on the ground. Yet, he/she ensures that each action by the team contributes to reinforcing the process of the poor taking charge of their own

development. The effective leader focuses the team to experience the potential of the poor and to grasp the specific dynamics of how they can organize, take responsibilities and initiate change. Thus the challenge for the NGO leadership is to so relate with the poor and the team, that every act, every word, every moment of silence, contributes to fertilizing the other, rather than establishing control: Liberating rather than inducing dependency.

The second factor in the success of small NGOs is the identification, training and fostering of village level activists who gradually begin to manage existing COs, thereby, enabling NGO staff to give more time to develop new COs. This process of devolution of management responsibility from NGO staff to village level activists is a crucial factor in the enlargement of NGO coverage in a situation where funds are limited and rapid expansion of staff financially infeasible. The converse of this dynamic is that if too much money becomes available too early, it undermines discipline, initiative and energy of the NGO.

The third factor in the success of small NGOs which have reached significant scale is the development of second level management and the ability of top level leadership to devolve responsibility, acknowledge their achievements and to learn from them just as much as it is necessary for the leadership to learn from the poor. An inner wakefulness that comes from transcending the ego is necessary to be always open to learning from the poor, and from each member of one's team. It is this openness to learning from others that constitutes the basis of the organization's dynamism, its innovation and its sense of being a community.

The fourth factor in the success of small NGOs in reaching significant scale is the development of credible accounting procedures, and a regular monitoring and evaluation exercise on the basis of which donor funding can be sought when it is required. In each case the successful NGO, apart from devising efficacious modes of reflection and action with the village communities, also develops formalized recording and reporting systems

4.2 Key Features in the Transition from Medium-sized to Large-sized NGOs

Those NGOs which started small and through certain specific features (discussed above) have reached a medium-size are now faced with the challenge of up-scaling to a much larger size. Typically, the successful NGOs started work in one hamlet a decade ago, are now working in scores of villages and in three or four districts. The question is what are the key changes within the organization which could enable them to reach a large size. In this context, seven key changes may be required:

- i) The single leader at the top (variously called Chairman, President or Chief Executive Officer) would need to build a team of at least three or four leaders who can work independently at the top level. This is necessary in a situation where programme operations become so geographically diversified that overall programme management would need to get regionally decentralized, such that each regional programme would be operating in three or more districts. At the moment, each of the heads of the three successful NGOs mentioned above are taking all strategic decisions and many tactical ones and have a hands on presence in each area of operation. In addition, they are also devoting part of their time to doing consultancy work or other private business to supplement their meagre salary from NGO funds. Consequently, the leadership is so over-stretched, that it is difficult for them to consider making a quantum leap of up-scaling. Yet, they have acquired the consciousness of relating with the poor necessary to train and develop a larger top level leadership.
- ii) For a major up-scaling of successful medium-sized NGOs, it would be necessary to receive grant funding for institutional strengthening and growth. The Pakistan Poverty Alleviation Fund that has recently been established, (discussed in Chapter III, Section 4) could provide such funding after careful evaluation of the concerned NGOs and assessment of their expansion plans.
- iii) As the organizational structure of the NGO changes from a centralized to a geographically decentralized one, the methodology of work would also have to change to enable introduction of procedures for monitoring and strategic planning. As full autonomy is granted to regional programme heads, each of them would be expected to report and evaluate on programme performance within an agreed format and in consultation with community organizations and the regional programme team. This evaluation could be done on a monthly basis and could feed into the process of developing regional programme plans on a quarterly and annual basis. These regional programme plans prepared

initially at regional programme offices, would include issues such as the number and locations of new COs to be formed and the deepening of existing COs. It would also include facilitating the preparation of participatory village development programmes for infrastructure, social sector services, and off-farm enterprises, as and when such services are identified by COs. The deepening of existing COs in the regional programme plans would include devolution of organizational responsibilities to village activists for managing village level or village cluster level apex organizations of the poor. Such devolution of responsibility would, on the one hand, enable self-managed community organizations to develop, and on the other hand, enable the NGO to keep its overheads low as it enlarges its coverage. The regional planning exercise could be conducted at the regional office on a quarterly basis. However, this process could also involve annual plenary planning sessions at Head Office where village activists, key members of regional teams and Head Office personnel in planning, monitoring and human resource development, would interact with each other.

- iv) One of the necessary conditions for successful NGOs that up-scaled to medium-sized level, was the development of a nascent middle level management in their team, although still tightly supervised by the top leadership. As such NGOs up-scale to large size and achieve geographic diversification, such middle level management would have to be brought to maturity, allowed greater autonomy and considerably increased in number. Such middle level management would play a key role in coordinating social mobilization, training of village level activists, and accessing technical support and credit. The middle management cadre by virtue of its proximity to the field would also be important in collecting data necessary for monitoring, evaluation and planning.
- v) The challenge to NGO up-scaling is that unlike RSPs, they must keep overheads costs to a minimum level. In order to achieve this, it is necessary for the NGO to be able to withdraw from those villages where COs have achieved adequate maturity and have developed the capacity to form apex support organizations of their own. The critical factor for enabling NGOs to devolve organizational responsibilities to apex organizations of COs, is the development of a cadre of village activists with training in the following fields: (a) community management skills, (b) ability to interact with donor

organizations and government line departments, (c) expertise in a range of basic skills such as, livestock management, agriculture, soils, irrigation, natural resource management and micro-enterprise development. Such a cadre could constitute a core management team in an independent apex support organization.

- vi) As the NGO up-scales to a large size it would generate a variety of training needs for CO members at the village level, as well as career development and professional training needs of NGO personnel. Consequently, a human resource development programme within the NGO may be necessary to identify the human resource and career development needs specific to the internal dynamics of the NGO's work. The human resource development section within the NGO would need to be a lean unit which should network with diverse specialized institutions to access the required training services.
- vii) As the NGO reaches a large scale, there would be a quantum leap in the range and complexity of financial flows within the NGO programmes and also between the NGO and macro level institutions (such as PPAF, commercial banks, donor agencies and government departments). It would, therefore, be essential for the NGO to have a high quality professional finance and accounts division, with the ability to develop and operate MIS, finance, accounting and statistical software packages. Members of this division, while having the best available skills as chartered accountants and finance managers would need to be sensitized to the methodology of Participatory Development and their work integrated with field operations. It would be necessary to develop accounting procedures that while meeting the auditing requirements at the most rigorous level, would also have the innovativeness and flexibility to cater to the unique nature of development NGOs credit operations.

The following matrix shows the key features of NGOs at each stage of their growth from small to large size. The features specified at the small size and transitional stages, actually prevail in successful NGO that have grown to a significant size. The features in the third stage (large size), however, are indicative in nature, for large NGOs to be sustainable, cost-effective and genuinely participatory.

NGO GROWTH AND CHANGING PROFILE OF KEY FEATURES

Sr. No.	Key Features	Small NGO (Prevalent Features)	Transition to Upscaling (Prevalent Features)	Large NGO (Indicative Features)
1.	Leadership	Single, dedicated leader usually without formal management training.	Emergence of one or more field officers as Regional programme Heads. Hiring of specialists at senior management level.	Hiring and training of professional and dedicated leaders for regional programs. Elevation of talented middle management field officers to top leadership positions.
2.	Management Systems	Absence of formalized procedures, multi-function role of staff members, intense synergy and team work. An openness to learning from the poor and from each other.	Institutional regulations and job specifications emerge; yet, emphasis on participatory decision making; collective reflection in regular staff meetings.	Formalized management systems, functional division of roles, systematic, periodic collective reflection to ensure participatory decision making and planning. Inhouse research capacity and link up with specialized research institutions.
4.	Accounting and Finance Systems	Rudimentary, operated by non-specialists. Maximum emphasis on keeping costs at lowest level.	Hiring of professional accountants emergence of financial analysis, computerized accounts and formal auditing.	Hiring of top level finance manager with professional finance and accounting team, sensitized to participatory development approach, development of customized software for MIS and credit operations.
5.	Devolution of Responsibility to Independent Apex Support Organizations of VOs	Social mobilization and support functions performed only by NGO staff.	Emergence of cadre of village activists, who share support role; emergence of independent multifunction support organizations at village level.	Large experienced cadre of village activists, matured multifunction VOs; emergence of independent apex multifunction support organizations at village cluster or tehsil level. They enable redeployment of NGO field staff and hence NGO overheads kept low.
6.	Relationship with Funding Agencies	Funding usually from single foreign donor, covering function specific operational costs hence occasional donations from friends of leader.	Funding from multiple donor sources for both operations and institutional capacity building. Application to PPAF for institution building grant and credit line.	Establishment of an endowment fund, project specific and region specific funding from multiple donor sources, link up with banks and PPAF for financing credit operations.
7.	Relationship with Government	Government departments usually hostile, avoiding pressure from lower echelon government officials a significant preoccupation.	Nascent links with government line departments to access technical support for VOs, good working relationship with district officials and selected provincial secretaries. Interference by vested interests amongst senior government officials and politicians a major hazard particularly due to fragility of NGO at this stage.	Systematic working relationship with government Line departments at the provincial, district, and tehsil level. Systematic working relationship with specialized institutions for technical support and training in government, autonomous and private sectors. Unwarranted government interference through senior officials and politicians could be a significant hazard.

Section 5

Key Institutions in the Enabling Environment for taking Participatory Development to Scale

The discussion in Chapter IV has shown that two broad institutional forms have been tried out for Participatory Development: (a) Multifunctional Development NGOs which were started by private sector individuals, on a small scale, in a single location and which have over the last decade achieved a significant coverage in terms of number of villages and geographic areas. Nevertheless, such NGOs can be said to have only up-scaled from small size to medium size so far. (b) Rural Support Programmes which were initiated by government and started off on a large scale, initiating work in a number different districts and provinces.

The strength of (a) above is that it is cost-effective and the overheads remain relatively low even as the NGO grows from small to medium size. Such NGOs may now be on a new threshold of achieving large scale coverage. However, to do this, changes in features of their organizational structure (see matrix on page 68), as well as a large inflow of grant funds for financial sustainability would be required. In the case of RSPs, however, the performance of the largest one, NRSP, has shown that given their centralized management approach, their cost per beneficiary is so large and pace of coverage so slow, that they do not constitute a feasible framework in their present form for overcoming poverty in Pakistan. Nevertheless, in the areas where NRSP has worked, in spite of its high costs and slow pace, a significant change in the lives of CO members has been brought about. The challenge is to restructure the management approach of RSPs to make their internal functioning participatory instead of top-down, to induce greater decentralization, and devolution of operational responsibilities to village organizations, so that RSPs can become cost-effective and achieve more rapid coverage. The enterprise of poverty alleviation through Participatory Development in Pakistan in the future may involve creating a policy framework for the rapid growth of NGOs. Four key elements of such a policy framework may be identified as follows:

- i) Enable the recently established PPAF to engage in capacity building so that it can fulfill its mandate of becoming an apex organization for fostering the rapid

- growth of Participatory Development NGOs. This capacity building would involve the development of five dimensions of its organization: (a) the ability to coordinate rigorous evaluation and impact assessment of the work of partner organizations, (b) coordinating large scale training of village activists, social mobilizers and management professionals for NGOs going to scale, (c) coordinating management support for NGOs (e.g., MIS, customized software programs, and management systems), which are in the process of up-scaling, (d) provide a forum for NGOs to learn from each other's experience, (e) provide a forum for policy dialogue between NGOs, governments, donors and the private sector.
- ii) Establish a national facility for training village activists in a variety of skills. It should be a lean organization with a mandate to network with all NGOs, identify their training needs and then coordinate with different training sources, develop courses and ensure that high training standards are established. The sources would include VTIs, training facilities in provincial government line departments, (such as Agriculture, Forestry, Livestock and Irrigation departments), autonomous organizations and the private sector.
 - iii) Establish a national Monitoring, Evaluation and Participatory Poverty Assessment Institute (MEPPAI) in the private sector supported by donors and government which has the professional expertise to undertake rigorous monitoring, evaluation, and impact assessment exercises for the PPAF and NGOs, on demand. Such an institute would also network national data collection and research institutions (such as the Federal Bureau of Statistics, PIDE, LUMS) to bring their expertise together for particular impact assessment exercises. The Participatory Poverty Assessment (PPA) currently initiated by DFID could be institutionalized into a permanent feature within the MEPPAI.
 - iv) Establish an inter-ministerial working group on employment generation and poverty alleviation, chaired by the Prime Minister. The purpose of such a group would be to develop macroeconomic policies to restructure the growth process so as to increase the capacity of Pakistan's economic growth for employment generation and poverty alleviation. Moreover, the group should review existing macroeconomic policies with a view to: (a) accelerate GDP growth, (b) increase

the employment elasticities of output growth in various sectors, (c) induce a shift of the labour force from low value added to high value added sectors and (d) improve the skill composition of the labour force in favour of high productivity skills and those which are in relatively greater demand, as the level and structure of economic growth changes.

CHAPTER V

POLICY RECOMMENDATIONS

Section 1 Crop Sector

- 1.1 The available data suggests that the output growth rate of major crops has declined during the 1990s compared to the decade of the 1980s and this decline is accompanied by increasing output instability from year to year. Under conditions of declining input productivity when higher input use per acre is required just to maintain yields, small farmers with fewer resources are likely to suffer a greater than average decline in yields compared to large farmers. At the same time, due to lack of savings to fall back on, small farmers are more vulnerable under conditions of unstable growth. Consequently, slower and more unstable growth may be accompanied by a tendency for growing inequality in rural income distribution, poverty and unemployment. That is why, it is important to initiate policies to counteract the tendency in both the farm and off-farm sectors in rural Pakistan. (Proposed policies are discussed at the end of each of Chapters I to IV of this report).
- 1.2 Our estimates suggest that farms below 25 acres in size are generating more than twice as much employment than large size farms in the case of wheat, basmati, cotton and fodder. The employment differential between small and large farms is even higher in the case of HYV rice (three times higher) and maize (five times higher). A detailed discussion on this issue and presentation of evidence can be found in Chapter I, Section 1, together with accompanying tables. These figures suggest that if policies for increasing the yield per acre of major crops were to focus on the small farm sector, a faster and more equitable growth with higher employment generation could be achieved in the crop sector.
- 1.3 The phenomenon of the deceleration of agriculture growth and its increased instability, may be due to the emergence of three major institutional constraints, (i) reduced water availability due to deterioration in the canal irrigation system, (ii) poor quality of seeds, and inadequate agriculture research and extension services, (iii) degradation of soils due to depleting soil nutrients and soil erosion

associated with improper agricultural practices. Policies for overcoming these constraints are briefly mentioned in the following sub-sections, (for details see Chapter I, Section 2).

- 1.3.1 The improvement of irrigation efficiencies has become a major policy imperative in view of the fact that the extensive margin on irrigated acreage has been reached and future growth of output and employment in the crop sector will have to rely on improving the efficiency of water use and other inputs.

Lower water availability to farmers is to some extent due to the poor maintenance and operation of the canal irrigation system. It may be advisable to develop a more cost-effective and decentralized institutional structure involving local communities in the operation and maintenance of canals and water courses. The efficacy of this approach has been demonstrated by PIEDAR in the Khanewal District of Southern Punjab where village organizations were successfully formed for, apart from other functions, the management of water courses.

- 1.3.2 Agriculture research has by and large failed to produce operationally usable results and this fact is considered an important explanatory variable in Pakistan's declining factor productivity. Seed varieties research where it has produced new seeds has involved a large time lag in getting research to the farmers, (in the case of wheat for example, average age of seed varieties is 11 years compared to 7 for all developing countries).

It is proposed that for more effective research and its diffusion amongst farmers, the following initiatives may be necessary:

- i) Restructure the existing institutional framework for seed development in particular and agriculture research in general to (a) bring greater professionalism, (b) improve monitoring and evaluation of research work.
- ii) Focus research on improving input productivity at the region specific level. In this context the outcomes of controlled experiments at research institutes need to be tailored to the specific needs and conditions of farms in the region.

- iii) Maintain regular interaction between research workers and farmers in the field by establishing an institutional linkage between research and village level institutions for diffusion of such research. Village level community organizations of farmers for participatory development have demonstrated the ability for a fruitful dialogue with research and extension institutions in the government and non-governmental sectors. Such interactions amongst farmers and agricultural researchers could redirect research to the specific needs and conditions of farmers and also enable a more rapid adoption of improved seeds and agricultural practices. Support organizations such as the PRSP in the Punjab (during August to October 1998), and AKRSP in the northern areas (during the early 1990s) have demonstrated an ability for facilitating the adoption of new knowledge and agricultural practices, particularly in cases where such adoption requires training and credit to farmers at the village level.
- 1.3.3 One of the important factors in the low and declining yields per acre in Pakistan's crop sector is the degradation of soils due to depletion of humus. In order to create a sustainable basis for accelerating agricultural growth and employment in the future, it would necessary to induce agricultural practices through which organic material in the top soil can be replenished and maintained. The existing extension services do not have the outreach, motivation and the management capability to achieve the adoption of sustainable agricultural practices at the farm level. Development NGOs in recent years have demonstrated that village level organizations of farmers backed by sensitive support institutions can play a powerful role in introducing sustainable agricultural practices to farmers, together with training and accessing of technical support from a variety of sources in the government and private sectors.

Section 2

Non-crop Sector in Agriculture: Milk Production

There is considerable potential for increasing export earnings, rural employment and poverty alleviation through increasing milk production, (e.g. potential increase in milk export earnings is US\$ 4 billion, and each additional milch animal for a poor peasant

household can increase income by Rs. 2500 per month). To actualize this potential a participatory institutional support system at the village and tehsil levels needs to be established for the provision of credit, training and breeding, veterinary medicine and access over marketing services to poor peasants. Such an institutional framework can be linked up with private sector milk purchasing centres in village clusters. This could be done through existing private sector milk packaging and processing companies, e.g. Nestle Milkpak Limited, Chaudhry Industries, Prime Service Group.

The body through which such initiatives can be taken is a new Dairy Development Organization (DDO). Details of the possible structure, functions, and operational mechanism of the DDO are discussed Chapter II, Section 1.

Section 3 **Small Scale Enterprises in the Rural Areas**

Given the limited potential of the crop sector for generating employment, accelerating the growth of small-scale enterprises in the rural areas is essential. Higher SSEs growth would help in: (a) increasing employment elasticities of output growth in the manufacturing sector as a whole, (b) accelerating GDP growth through lowering of ICORs, (c) changing the structure of GDP growth so as to improve income distribution and the poverty alleviation capacity of growth.

In order to overcome the constraints to the rapid growth of SSEs (discussed in Chapter II, Section 2.3), it is proposed that Industrial Support Centres (ISCs) be established in specified growth nodes where SSE clusters exist. The ISCs would constitute a support system for providing SSEs with: (a) Vending link up with large scale manufacturers, (b) accessing specific skill training to improve quality of products, (c) good quality raw materials. This could be done by establishing raw material banks in each SSE cluster, (d) specialized fabrication facilities, such as forging and heat treatment, (e) credit through SMEDA. (Details of the organizational structure, functions, possible locations, and in-house technical facilities of ISCs and product groups which could be serviced by them are discussed in Chapter II, Section 2.4).

The institutional framework within which the ISCs could be established and sustained is the newly formed SMEDA.

This organization could network with the newly formed Vocational Training Institutes (VTIs) and with the proposed raw material banks for SMEs.

Section 4

Taking Participatory Development NGOs to Scale

For a direct attack on the poverty problem it is proposed that Participatory Development be taken to national scale. This is a process of empowerment of the poor through social mobilization at the village level, development of group identity, and initiating a localized capital accumulation process at the village and cluster level. Experience of development NGOs during the last two decades has shown that this process can be initiated and sustained by building a network of support institutions at the village and regional levels.

In order to take development NGOs to scale and replicate them rapidly to achieve national coverage, the following enabling policy framework is proposed:

- i) Enable the recently established PPAF to engage in capacity building so that it can fulfill its mandate of becoming an apex organization for fostering the rapid growth of Participatory Development NGOs. This capacity building would involve the development of five dimensions of its organization: (a) the ability to coordinate rigorous evaluation and impact assessment of the work of partner organizations, (b) coordinating large scale training of village activists, social mobilizers and management professionals for NGOs going to scale, (c) coordinating management support for NGOs (e.g., MIS, customized software programs, and management systems), which are in the process of up-scaling, (d) provide a forum for NGOs to learn from each other's experience, (e) provide a forum for policy dialogue between NGOs, governments, donors and the private sector.
- ii) Establish a national facility for training village activists in a variety of skills. It should be a lean organization with a mandate to network with all NGOs, identify their training needs and then coordinate with different training sources, develop

- courses and ensure that high training standards are established. The sources would include VTIs, training facilities in provincial government line departments, such as Agriculture, Forestry, Livestock and Irrigation departments, and the private sector, such as SDPI, HDC, LUMS.
- iii) Establish a national Monitoring, Evaluation and Participatory Poverty Assessment Institute (MEPPAI) in the private sector supported by donors and government which has the professional expertise to undertake rigorous monitoring, evaluation, and impact assessment exercises for the PPAF and NGOs, on demand. Such an institute would network national data collection and research institutions (such as the Federal Bureau of Statistics, PIDE, LUMS) to bring their expertise together for particular impact assessment exercises. The Participatory Poverty Assessment (PPA) currently initiated by DFID could be institutionalized into a permanent feature within the MEPPAI.

Section 5

Walking on Two Legs: Restructuring GDP Growth for Enhanced Employment Generation and Poverty Alleviation

A strategy for rapid employment generation and poverty alleviation at the national level needs to function on two legs: (i) the establishment of new institutions which can enable accelerated growth of output and employment to occur at the micro level through small scale enterprises in small rural towns, on the one hand, and a village level capital accumulation process through Participatory Development, on the other, (ii) a restructuring of the economic growth process through macroeconomic policies.

In order to undertake macroeconomic policies through which the overall employment generation and poverty alleviation capability can be enhanced, it is proposed that an inter-ministerial working group on employment generation and poverty alleviation be established under the chairmanship of the Prime Minister. The purpose of such a group would be to review existing macroeconomic policies which have an adverse effect on the poor and/or create distortions leading to capital intensive technology and product choices, and adverse effects on the poor. At the same time, the group should formulate policies that can (a) accelerate GDP growth, (b) increase employment elasticities of output growth in various sectors, (c) induce a shift in the labour force from low value added to high

value added sectors and (d) improvement in the skill composition of the labour force in favour of high productivity skills and those which are in relatively greater demand, as the level and structure of GDP growth changes.

REFERENCES

Byerlee, D. : Agricultural Productivity in Pakistan, Problems and Potential, World Bank Agriculture Sector Review, cited in World Bank Report No. 13092 – PAK.

Cooper, D. : The Death of the Family, Bantam Books, 1974.

Faruqee, R. : Structural and Policy Reforms for Agriculture Growth, the case of Pakistan, Agriculture and Natural Resource Division, South Asia Department 1, The World Bank, October 2, 1995.

Hussain, Akmal:

- Punjab Rural Support Programme: The First Four Months, Report of the Honorary Chief Executive Officer of PRSP to the Board of Directors, November 1998.
- Overcoming Poverty, Report of the Task Force on Poverty Eradication, May 1997.
- Development Interventions for Small Manufacturing Enterprises using the Common Facilities Approach: Case Study of Centre for Agricultural Machinery Industries (CAMI)/Common Facilities Centre (CFC), Mian Channu (Southern Punjab), June 10, 1994.
- Poverty Alleviation in Pakistan, Vanguard Books, Lahore, 1994.
- Rural Industrialization, Economic Logic and Institutional Requirements. Policy Paper submitted to the Prime Minister 1989, later presented at International Conference on Agricultural Strategies for the 1990s, Pakistan Association of Agricultural Scientists, Islamabad, 7-9 May 1991.
- Labour Absorption in Pakistan's Agriculture, An Interim Report, paper submitted to ILO/ARTEP, March 1989.
- Strategic Issues in Pakistan's Economic Policy, Progressive Publishers, Lahore, 1988.
- Study on Industrialization Potential of Selected Backward Districts in Pakistan. A report submitted to NDFC, Karachi, 1987.
- The End of Teaching, Weekly Viewpoint, Lahore.

Hussain, A. and Khan, O. A. : PHMP Project Proposal for Phase II, SIDB, NWFP and D.G for International Cooperation, Netherlands.

- Khan, A.H. : Micro Enterprise Credit, OCT, Karachi 1996.
- Mian A. and Mirza, Y.: Pakistan Soil Resources, National Conservation Strategy, Sector Paper IV, Environment and Urban Affairs Division, with IUCN, 1993.
- Mahmood, M. : Cited in: ILO/SAAT, 1997 (Mimeo).
- Pakistan Economic Survey 1997-98, Government of Pakistan, Finance Division, Economic Advisor's Wing, Islamabad.
- Qureshi, A. and Iglesias: Implications of Global Climate Change for Pakistan Agriculture: Impacts on Simulated Wheat Production, Climate Institute, Washington, D. C. USA, 1992.
- Report of the Sub-Committee on Cottage and Small Scale Industry in Punjab, Government of the Punjab, 1999.
- Report of the Project Preparation Mission, Government of N.W.F.P. and Swiss Development Corporation, January 1990.
- Report titled, Pakistan: A strategy for Sustainable Agricultural Growth, Report No. 13092 Pak, World Bank, November 1994.
- Report titled, Pakistan: An Employment Strategy, ILO/SAAT, (Mimeo), December 1997.
- Report titled, Employment and Structural Change, Issues for the Eighties, prepared for the Planning Commission ILO/ARTEP, (Mimeo), 1983.
- Report titled: National Human Settlements Policy Study, Pakistan Environmental Planning & Architectural Consultants Limited (PEPAC), March 1983.
- Report of the Project Preparation Mission, Government of N.W.F.P. and Swiss Development Corporation, January 1990.
- Rosegrant, M.W. and Evenson, R. : Agricultural Productivity Growth in Pakistan and India: A comparative Analysis, presented at Pakistan Institute of Development Economists Ninth Annual General Meeting, Islamabad, 1993.
- State Bank of Pakistan, Annual Report, 1997-98.
- Wignaraja, P., Hussain, A., Sethi, H. and Wignaraja, G.: Participatory Development, Lessons from South Asia, United Nations University Press, Tokyo, and Oxford University Press, Karachi, 1991.

APPENDICES

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**INDUSTRIAL SUPPORT CENTRES:
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**PRSP
PUNJAB RURAL SUPPORT PROGRAMME
THE FIRST FOUR MONTHS**

APPENDIX 1

INDUSTRIAL SUPPORT CENTRES: TECHNICAL FACILITIES AND PRODUCT GROUPS

I. Specific Technical Facilities at ISC's

The specific facilities that could be available at ISC's to fulfill their technology diffusion/fabrication functions in the field of metals, and light engineering industry.

1. Materials testing laboratory
2. Foundry
3. Surface Treatment Plant:
 - (a) Hot Dip Galvanizing Unit
 - (b) Paint Spray Installation
4. Welding Workshop
5. Sheet Metal Unit:
 - (a) This metal sheet and pipe bending unit
 - (b) Thick metal sheet unit
6. Heat Treatment Unit
7. Tool and Die-making Shop
8. Automotive Workshop/Garage
9. Design and Information Centre

II. Product Groups

The product groups for which above facilities could provide support to SSI's are:

1. Agriculture

The ISC's could provide manufacturing support and marketing for SSI's in the following products:

- a) Tools for manual work such as Hoes, Shovels, and Rakes
- b) Animal traction equipment

In spite of rapid tractorization in Pakistan there remains a high demand for ox-drawn implements. The main technology here is the assembly of section irons and plates. Forging is essential in this field but there is also need for cast iron. The production of this equipment may consist of:

- Ploughs: (Forging and structural steel work)
- Rotary-blade harrows (Forging, casting and structural steel work)
- Bearings and other parts for animal drawn carts

2. Power Traction

Popular tractor drawn equipment contains cast as well as forged and machined parts. Welding is often necessary. Items to be produced may include:

- Spare parts for power cultivators (mainly forging)
- Ground graders (mainly plate assembly)
- Rollers (mainly plate assembly)
- Seeders, harrows and cultivators (Plate stamping, casting and structural steel work)
- Components for sprayers (aluminum casting)

3. Irrigation

This equipment includes valves and pumps for industrial and household use.

More complex technologies are involved in producing irrigation equipment. Among the technologies are the casting of non-ferrous metals and production of special cast iron.

Typical products are:

- Components for centrifugal pumps (all ICS workshop technologies are involved)
- Connections and bends (mainly aluminum technologies)
- Components for hand pumps (casting, machining and welding)
- Components for sprayers (casting and machining)
- Panels for water reservoirs and roof tanks (welding and sheet metal technologies)

4. Off-Road Transportation

Off-road transportation includes rail transportation. Products are:

- Parts for railway cars and rail transport (forging, castings, and plate)

- Bushings and covers (nodular cast iron)
- Traction components (forged or shaped metalwork)
- Brake components (cast iron)
- Hooks, turnbuckles, clamps and other fastenings (mainly forged).

5. Vehicle Components Industry

Vehicle components include spare parts for motorcars, trucks, buses, tractors and industrial conveying and hoisting equipment. Particular vehicle components subject to frequent breakdown, such as pulley systems, fans and traction hooks, should be considered. The following are representative items:

- Brake discs and drums (pig iron)
- Oil-tight covers, oil pumps, pistons (aluminum alloys)
- Fans (aluminum alloy and stamped plate)
- Lights and tool kits (aluminum alloy and stamped plate)
- Trolley roofing (stamped plate and structural steelwork)
- Hubs for tractor and trolley wheels (cast iron)

6. Metalworking

The metalworking industries require metal containers, conveyors, gears, pulleys, electric motors castings, and supplies for trucks and cars. Typical products are:

- Plate bins (shaped plates)
- Components for rolling conveyors (plate or cast-iron castings)
- Pulleys and gears (iron castings and forging)
- Equipment for ingots moulds (iron castings)
- Blacksmith or smelter equipment (uses all ISC technologies)
- Miscellaneous tools (mostly forged)

7. Food and Related Industry

The food processing industry in Pakistan in the SSE sector is still in its infant stage. However, the scope for the production of canned fruit, fruit juices and vegetables is quite favourable. The set-up of such industries requires an approach on a case-to-case basis. Among the products are:

- Containers for food liquids (normally stainless-steel stamped parts)
- Stainless steel vats, tables, containers for food-processing plants
- Wire products (baskets, shelves, dish drainers)
- Metal hanging panels
- Cookers, water heaters, solar heaters

- Components for seed-oil presses

8. Construction

Building yard machines are generally imported in whole or in part from abroad. Domestic production of simple castings may partly replace imports. The following are construction products:

- Building yard equipment (mostly forging)
- Scaffolding material (mostly forging)
- Mason tools (mostly forging)
- Components for building yard machines
- Implements for rolling shutters or window screening (shaped plate, welding)
- Components for door framing and windows (cast or stamped plate)
- Drain covers, grates, road drain wells (cast iron)
- Piping elbows and unions for drains (cast iron)
- Components for valves, gate valves, unions, for portable or street and road signs, road fencing
- Hinges and locks

9. Household Appliances

Household appliance products for the model workshops are:

- Bath tubs, showers and sanitary equipment (mostly cast iron)
- Taps (non-ferrous casting)
- Miscellaneous household fixtures and equipment (cast iron and aluminum castings and shaped sheets)
- Brassware for fittings, stop cocks, water taps

10. Power and Telephone Line Fittings

Considering the ambitious plans in Pakistan for the increase in installed power capacity and electrification of rural areas, items in this category should be subject to market surveys and, if feasible, then produced. Possible ISC workshop items are:

- Connection, support and mooring clamps for power lines (cast iron and aluminum castings)
- Accessories for overhead line supports (aluminum castings and forging)
- Cable connection boxes (cast iron and aluminum castings)
- Waterproof feeder boxes (cast iron and aluminum castings)

11. Valves for Industrial Use

Valves for industrial use include products that are almost exclusively nodular cast iron. Components include those of gate valves and fittings for gas and oil pipelines. Also included are components of small rotary compressors and radical fans, which mostly use shaped-plate castings. Cast-iron pipes, centrifugally or statically cast, must also be considered.

APPENDIX 2

PROPOSED GROWTH NODES FOR SMEs AND LOCATION OF INDUSTRIAL SUPPORT CENTRES

PUNJAB

1. Lahore-Chunian Axis.
Centre: Bhai Pheru
2. Lahore:Sheikhupra Axis.
Centre: Sheikhupura
3. Gujranwala-Sialkot Axis.
Centre: Sialkot
4. Rawalpindi-Mianwali Axis.
Centre: Mianwali
5. Bahawalpur-Bahawalnagar Axis.
Centre: Bahawalnagar.

NWFP

1. Haripur-Abbotabad and Haripur-Havelian Axis.
Centre: Haripur
2. Islamabad-Nowshera-Peshawar Axis.
Centre: Peshawar
3. Peshawar-Kohat Axis.
Centre: Kohat

BALUCHISTAN

1. Lesbela-Quetta Axis Axis.
Centre: Lesbela
2. Lesbela-Mekran Axis
Centre: Mekran

SIND

1. Hyderabad-Nawabshah Axis
Centre: Nawabshah
2. Nawabshah-Sanghar Axis
Centre: Sanghar
3. Nawabshah-Larkana Axis
Centre: Larkana
4. Larkana-Sukkur Axis
Centre: Sukkur

APPENDIX 3*

DEVELOPMENT INTERVENTIONS FOR SMALL MANUFACTURING ENTERPRISES USING THE COMMON FACILITIES APPROACH: CASE STUDY OF CENTRE FOR AGRICULTURAL MACHINERY INDUSTRIES MIAN CHANNU

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* *This case study is based on an earlier field evaluation of the Mian Channu, Common Facilities Centre, and Survey of SSE units in Mian Channu and Multan, conducted by the author in 1994. Akmal Hussain: Development Interventions for small manufacturing Enterprises using the common facilities approach: An Evaluation with Reference to CAMI/CFC.*

SECTION I: THE CAMI/CFC PROBLEMATIQUE

In the category of development interventions characterized by CAMI/CFC, the full fruition of project potential is predicated on the achievement of two objectives:

- i) Providing to a large clientele, a wide range of customer specific and specialized fabrication facilities in sheet metal (cutting and bending), heat treatment and light engineering (such as manufacture of components).
- ii) Achieving improved product quality of farm implements through the development of prototypes which embody improvements in product design and better engineering quality of components.

The pre-requisite for achieving both (i) and (ii) above is the generation of client demand for the CFC's goods and services. This is determined to a large extent by the "demonstration effect" and resultant diffusion of information regarding the goods and services that CAMI/CFC has to offer. Price and quality of course are also important factors. But if the prices of CFC fabrication services plus transport costs are less than those prevailing in the closest urban centre (in this case Lahore), where such services are available, and quality significantly higher, then *ceteris paribus* the demonstration/diffusion factor becomes the pre-eminent determinant of demand. Such diffusion is stimulated though not necessarily determined by extension, training and credit programs.

The demonstration effect and the diffusion process occur in real time, whose magnitude depends on: (a) the effectiveness of the extension service effort; (b) the volume and speed with which the CFC services are supplied in response to demand; and (c) the pace of adoption of CFC generated technology. During this interregnum between the start of CFC operations and the emergence of a large scale and geographically widespread clientele, the CFC would be necessarily both under-utilized and generate a deficit between sales revenues and operation costs. However, there is a possibility of achieving a high utilization of productive capacity, and avoiding a financial deficit even during the

interregnum, if the following two conditions prevail in the production and management structures respectively:

- (a) A prior balancing of machine stocks to enable serial production of selected components/products with high demand and substantial profit margins, to be manufactured with spare productive capacity.
- (b) An autonomous management structure capable of quick and flexible responses to changing demand conditions.

Thus the problem inherent in CFCs, is that there is an inevitable time lag between installation of machines and the diffusion of demand for its services throughout the cluster (or network of clusters) of small manufacturing enterprises. If adequate provision in the project design has not been made for financial sustainability during the interregnum, (either in the form of a serial production component of the project, or adequate provision for bridging finance to cater for the expected budget deficit), then the CFC project is doomed at the very moment of its birth.

In the context of CAMI/CFC problematique a number of questions emerge which may have a more general relevance for development policy with regard to small manufacturing enterprises:

1. Does the growth of clusters of SME's have greater efficiency gains for society and larger secondary multiplier effects, compared to dispersed units?
2. Is the CFC within a framework of partnership between donors (providing the capital investment) and a parastatal organization (operating the CFC), in fact the most efficient institutional form of intervention for stimulating cluster growth? How can beneficiaries banks, and other actors be involved in the development intervention?
3. What are the criteria for quantifying the external economies of CFCs and imputing them to the social cost benefit evaluation of the CFC?

These issues will be discussed in the following sections with special reference to CAMI.

SECTION II: ANALYSIS OF THE CAMI/CFC PROJECT DESIGN

II(1) Objectives and Instrumentalities

The strategic objective was to accelerate economic growth and increased employment generation in the Mian Channu/Multan area. This was to be achieved by means of stimulating the industrialization process in the farm implements and related high engineering sub-sectors of the area.

The CAMI/CFC was designed to have three functions which would constitute the instrumentalities for achieving the above objectives:

- (a) Manufacture prototypes of farm implements and components with improved design and engineering quality and then through an extension/credit effort induce farm implement manufacturers of the area to adopt the upgraded technology embodied in the CAMI prototypes.
- (b) Provide small manufacturing enterprises in the area (which are predominantly farm implement manufacturing and related light engineering units), with specialized fabrication facilities which none of the SME's in the area could afford to establish themselves, and which could be supplied to them at CAMI, for a price. These common facilities include sheet bending and cutting, heat treatment and forging.
- (c) Provision of extension services, training and credit.

II(2) The Problem of Imperfect Congruence between Project Objectives and Project Instrumentalities.

Implicit in the project design is the assumption that it would address the strategic objective of accelerating economic growth in two ways:

- (a) Agricultural growth and productivity would be accelerated by helping provide improved farm implements.

- (b) Industrial growth would be accelerated by stimulating the growth of small-scale enterprises in the engineering sub-sector, of two potential growth nodes: Mian Channu and Multan.

The assumption that technologically improved farm implements would accelerate agricultural growth and productivity in itself is erroneous. This is because

- (a) Improved farm implements are by no means a critical constraint to agricultural growth. Some of the critical constraints to increased yields and accelerated agricultural growth are:
 - i) Inadequate irrigation to the crop zone due to poor delivery and application efficiencies. (Which are 58 percent and 37 percent respectively in the Punjab).
 - ii) Inadequate and improper application of fertilizer. Not only is the quantity of fertilizer per acre inadequate (for a whole range of institutional reasons) but also its chemical composition often does not correspond to the nutrient requirements of the soil.
 - iii) The damage to topsoil ecology resulting from over-use of pesticides, in some cases and use of cultural practices which preclude soil replenishment over time.
 - iv) Poor cropping patterns and a failure to shift into higher value added crops.

Now the project design while addressing none of the critical constraints to agricultural growth, relies entirely on the relatively less important constraint, i.e. farm implement quality. Even this constraint can be effective in accelerating agricultural growth only in conjunction with improved irrigation, fertilizer and cultural practices which are of course absent from the project design.

The project objective of stimulating industrial growth in what the project document refers to as “Mian Channu/Multan area”, is based on the methodology of growth nodes. The area in question should be properly referred to as Mian Channu and Multan areas. Here there are actually two nodes, and not one as the project design assumes. The concept being that by intervening to provide a strategic infrastructure need (in this case prototype

development and specialized fabrication facilities), the project would give a critical impulse to the engineering units concentrated in these areas, and induce a rapid and diversified industrial growth. The two distinct growth nodes are: The Mian Channu node stretching north upto Okara and the Multan node stretching south to Bahawalnagar.

An important feature of the growth node methodology is that a linkage needs to be established between the growth nodes for achieving self-sustained and rapid diffusion of markets, technologies, and economic growth (see Section 4). The CAMI/CFC project design by confusing two distinct nodes as one (“The Mian Channu/Multan area”), is unable to specify actions and institutions required to establish the necessary linkage between the nodes.

II (3) The Problem of Market Demand and Sustainability

As discussed in Section I, inherent to a CFC designed within a top-down approach is the phenomenon of a time lag between installation of machines and their full utilization for catering to a large clientele. There are three necessary conditions for sustainability:

- i) A committed bridging finance component to finance the budget deficit during the time lag.
- ii) A production unit component, with equipment, personnel, raw materials stock requirement and specification of the particular components to be manufactured for profitable sales during the "time lag" period. This is necessary in order to finance the deficit on the operating costs of the common facilities, costs of prototype development and extension training and credit services.
- iii) Built into the Project Design should be a large extension service outfit that can catalyze the diffusion process emanating from prototype development and CFC operations. It is through the quick dissemination of information, to SME's about CFC capabilities, specification of the unit specific fabrication requirements, and the provision of training and credit, that a demand for CAMI/CFC could have been created quickly.

A major flaw in the Project Design of CAMI/CFC is that the first two necessary conditions are absent while the third (Large Extension Service outfit with wide geographic coverage) is so weak, as to be incapable of fulfilling project objectives. There are currently only two extension service officers, and both are based in Mian Channu. These officers though competent and highly motivated are poorly paid and poorly equipped. Actually the provision should have been for at least 9 extension officers, 4 to be based in Mian Channu and 5 in Multan, equipped with transport, communications, and data generation/analysis facilities.

That the three necessary conditions for sustainability of the project during the “time lag phase” are not adequately addressed in the CAMI/CFC is not surprising: The Project Design does not specifically consider the sustainability issue. It only indicates that there will be certain “recurring costs” which will be borne by the government. There is also a vague mention that the project should “try” to generate revenues to finance some part of the recurring costs. There is no attempt at estimating the magnitude of recurring costs on a yearly basis let alone a formal contractual stipulation that the Punjab government or PSIC include the recurring costs of CAMI in their budgets, for the years in question. Similarly, there is no concrete plan in the Project Design on how the revenues are to be generated, the project mix, the mechanism of demand generation of CFC services, and prices of products and services of CAMI.

SECTION III: PERFORMANCE OF THE CAMI PROJECT

III (1) Sales Performance

During the period July 1993 to May 1994 CAMI has provided CFC facilities to 79 SME's in and around Mian Channu, it has completed 276 jobs in both fabrication operations for clients and manufacture of components, and generated a sales revenue of Rs. 848,847.

- (a) An analysis of the geographic composition of this sales revenue shows that 57% was generated in Mian Channu and 43% in widely dispersed locations ranging from Bahawalpur, Multan, Lodhran in South Punjab to Gujranwala and Faisalabad in the North Punjab. (See table 1). However, in keeping with the

expected dynamics of growth nodes, a predominant proportion of sales revenues of CAMI (81%) were concentrated in the Mian Channu and Multan Nodes. Mian Channu generated more than twice as much revenue (57%), as Multan (24%), even though the Multan node has a larger number and more diversified small manufacturing enterprises. The distribution of sales revenue between Mian Channu and Multan suggests:

- i) That there is considerable potential for the growth of CAMI/CFC revenues as the sales potential of Multan and its environs (Lodhran, Vehari, Kabirwala, and Khanewal) is yet to be actualized.
 - ii) There is a need to substantially increase the geographic outreach of CAMI extension/marketing component, by establishing an extension service office in Multan and increasing the number of extension officers.
- b) The size distribution of sales revenue amongst clients/customers, indicates that 81% of sales revenues came from customers who paid more than Rs. 5000/-, and only 19% from those paying less than Rs. 5000/- (see table 1)
- c) The monthly sales revenues are rising fast. The trend line fitted on the basis of Ordinary Least Squares (OLSQ) method, shows a sharp upward trend in sales revenue, with the slope being as high as 12627, when sales revenues are regressed on time. The T-Test shows that the slope coefficient is significant at the 99% level. (See table 2).

III (2) Prototype Development of Parts/Products at CAMI

Existing Performance

- i) An improved version of the best thresher available in the local market, has been produced. The specific improvements in the CAMI thresher prototype are as follows:
 - (a) An improved version of the thresher cutter blade has been developed: The blade is made of alloy steel which is heat treated over 40% of its length to achieve 40 HRC hardness, while 60% is left relatively soft. The logic is that the hard section at the cutting end, enables more precise cutting, and the section where the impact of forces occurs, is left soft to give greater flexibility and resilience.

- (b) The cutter blade is clamped on to the thresher beam for increased durability and strength (instead of being welded on, as in the obsolete version).
 - (c) Development of an improved thresher pull channel which has reduced thresher damage during transportation.
- ii) A Rotavator bevel gear set has been developed through vendors under CAMI control. The heat treatment has been performed at the CAMI/CFC facilities. This is a major contribution to technological improvement in an important and widely used farm implement. The existing Rotavators produced by SME's use poor quality, ill fitting and second hand bevel gears cannibalized from old trucks in the junk market.
 - iii) A Rotavator side gear has also been developed, which will improve its durability and reduce maintenance requirements.
 - iv) An improved Seed Drill which uses an overlapping metal design at corners, with spot welding, instead of crude welding of straight sheets in the obsolete version. This improvement has considerably enhanced durability, and seed loss during operation.
 - v) High quality hulling knives have been developed which have the potential for substituting import of this component. These hulling knives are used in oil expellers for breaking oil seed. Interviews with manufacturers of oil expellers in Mian Channu and Multan suggest, that CAMI fabricated hulling knives are in high demand and would substantially improve the quality and reduce production cost of oil expellers.

Planned further Developments

The development of the following components is in process or is planned in the immediate future:

- Front blade of Rotavator.
- Side gear of Rotavator.
- Rotavator shaft.
- Rotavator blades and knife

- A radically improved version of the Boom Sprayer for tractor driven spraying of crops. The new design of the boom sprayer being developed by CAMI is expected to overcome the following weaknesses in the existing boom sprayers being manufactured by SME's: (a) Improper nozzle distribution (b) Poor pump quality, (c) Lack of flexibility of function, (d) Lack of control over pressure and flow.

III(3) Extension Services, Training and Credit

The extension service unit is operating out of Mian Channu, and has only two functional staff members. The existing staff combining competence with dedication, has played a key role in both prototype development and in creating a demand for CFC in the Mian Channu area to identify their special fabrication needs, and pinpointing design problems in existing farm implements. This has been achieved through extensive discussions, both individually and in large meetings with staff of SME's.

As a result of the extension service effort, a clientele of 79 entrepreneurs has emerged resulting in 276 individual jobs for CFC. Apart from this the Extension staff is working with the following three SME's to enable them to upgrade their production organization, including building lay-out, storage techniques, technical training and product development:

1. Jamal Industries. This unit has been helped by CAMI extension staff to develop an improved potato digger and sugarcane planter.
2. Dogar Industries. This unit is collaborating with CAMI to make further improvements in their sugar planter.
3. Bhutta Industries. CAMI extension staff has helped prepare a scientific workshop layout, and designed material storage racks enabling saving of space, and greater efficiency in production and material handling.

In the field of training, during the period August 1993 to April 1994, seven training courses have been conducted at CAMI, from which a total of 38 trainees have graduated.

The CAMI credit program has only recently come into existence and so far only 4 loans have been sanctioned (two investment loans and two working capital loans) amounting to a total of Rs. 700,000. The money however has not yet been disbursed. The CAMI credit program is conceived as being integrated with the extension service program. The idea is to provide credit to SME's in agricultural implement and metal sectors, for both investment and working capital requirements. There is a revolving fund provision of Rs. 5 million in the CCP, with a ceiling of Rs. 200,000 on investment loans, and Rs. 150,000 on working capital loans, with an interest rate of 11% on both.

III (4) Conclusion

The team of personnel who have been running the project after its commissioning about 18 months ago are facing an uphill task as they confront four obstacles, all of which emanate from project design flaws:

- (a) Financial constraints since revenues are not covering operating costs just yet, and PSIC is pressing (at this awkward stage) for financial self-sufficiency of the project. (See Section II for an analysis of flaws in Project Design which have resulted in this problem).
- (b) Inadequate staff provision in the project for the extension service unit. Yet, this is precisely the unit that would be expected to play the leading role in: (i) Generating demand for CFC services, (ii) Helping to identify new prototype ideas, (iii) Marketing of components manufactured at CFC, and (iv) Identifying high demand and high revenue items for serial production which is necessary for the financial sustainability of CAMI.
- (c) A machine stock which while suitable for the common facilities objective, needs some balancing with additional machines if serial production of components is to be established. (See Section IV for details).
- (d) An institutional framework (A parastatal actually running the project, combined with donor support) which leaves very little autonomy with on-site management. The decision making process is both cumbersome and bureaucratic given the nature of PSIC control from its head office in Lahore. Such an institutional

framework is not suited for innovative management, quick decisions in response to rapidly changing market conditions and risk taking, all of which are essential if the project is to actualize its considerable potential.

In spite of the difficulties confronted by project staff, there is an impressive level of teamwork and motivation in both the management and the workforce, to achieve success. Both team cohesion and motivation are reinforced by the conviction amongst its members that the project is already playing a vital role in catalyzing technological improvements, increased income and growth in SME's in Mian Channu; and that it has considerable potential for achieving a much larger geographic and demographic coverage, in a short time span. The pre-conditions for fulfilling this potential are that changes be brought about in the composition of machine stock, a complementary serial production of selected components is set-up; an enhanced extension and marketing organization with wider outreach is established; and greater autonomy and flexibility is achieved in management.

The growth of monthly sales shows a clear upward trend and within 11 months sales revenue has increased from Rs. 10,000 per month to almost Rs. 180,000 per month. The monthly expenses both (recurring and contingencies) are about Rs. 300,000. The depreciation on the capital stock is approximately Rs. 200,000. There is already a need to treble the sales revenue. The potential exists to raise sales revenue by ten times.

III(5) A Note on Criteria for Performance Evaluation for CFC's

A project evaluation calculus based on costs and benefits internal to the CFC is inappropriate for this kind of enterprise. The justification of setting up the institution is derived from the fact that a reduction in costs and/or an increase in revenues is made possible for a matrix of individuals and institutions external to the project itself. Equally important is the fact that the increase in net incomes of these 'external' beneficiaries is the aggregate result of inter-active stimulation of economic actors, occurring in a cumulative process over time. Such a process changes both the structure and growth potential of the regional economy by laying the basis for accelerated technological change, growth in demand, investment, income and employment. (For details see Section IV).

Consequently, CAMI/CFC project evaluation criteria must set out to measure:

- a) The impact of the project on the costs, incomes and growth of the SME's initially in the Mian Channu node and later in the Multan Node.
- (b) The extent to which the SME's in the node increase the economic interaction amongst themselves: Such interaction would be specified in terms of providing inputs for each other's products, demand and sub-contracting arrangements.
- (c) The extent to which the CFC helps the SME's in the node to establish backward and forward linkages.

A proper calculation of economic benefits of CAMI/CFC would require data on the impact of CAMI/CFC on net incomes of beneficiaries, and secondary multiplier effects of forward/backward linkages in the region. In its absence it is only possible to make an assessment based on the number of units that CAMI/CFC has had any impact on. If during the first year alone, as discussed in Section III, CAMI has provided common facilities to 79 entrepreneurs in the Mian Channu node, developed and diffused seven technologically upgraded components of farm implements, completed 276 fabrication jobs and given 7 training courses in different trades to 38 persons, then it is by no means a bad performance. If the geographic outreach and diversification of target enterprises can be achieved through a strengthened extension service unit, the stimulus to growth and structural change within the node can be considerably intensified.

Under these circumstances to think of closing down the CAMI/CFC and bringing about the destruction of capital as a result, on the basis of a narrow and static IRR criteria, would be indefensible from the standpoint of serious economic analysis.

SECTION IV: THE CFC IN THE CONTEXT OF THE GROWTH NODE CONCEPT

IV(1) The Concept of Growth Nodes

The location of an industrial project in a backward region often involves large external diseconomies. Where these relate to such components of the infrastructure as road and

rail transport and energy and telecommunications, the government can ameliorate shortages by providing more of these facilities, although obviously there are major national savings in providing these for a large number of industrial and other users than for an individual project. There are other elements of the environment which are more difficult to create such as a local market for skilled and semi-skilled labour. Finally, there are backward and forward linkages and industrial services that are essential for maximum efficiency which can only be provided to a given industrial unit by other units and other industries. It is in the context of all these factors that the concept of growth nodes has arisen. There are three distant elements in this concept, that of the type of industry that generates linkages, that of critical thresholds for industries and that of space, or the geographical dimension.

IV (2) Desirable Types of Industries

As a sort of a seed crystal, Perroux⁴⁰ has suggested the concept of the “Industrie Matrice” which denotes an industry that can act as a sort of engine of industrial growth. He posits such an industry at “the leading edge of technology” but obviously this may be modified to the circumstances of a particular backward region where a particular industrial unit while not at the state of the art level of technology in international terms, does represent a breakthrough for that particular region. Its backward and forward linkages represented by its own demand and its ability to supply the demands of other units are what make it an “industrie Matrice”. Watanabe⁴¹ extends this concept by his characterization of industrial growth at a point as “An intense thicket of backward and forward linkages, not bi-directional but uni-directional”. In other words a group of industries generating a demand for a wide range of goods and services and also possessing the ability to supply an ever-growing range of goods and services. As an example of this, an engineering unit, say a farm implements manufacturer with his needs for a wide range of subcontracting jobs and his ability to produce in house, a diverse range of components in quantity, is a

⁴⁰ Cited in A. Hussain, et. al. Study on Industrialization Potential of Selected Backward Districts in Pakistan. A report submitted to NDFC, 1987.

⁴¹ Op. cit.

better example of “industrie Matrices” than say a cement plant which requires much fewer subcontracting jobs and is essentially a monoproduct. The interaction of a number of units of the first type will not only fuel growth between themselves but create (through rising external economies) a better operating environment for industries of the second type and so the “Thicket of Linkages” grows.

IV(3) Thresholds

The work of Kozlowsky⁴² and Hughes shows that both investment and economies of scale functions in industrial growth are lumpy not smooth functions, i.e., both are given to sudden rises and not gradual, incremental changes. The establishment of a particular industrial unit by creating a demand causes the crossing of a threshold for the establishment of another unit. A similar threshold can be said to exist for an industry (or industrial sector) as well as a service industry. Likewise, the increase in operating industrial units creates a pre and post demand for more infrastructure.

IV(4) The Geographical Dimension

In a sense, the theories elaborated thus far do not include a spatial dimension. This is brought in by the work of Boudeville⁴³ and B.J.L. Berry⁴⁴ who have shown that Distance Decay Curves exist for most goods transported from one location to another. This means that the largest quantum of goods are transported over the shortest distances and there is a corresponding falling off as distances increase. This is obviously not a simple relationship since a unit cost of transport must relate to the value added of the good in question with adjustments for perishable goods but it does hold true with these provisos. A similar relationship has been posited with regard to information flows where frictional losses are likely to be higher between larger geographical spaces.

⁴² Cited in National Human Settlements Policy Study. A report submitted to Pakistan Environmental Planning & Architectural Consultants Limited (PEPAC) in March 1983.

⁴³ Op. cit.

⁴⁴ Op. cit.

The defining characteristics for a growth node are therefore:

- i) The aggregation of industries so as to include a number of “industries matrices”.
- ii) For this aggregation to create an increasing number of unidirectional linkages.
- iii) To allow concentrated and cost effective provision of infrastructure including R&D specialized fabrication facilities, transport, telecommunications, energy, labour, finance and information.
- iv) For this growth to permit the passing of thresholds necessary for the establishment of new units and industries.

It only remains to be added that proximity in time is as important as proximity in geographical space if the node is to be self-reinforcing. As these nodes come up they then begin to interact with each other in a process of mutual reinforcement and bring about further growth and development along their axes and at their locations.

IV(5) The Importance of Project Selection and Location

If the criterion of private profitability as embodied for example in the internal rate of return (IRR) is the determinant in project selection, it is inevitable that project decision will favour the relatively more developed regions, because it is there that the internal economies of the project are highest.

If however we disregard the concept of IRR as a criterion in project selection we return to a situation where the selection of projects is based on one or more factors external to the economic and financial feasibility of the project. This policy has been a costly failure in the past. What is required is to create the external economies necessary for positive returns for industrial projects. This is best done through the creation of growth nodes. Crucial to this concept is the setting up of groups of industrial projects in close proximity with a more or less centralized provision of the major infrastructural requirements. This process will over time increase both the internal and external economies by allowing each project to reinforce the other and increasing the attractiveness of the area to new investors as explained above.

There are four analytically distinct economies associated with the process of economic growth in a node:

- i) Static external economies which is the ability of projects to meet the demands for materials for other projects, to utilize their end products or to service them in one way or another.
- ii) Dynamic external economies. This means that each existing project either decreases the cost or increases the revenue of new projects through the process outlined above.
- iii) Dynamic internal economies of scale. In the first instance a rapid growth rate of output as would occur when a growth node takes off, would be associated with a larger proportion of new machines in the total stock of machines. This, in turn, implies a higher average productivity through a relatively greater utilization of the newest technologies. This factor is not of crucial importance to the individual project but extremely important to the overall question of industrial growth.
- iv) As these nodes function another factor comes into play which is contained in K. J. Arrow's concept of "learning by doing", i.e., the improvement of industrial procedures and the gaining of greater efficiency simply through experience over time.

It is clear that proximity in space and proximity in time are both crucial to the concept of growth nodes. A growth node requires a critical concentration of industries and infrastructure over a relatively short time if the process is to be self-reinforcing. Paradoxically, these centralized growth nodes require for their successful operation a degree of decentralization at the very highest level of financial and industrial administration in the country. The response of different growth factors to individual problems in a growth node must be quick and precise. This is only possible if a large degree of financial and other decision making is at a level where attention can be paid to the individual characteristics of the problems of a particular growth node.

SECTION V: WHERE SHOULD CAMI GO FROM HERE?

If CAMI is to fulfill its development function and at the same time become financially a 'going concern' then action needs to be taken within four dimensions:

V(1) Diversification of Clientele

Widening the impact of CAMI on small manufacturing enterprises. In this context two types of diversification of beneficiary impact needs to be considered:

- (a) Widening its geographic scope from Mian Channu (as at present) to the tehsils of Lodhran, Kabirwala, Vehari, Khanewal and city of Multan and its environs. These are contiguous areas and lying along the road network emanating from Multan. CAMI activity in these areas would establish a linkage between the Mian Channu and Multan growth nodes and induce inter-active and accelerated economic growth, as discussed in Section III and IV above.
- (b) Diversification in the types of manufacturers served by CAMI. Currently CAMI is concentrating both common facilities services as well as component manufacture for predominantly farm implements manufacturers. The range of clients served could also cover agro based industry (such as ginning factories) and light engineering units.

V(2) Serial Production of Component Manufacture

Developing serial production capability in a number of high quality components, which are used (but not manufactured) by farm implements manufacturers, agro based industrial units and light engineering units. If CAMI were to develop such a capability, it would (a) improve the quality and profitability of a wider range of SME's, (b) achieve fuller utilization of the CFC equipment and (c) CAMI itself would become an internally profitable institution.

In conjunction with serial production, CAMI needs to establish a stock of raw materials required by clients for specialized fabrication and components manufacture. Such a raw material stock could be conveniently established on the basis of an overdraft facility arranged with a local commercial bank, and the raw material stocks could be hypothecated to the bank by way of collateral. If such a raw material stock could be

established it could considerably enlarge clientele of the CFC, since currently many potential customers find it inconvenient to buy the raw material themselves from a far off place and then bring it to CAMI/CFC for fabrication.

Discussions with CAMI staff has yielded a possible list of components that CAMI could manufacture on a serial basis. The list of components and the additional machinery required, alongwith estimated prices of machines and sales revenue from component manufacture is presented in table 3. The table indicates that with an additional fixed investment of Rs. 12.9 million, annual revenue could increase by Rs. 20.4 million.

V(3) Enlarged Extension/Marketing Capability

The present extension capability is inadequate for achieving wide geographic outreach, quick diffusion of prototypes, and rapid increase in the clientele served by CFC and supplied with CAMI products. An increase in extension/marketing staff from existing 2, to a total of 10 persons is required, with a camp office established in Multan, to enable more effective outreach in the Multan node. Extension officers should be provided with vehicles and attractive salaries, in view of the difficult and important job they would be performing. Given the client specific nature of the fabrication facilities offered by CAMI/CFC, and the technical nature of components to be produced and sold , the extension and marketing should be synthesized, and performed by technically trained but socially sensitive extension service staff.

V(4) Institutional Change for Greater Management Autonomy and Beneficiary Participation.

As discussed in earlier sections, the current institutional framework does not allow the necessary autonomy to CAMI management, and flexibility for innovative initiatives. With PSIC controlling the functioning of CAMI, management procedures tend to be bureaucratic and the motivation and initiative of management staff is suppressed by a distant and centralized control. At the same time, the current rigid institutional structure precludes the possibility of CAMI mutating into more creative organizational forms in

which there could be functional participation of a number of different actors related with CAMI actively: Small manufacturers, farmers, banks, and young trainees.

Perhaps at some point in the future it may be useful to envisage replacing the present organizational structure with an NGO, registered under the Societies Act, (or even a private limited company) with the board of governors/directors, including a representative of PSIC, the Project Director, a representative of the Donors, at least two representatives of small manufacturing enterprises in the Mian Channu and Multan areas, one representative of the farmers' association of the area, and one representative of the banks functioning in the area.

Such an NGO apart from its own board meetings, should hold regular meetings of small manufacturers, farmers, and engineers/technicians, to discuss issues related with the functioning of CAMI as a catalyst to industrialization in the area. Apart from this, the NGO should hold regular seminars to disseminate knowledge on professional issues related with agriculture engineering, finance and management. The NGO could usefully link itself with the Lahore University of Management Sciences, which is currently develop a teaching/training course for the small business sector.

Such an NGO, in order to concentrate on the diffusion of CFC services, training, diffusion of new prototype ideas, and marketing of components manufactured in house, could conveniently contract out the task of prototype development to AMRI (in Multan).

TABLE 1
COMPARISON AND LOCATION OF SALES REVENUE
JULY 1993 - MAY 1994

Location/Size	Total	%
Jamal Industries	77,704	9.2%
Ilyas Borthers	155,009	18.3%
Karmanwala Industries	46,963	5.5%
Akhtar Rashid	45,000	5.3%
Total Large Mian Channu	324,676	38%
< 5,000 Rs. Per month	157,368	19%
> 5,000 Rs. Other locations	366,803	43%
Multan	204,921	24.1%
Lodheran	10,432	1.2%
Vehari	5,000	0.6%
Bahawalpur	5,850	0.7%
Gujranwala	5,600	0.7%
Faisalabad	45,000	5.3%
Sahiwal	45,000	5.3%
Chichawatni	45,000	5.3%
Grand Total	848,847	100%

Source: CAMI data, Calculations by P. Buijs

**TABLE 2
REGRESSION RESULTS OF SALES REVENUE TREND**

The regression equation is
MONTHLY SALES = 1964 + 12627 MONTHS

Predicator	Coefficient	Stdev	t-ratio	P
Constant	1964	25078	0.08	0.939
MONTHS	12627	3698	3.42	0.008

s = 38780 R-sq = 56.4% R = sq (adj) = 51.6%

Analysis of Variance

SOURCE	DF	SS	MS	F	P
Regression	1	17,539,280,896		11.6	0.008
			17,539,280,896		
Error	9	13,534,900,224			
			1,503,877,760		
Total	10	31,074,181,120			

Usual Observations

Obs.	MONTHS	SALES	Fit	Stdev.fit	Residua	St. Resid
7	7	12000	90355	12263	-78355	-2.13 R

R denotes an Obs. with a large st. residual

MONTHS	Monthly Sales Revenue
1	8000
2	39000
3	45000
4	52000
5	58000
6	128000
7	12000
8	139000
9	88000
10	10200
11	184000

Source: CAMI data, Calculations by A. Hussain

**TABLE 3
PROPOSED PRODUCTION PROGRAM (ANNUAL)**

ITEM DESCRIPTION	QUANTITY	RATE	AMOUNT	ADD. MACH.
Cultivator shovel	30000	15/-	450,000.00	A
Cultivator tines	5000	80/-	400,000.00	
Inter-row cultivator tines	4000	100/-	400,000.00	
Seed drill hoppers	300	700/-	210,000.00	
Rotavator blades	20000	60/-	1,200,000.00	
Rotavator transmission set (bevel gear, side gear, shaft)	400	6500/-	2,600,000.00	B + C
Thresher pulls	1400	300/-	420,000.00	
Thresher channels	700	500/-	350,000.00	
Thresher cutters	52500	11/-	577,500.00	
PTO bevel gear set	3000	500/-	1,500,000.00	B + C
Transmission gears (various)	2000	500/-	1,000,000.00	B
Hulling knives	6000	75/-	450,000.00	
Oil expeller extruder worm	1500	250/-	375,000.00	D
Oil expeller discharge	500	80/-	40,000.00	D
Oil expeller plaes	2000	275/-	550,000.00	
Service CFC	-	-	600,000.00	B
Raw material shop sales	-	-	10,500,000.00	B
Total:-			20,437,500.00	
ADDITIONAL MACHINERY REQUIRED		ESTIMATED AMOUNT (Rs.)		
A. 3 Nos eccentric press		300,000.00		
B. Broaching machine		900,000.00		
C. Bevel gear generating machine		5,000,000.00		
D. Special Lathe		1,000,000.00		
D. Material processing equipment (decoiler, straightening machine, shearing machine, hacksaw machine, weighing scale, jib crane, hydraulic fork lift truck, electric chain hoist, etc		5,700,000.00		
Total:-			12,900,000.00	

Appendix 4

PRSP

PUNJAB RURAL SUPPORT PROGRAMME THE FIRST FOUR MONTHS

Report submitted to the

Board of Directors

By

Dr. Akmal Hussain
Honourary Chief Executive Officer
PRSP

December 1998

BOARD OF DIRECTORS

Mr. M. Shafi Arshad

Mr. Shoaib Sultan Khan (Chairman)

Dr. Rashid Bajwa

Mr. Wasif M. Khan

Mr. Aminullah Chaudry

Mr. Muhammad Akram Malik

Mr. Tariq Farook

Mr. Khalil Mian

Mr. Humayun Farshori

Dr. Zafar Iqbal Qureshi

**Dr. Akmal Hussain
(Honorary Chief Executive Officer)**

Mr. Tariq Sultan

Dr. (Begum) Attiya Inayatullah

Mr. Asad Ali Shah

Ms. Shazia Khan

Mr. Shaukat Tareen

OPERATIONS

Region	Regional Manager	Districts	Tehsils/ S. Tehsils Where COs Formed
Lahore	Dr. Amjad Saqib	Lahore, Okara, Kasur	Lahore
Gujranwala	Brig. (Retd.) Riaz Ahmad Riaz	Gujranwala, Hafizabad, Shaikhupura	Wazirabad, Gujranwala, Kamoke
Sialkot	Mr. Ayub Munir	Sialkot, Narowal	Daska
Faisalabad	Col. (Retd.) Javed Murtaza	Faisalabad, Jhang, Toba Taik Singh	Faisalabad, Jaranwala
Sargodha	Mr. Nasir Mahmood	Sargodha, Mianwali	Sargodha, Sahiwal
Sahiwal	Mr. Basharat Ali	Sahiwal, Pak Pattan	Sahiwal
Multan	Ms. Humaira Hashmi	Multan, Khanewal	Multan
Muzaffargarh	Mr. Muhammad Darjaat	Muzaffargarh, Laiyya	Muzaffargarh
Head Office (Lahore)	Dr. Akmal Hussain Hon. CEO		

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INTRODUCTION

A programme whose goal is nothing short of overcoming poverty in rural Punjab within a decade, is historically unprecedented in this Province in both the magnitude and complexity of effort. It was therefore clear from its inception that the PRSP would have to bring together a talented team of Managers each of whom could combine creativity with commitment. The challenge was to create a work culture in which this creativity and commitment could be sustained through an intensive work schedule and collective synergy. Since we were facing a unique set of circumstances in each of the eight regions where we started work, it was necessary to develop a management system that permitted sufficient space to each member of the team for independent thought and action, while at the same time, creating an environment for collective reflection and conceptualization through which we could deepen the quality of social action. This report attempts to present the principles underlying the management style and work procedures of PRSP, while also reporting on the strategic plan we devised through initial field visits, the objectives we specified for the program and the remarkable results that were achieved in the first four months.

PRSP MANAGEMENT VISION AND METHODOLOGY OF ACTION

You are the woof and you the warp
You are in a every pore
Says Shah Hussain Faqir
Naught am I all is you

-Shah Hussain – 17th, Century

DEPLOYING CONSIIOUSNESS FOR SOCIAL CHANGE

Six inter-related elements of the Punjabi Sufi tradition may be relevant to the PRSP endeavour:

1. The growth of the self involves a transcendence of the ego through a relationship of love (ISHQ) with the “other”.
2. The practice of ISHQ involves combining passion with rigorous rationality.
3. The true stature of a person therefore is measured not in terms of what he owns, but what he gives to others.

4. By the same token the more developed a person's consciousness, the more he locates himself in the collective being of the community.
5. The process of growth of the self therefore is progressive integration with the community.
6. Dialogue is conceived by the Sufi as a process of mutually fertilizing reflection, which so enters consciousness, that it becomes the basis for existential choices and action.

I. LANGUAGE, LITERATURE AND SOCIAL CHANGE

INTRODUCTION

Overcoming poverty in rural Punjab is fundamentally a process of empowering the poor to actualize their creative potential. Such a profound social change, if it is to be sustainable, involves tapping into the specific cultural wellsprings of creative consciousness of the Punjab peasantry.

The peasants of Punjab may be poor, but they are inheritors of a rich cultural and philosophical tradition, which is reflected in their forms of apprehending social life, their poetry and folklore. Through their forms of love and social action the Punjab peasants express their dreams and sorrows, and make their individual and collective history.

The consciousness of the poor peasantry in rural Punjab has been deeply influenced by the Punjabi Sufi saints. This can be seen in the folklore and experiential reference points of contemporary language use in rural Punjab. Six inter-related elements of the Punjabi Sufi tradition may be relevant to the PRSP endeavour:

The growth of the self involves a transcendence of the ego through a relationship of love (ISHQ) with the "other".

The practice of ISHQ involves combining passion with rigorous rationality.

The true stature of a person therefore is measured not in terms of what he owns, but what he gives to others.

By the same token the more developed a person's consciousness, the more he locates himself in the collective being of the community

The process of growth of the self therefore is progressive integration with the community:

Dialogue is conceived by the Sufi as a process of mutually fertilizing reflection, which so enters consciousness, that it becomes the basis for existential choices and action.

These elements of the Sufi tradition are deeply rooted in the consciousness of the Punjabi peasantry. They lie just below the surface of language use in their silences as much as the cadences of their speech. Najam Hussain Syed, (perhaps the greatest Punjabi Sufi poet of the 20th century) has referred to this subliminal consciousness of the peasantry:

Once this counter consciousness of love and relatedness, of integrity and creative action, is brought to the surface, a new recognition and set of values come into play. The challenge in the dialogues undertaken by PRSP was to bring about this gestalt switch in consciousness, through word, gesture and work procedures.

The awakening of this consciousness in however nascent a form, was seen in the work of PRSP to be a material force for social change. One of the important factors in the rapid growth and depth of CO formation in the PRSP is that this consciousness was tapped during the dialogues.

II. PASSION, PARADIGM AND PRAXIS

1. Consciousness, Organizational Structure and Work Procedures

The defining feature of the program is the passion, which impels those who work in it and those for whom we work. It is not just an emotion but a form of consciousness. It comes from transcending the ego and relating with the community through love. Thus, passionate consciousness is both a cohering force of the community and also the synergy through which the PRSP team engages in a process of action and reflection. This principal is the basis of the work culture and the methodology of

action of PRSP. It is illustrated by the dialogues that occur between PRSP personnel and rural communities, on the one hand and between the members of PRSP team on the other. The dialogues are designed to identify and actualize the creative potential of individuals.

The form of learning and creative growth pursued by PRSP through its dialogues has been called prophetic as, opposed to messianic.⁴⁵ The messianic leader/teacher/manager is one who claims to embody the truth and if his followers want to become something they can only be his shadows. By contrast, the prophetic leader/teacher/manager is one who abnegates his own exceptionality and recognizes each individual as the unique origin of change. The participants in the dialogues whether between PRSP and a community or within PRSP itself, are essentially co-equals in a journey of actualizing each other's creative potential in the context of social change.

The organizational structure reflecting the messianic approach is hierarchic and restricts the space for independent thinking. Its work procedures involve issuing instructions or blindly implementing them. By contrast the organizational structure associated with the prophetic approach is non-hierarchic, designed to provide space for thought and action by autonomous individuals in collegial interaction. Its work procedures instead of being a simple dichotomy between instructions and compliance, are designed for mutually fertilizing dialogues, action and collective reflection.

2. Alternative Paradigms and the Methodologies of Action

The paradigm of the PRSP is a framework of thought and action, which has been called Participatory Development.⁴⁶ This is exactly opposite to the paradigm, which has been followed by development practitioners in this country during the last 50 years. Since Pakistan's independence, the idea behind development actions was that the poor are victims to whom certain goods and services have to be delivered. This is the "top-down" paradigm. In the past, governments at best tried to develop administrative mechanisms through which goods and services could be handed out to

⁴⁵ See, David Cooper: The Death of the Family.
Akmal Hussain: The End of Teaching, Weekly Viewpoint, Lahore.

⁴⁶ Akmal Hussain: Poverty Alleviation in Pakistan, Vanguard Books (Private) Limited, 1994.

the poor. It is now widely recognized that such an approach has not worked because in the process of delivering goods and services, a large part of the resources get lost enroute, while poverty is reproduced after some time. The problem of the lack of goods and services for the poor is the result of the fact that they are locked into a system of dependence at the local and national levels. The dependence of individual members of poor village communities originates in the fact that they are fragmented and alone. They have neither the skills nor the resources to increase their productivity, nor the organizational strength through which to acquire resources from governments, donors and the market. The Participatory Development paradigm by contrast aims to enable the poor to organize, acquire new skills, increase productivity, achieve savings, and develop the ability to access training, technical support and credit from a variety of institutional sources.

COUNTERPOSED APPROACHES TO LEADERSHIP/ MANAGEMENT/TEACHING

MESSIANIC	PROPHETIC
<p>Leader/ manager/ teacher claims to embody the truth and if his followers want to be something, they can only be his shadows.</p> <p>Organizational structure is hierarchic in which space for thinking is restricted.</p> <p>Work procedure involve issuing instructions or unthinking implementation.</p>	<p>Leader/manager/teacher abnegates his own exceptionally and recognizes each individual as the unique origin of change.</p> <p>Organizational structure collegial (non-hierarchic), designed to provide space, for thought and action by autonomous individuals.</p> <p>Work procedures designed for mutually fertilizing dialogues, action and collective reflection.</p>

III. THE PARTICIPATORY DEVELOPMENT PARADIGM⁴⁷

1. Elements of the Participatory Development Paradigm

⁴⁷ Akmal Hussain: Poverty Alleviation in Pakistan, Vanguard Books (Private) Limited, 1994.

Participatory Development is a process which involves the participation of the poor at the village level to build their human, natural and economic resource base for breaking out of the poverty nexus. It is specifically aims at achieving a localized capital accumulation process based on the progressive development of group identity, skills development and local resources generation. The essential feature of Participatory Development is social mobilization or the formation of group identity. This is done by initiating a series of dialogues with rural communities, which can result in the formation of community organizations. The beginning of the process is therefore the emergence of a nascent form of community consciousness. This is then deepened as the community identifies and implements projects for increasing income, acquiring new skills and begins to engage in collective savings.

As the sense of group identity is deepened it gives a new self-confidence through which the community can engage in more ambitious projects involving collective action and management.

The concept of Participatory Development has three key elements:

- (a) Process: It is a process whose moving forces are the growth of consciousness and group identity, and the realization, in practice, of the creative potential of the poor.
- (b) Empowerment: The process of reconstructing a group identity, of raising consciousness, of acquiring new skills and of upgrading their knowledge base, progressively imparts to the poor a new power over the economic and social forces that fashion their daily lives.

It is through this power that the poor shift out of the perception of being passive victims of the process that perpetuates their poverty. They become the active forces in initiating interventions that progressively improve their economic and social condition, and help overcome poverty.

- (c) Participation: The acquisition of the power to break the vicious circle of poverty is based on participation within an organization, in a series of projects. This participation is not through ‘representatives’ who act on their behalf but rather, the actual involvement of each member of the organization in project identification, formulation, implementation and evaluation. It is in open meetings of ordinary members at the village/mohalla level organization that decisions are collectively taken, and work responsibilities assigned on issues

such as income generation projects, savings funds, conservation practices in land use, infrastructure construction and asset creation.

2. The Dynamics of Participatory Development

The process of participatory development proceeds through a dynamic interaction between the achievement of specific objectives for improving the resource position of the local community and the inculcation of a sense of community identity. Collective actions for specific objectives such as a small irrigation project, building a school, clean drinking water provision, or agricultural production activities can be an entry point for a localized capital accumulation process. This is associated with group savings schemes, reinvestment and asset creation. The dynamics of participatory development are based on the possibility that with the achievement of such specific objectives for an improved resource position, the community would acquire greater self-confidence and strengthen its group identity.

3. The Implementation Mechanism

A rural support system that enables:

- i) Organizing village communities and rediscovery of community consciousness.
- ii) Access over credit.
- iii) Access over skill training.
- iv) Access over technical support from:
 - Government line departments,
 - Donors,
 - Other NGOs,
 - Autonomous bodies

GOALS, OBJECTIVES AND VERIFIABLE INDICATORS

Plant your ideal,
The tree of light
In your inner courtyard,
Be constant in it's pursuit
Remain with the beloved
Remain with the beloved

-Shah Hussain – 17th, Century

IV. GOAL

Overcome poverty in rural Punjab within a decade by actualizing the potential of the poor through a regional support system. This system shall be designed to enable organization of poor village communities, through rediscovery of community consciousness, and provide access to skill training, credit and technical support. The purpose of such a support system is to initiate and sustain a process of diversified growth of income and the human, natural and economic resources of the poor.

V. OBJECTIVES OF THE PROGRAM

Organize approximately 1.63 million households, into approximately 29,681 community organizations with approximately half of them female COs, in 13,629 villages, to achieve 100 percent coverage of the poor population in the target regions.

On the basis of a series of dialogues with COs, identify a portfolio of diversified income generation projects in agriculture, livestock, micro enterprises and small-scale infrastructure. Through implementation of these projects, achieve a 50 percent increase in income levels of the poor population in the target region in five years, on a sustainable basis.

Enable the provision of training to 107,372, men and women amongst the poor population in the target districts over the five year period, in the following fields:

Community Management, Livestock, Agriculture and Forestry, Poultry, Technical/Industrial Training, and Micro-enterprise development.

On the basis of social mobilization, skill training and provision of technical support, provide credit of Rs. 6.66 billion to Rs. 486,240 beneficiaries over a five-year period, and achieve 95 percent pay back.

Achieve a savings fund of COs of approximately Rs. 428.51million in the target regions.

VI. VERIFIABLE INDICATORS

In a program whose defining feature is to enable the formation of community organizations and the development of community consciousness, the most important verifiable indicator is the number of community organizations formed. A CO is

deemed to have been formed only when it has acquired the ability to hold regular meetings (at least three) with proper documentation of the meetings and to have opened a savings account with contributions from each of its members.

The number of CO meetings held (with over sixty percent attendance) becomes the second indicator and the amount of CO savings is the third indicator of program performance.

Household level, portfolio of investment are developed by the regional teams through detailed dialogues with communities. These portfolios of investment indicate the income generating activity that households wish to undertake. The obstacles to undertaking such projects and successfully completing them are identified. The number of portfolio of investment completed, thus becomes the fourth indicator of program performance.

The basis of the credit appraisal of portfolio of investment is the assessment of their viability first by the CO and then by program staff members. Credit disbursements therefore represent collective evaluation of individual projects and becomes the fifth indicator of program performance.

Training needs in the context of both household level projects and collective projects are identified as an essential element in the process of localized capital accumulation. Training needs are identified on the basis of dialogues between program personnel and COs. The number of persons trained in various fields thus becomes the sixth indicator of program performance.

Finally, credit payback performance indicates not only the success of income generation projects but also the capacity of the CO to bring to bear its collective identity in ensuring timely payback of borrowed money by the individual households.

In the long run the ability of COs to design and implement collective projects and to resolve social conflicts at the CO level would become an important indicator of program performance.

FIVE YEAR STRATEGIC PLAN

What ever colour I weave
I weave deep

-Shah Hussain – 17th, Century

VII. STRATEGIC PLAN*

**TABLE SP-1
COMMUNITY ORGANIZATIONS
(ALL REGIONS)**

Sr. No.	Outputs	1st Six Months	Year 1	Year 2	Year 3	Year 4	Year 5	Total
I.	Community Organizations (All Regions)	800	2825	4975	6600	7500	6981	29681
	Region 1	100	300	600	900	1000	1200	4100
	Region 2	100	400	900	1700	2000	2000	7100
	Region 3	100	400	600	700	700	600	3100
	Region 4	100	400	700	1000	1500	1500	5200
	Region 5	150	625	875	800	800	400	3650
	Region 6	100	500	800	800	800	581	3581
	Region 7	150	200	500	700	700	700	2950

* The Strategic Plan was made in June 1998 for 7 Regions. The 8th Region (Multan Division) was established later in August 1998

**TABLE SP-2
CREDIT
(ALL REGIONS)**

II. Outputs		Ist Six Months	Year 1	Year 2	Year 3	Year 4	Year 5	Total
II.	Credit (All Regions) Amount Beneficiaries	Rs. 95.525 M 6900	Rs. 345.276 M 25340	Rs. 711.125 M 51950	Rs. 1075.625 M 85450	Rs. 1786.625M 125050	Rs. 2646.025M 191550	Rs. 6,660.20 M 486,240
	<u>Region 1</u> Amount Beneficiaries	Rs. 5.0 M 500	Rs. 21.0 M 2100	Rs. 60.0 M 6000	Rs. 120.0 M 12000	Rs.150.0 M 15000	Rs. 240.0 M 24000	
	<u>Region 2</u> Amount Beneficiaries	Rs. 6.0 M 400	Rs. 16.5 M 1200	Rs. 45.0 M 2400	Rs. 67.5 M 3600	Rs. 126 M 4800	Rs. 157.0 M 6000	
	<u>Region 3</u> Amount Beneficiaries	Rs. 9.15 M 750	Rs. 24.0 M 2500	Rs. 36.0 M 3750	Rs. 49.0 M 5050	Rs. 67.5 M 6250	Rs. 79.9 M 7450	
	<u>Region 4</u> Amount Beneficiaries	Rs. 18.0 M 1200	Rs. 50.0 M 2500	Rs. 100.0 M 5000	Rs. 200.0 M 10,000	Rs. 400 M 20,000	Rs. 800.0 M 50,000	
	<u>Region 5</u> Amount Beneficiaries	Rs. 24.375 M 1500	Rs. 125.776 M 7740	Rs. 268.125 M 16500	Rs. 298.125 M 24500	Rs. 528.125 M 32500	Rs. 593.125 M 36500	
	<u>Region 6</u> Amount Beneficiaries	Rs. 10.50 M 1050	Rs. 63.0 M 6300	Rs. 147.0 M 14700	Rs. 231.0 M 23100	Rs. 315 M 31500	Rs. 376.0 M 37600	
	<u>Region 7</u> Amount Beneficiaries	Rs. 22.5 M 1500	Rs. 45.0 M 3000	Rs. 55.0 M 3600	Rs. 110.0 M 7200	Rs. 200 M 15000	Rs. 400.0 M 30,000	

**TABLE SP-3
SAVINGS
(ALL REGIONS)**

Rupees in Million

Sr. No.	Outputs	First Six Months	Year 1	Year 2	Year 3	Year 4	Year 5	Total
III.	SAVINGS (ALL REGIONS)	3.45	25.14	57.43	88.18	120.1	134.21	428.51
	Region 1	0.45	2.70	5.40	8.10	9.00	10.80	
	Region 2	0.72	5.76	12.96	24.48	28.80	28.80	
	Region 3	0.90	7.20	10.80	12.60	12.60	10.80	
	Region 4	0.45	3.60	6.30	9.00	13.50	13.50	
	Region 5	0.54	3.33	8.73	14.76	20.52	24.84	
	Region 6	0.16	1.50	7.24	8.74	21.28	27.27	
	Region 7	0.23	1.05	6.00M	10.50	14.40	18.20	

**TABLE SP-4
SKILL TRAINING
(ALL REGIONS)**

Sr. No.	Outputs	First Six Months	Year 1	III.	Year 3	Year 4	Year 5	Total	
IV.	Skill Training (All Regions)								
	Activist Training		1370	3420	5430	7200	5200	7162	28412
	Other Skills		2290	9275	13970	17645	18710	17070	78,900
	<u>Region 1</u>								
	Activist Training		300	900	800	2400	300	3600	
	Other Skills		300	1200	2400	3200	4000	4800	
	<u>Region 2</u>								
	Activist Training		60	120	180	200	200	200	
	Other Skills		50	185	310	525	490	610	
	<u>Region 3</u>								
	Activist Training		60	200	300	400	400	300	
	Other Skills		160	640	960	1120	1120	960	
	<u>Region 4</u>								
	Activist Training		50	100	100	200	300	300	
	Other Skills		150	250	300	600	900	1000	
	<u>Region 5</u>								
	Activist Training		600	1250	1750	1600	1600	800	
	Other Skills		1000	3200	4000	4200	4200	2100	
	<u>Region 6</u>								
	Activist Training		200	300	1600	1600	1600	1162	
Other Skills		430	1800	3000	3000	3000	2600		
<u>Region 7</u>									
Activist Training		100	550	700	800	800	800		
Other Skills		200	2000	3000	5000	5000	5000		

BUDGET 1998 – 1999 AND FINANCIAL IMPACT ASSESSMENT

Everything quantifiable runs out,
And everything anticipated
is yet to come

-HAZRAT ALI (PBUH)

Table B-3
**MEASURING EFFICIENCY
RATIO ANALYSIS**

		RATIO	
(I)	$\frac{\text{Administrative Expenditure}}{\text{Total Expenditure}}$	$\frac{4,574,632}{45,611,292}$	= 10.030%
(II)	$\frac{\text{Administrative Expenditure}}{\text{Value of Outputs}}$	$\frac{4,574,632}{3,973,315,194}$	= 0.115%
(III)	$\frac{\text{All Expenditure}}{\text{Value of Outputs}}$	$\frac{45,611,292}{3,973,315,194}$	= 1.148%
(IV)	$\frac{\text{Administrative Expenditure}}{\text{Interest Income}}$	$\frac{4,574,632}{6,215,000}$	= 73.606%

VIII. THE BUDGET AND FINANCIAL ANALYSIS

Table B-17
INCOME STATEMENT 1998-99

BUDGETED INCOME	<u>Rupees</u>	
Surplus before taxation brought from last year	9,995,036	
A. INTEREST ON INVESTMENTS	91,620,000	
Service Charges on credit (Annex-III)	27,622,080	
Total Income	129,237,116	
BUDGETED EXPENDITURE		
B. EXPENDITURE		
B1. Administrative Costs		
	<u>Rupees</u>	
B1.1 Capital Expenditure	2,723,000	0.63%
B1.2 Administration & Office Overheads	1,195,000	0.28%
B1.3 Travel & Vehicle Operation	348,600	0.08%
B1.4 Personnel Costs	2,848,572	0.66%
Total Administrative Cost	7,115,172	1.66%
B2. Programme Costs		
B2.1 Credit Disbursements	345,276,000	80.36%
B2.2 Provision for Loan Losses	17,263,800	4.02%
B2.3 Human Resources Development	8,160,000	1.90%
Social Mobilization		
B2.4 Capital Expenditure	21,790,000	5.07%
B2.5 Administration & Office Overheads	10,670,400	2.48%
B2.6 Travel & Vehicle Operation	4,528,800	1.05%
B2.7 Personnel Costs	14,882,080	3.46%
Sub-Total of Social Mobilization	51,871,280	12.07%
Total Programme Costs	422,571,080	
Total Expenditure Budgeted	429,686,252	
Less Credit Disbursements	345,276,000	
Total expenses excluding Credit	84,410,252	19.64%
Add Interest on OD	21,407,112	4.98%
G. Total	105,817,364	
Income/(Deficit) Before Taxation Carried Forward	95.98%	23,419,752*

• *Subject to exemption from Income Tax*

Table B-2
BUDGET & ACTION
INPUT VS OUTPUT

INPUTS				OUTPUTS					
				Number of Poor With New Skills	Present Discounted Value of Skills Acquired	Number of Persons Organized	Present Discounted Value of Income Stream Due To Social Mobilization	Interest Income	Total
1	Administrative Expenditure								
	<i>(I)</i>	Fixed Overheads							
		Rent	60,000						
		Legal Expenses	72,000						
		Auditors Fee	110,000						
		Salaries	2,848,432						
		Depreciation	236,600						
			-						
			3,327,032						
	<i>(II)</i>	Variable Costs							
		Telephone	240,000						
		Utilities	180,000						
		Stationery	60,000						
		Books & Periodicals	60,000						
		Publication Training & research	144,000						
		Furnishing	35,000						
		Crockery	10,000						
		Legal Expenses	88,000						
		Calculators	16,000						
		Vehicle Pole & Maintenance	165,000						
		Contingencies	120,000						
		Daily Allowance of staff	129,600						
			1,247,600						
			4,574,632						
2	Training Expenditure								
				6,927	2,224,709,955				2,224,716,882
3	Social Mobilization Expenditure								
	<i>(I)</i>	Fixed	8,722,000						
	<i>(II)</i>	Depreciation	2,795,660						
	<i>(III)</i>	Variable	11,359,000			55,312	1,742,328,000		1,742,383,312
4	Income Generation							6,215,000	6,215,000
	TOTAL								
			45,611,292						
					2,224,709,955		1,742,328,000	6,215,000	3,973,315,194

PRSP BUDGET ANALYSIS

INVESTMENT AND SOCIAL BENEFITS

- With an expenditure of Rs. 8.1 million on training in the first year, and social benefit of Rs. 2.224 billion can be generated.

- With an expenditure of Rs. 32.876 million on social mobilization, a social benefit of Rs. 1.742 billion can be generated.

- The total social benefits (in terms of discounted present value of future stream of earnings) from the first year's total budgetary expenditure is 8611%.

PROGRAMME PERFORMANCE

The mind is not a vessel to
be filled but a fire to be
kindled

-PLUTARCH

THE QUANTITATIVE DIMENSION

In the period July to October 1998 we have, by the Grace of God, not only established eight regional teams in our target divisions but have formed 764 community organizations with a collective savings fund of Rs. 2.758 million. We have disbursed Rs. 22.41 million of credit to 1403 beneficiaries in a wide range of fields including agriculture, livestock and micro-enterprises. The pay back credit is 100%. We have trained 782 village level activists in fields such as community management, livestock, agriculture, poultry, public health and light engineering.

THE QUALITATIVE DIMENSION

A change is beginning to take place in the quality of life of the rural poor in the areas of our operation. I have had occasion to talk with communities in all the eight regions. The hope that we have kindled and the love that I have received from them has deeply moved me. Across the eight regions, the organization of poor village communities and the start-up of income generation projects have not only given a new confidence and collective purpose in many cases but has also significantly increased their individual incomes. Beyond the income dimension I have noticed, for example, in Multan a village community reported that they are beginning to settle their disputes within the CO and have even resolved amicably the disputes, which they had earlier registered at the local police station. A women's CO in the same area have set up a girls school indicating the beginning of collective action for the collective benefit of the community.

LINKAGES FOR TECHNICAL SUPPORT

The Department of Livestock and Dairy Development has been mobilized by our, RGMs to provide training to village activists in improved livestock management, the

department of Agriculture has been mobilized to give advice on pesticide use and the Department of Health has been mobilized to provide their expertise at a community managed health camp. Private sector firms such as AEFSCO have been linked up with PRSP, to conduct workshops with COs for training in soil testing and use of composite fertilizer for the precise nutrient requirements of each field. Similarly, NESTLE Milkpak has been approached to provide information on increasing yields of milch animals.

IX PROGRAM PERFORMANCE

Program performance and verifiable Indicators

Table SP-1 shows program progress in terms of verifiable indicators specified in Section VII. A total of 764 COs were formed during the period July - October 1998, including 542 male CO's, 211 female COs, and 11-mixed Cos.

An indication of the management capability and early state of community identity formation is the fact that collective savings amounting to Rs. 2.578 million were achieved, including Rs. 2.397 million savings amongst male COs and Rs. 0.18 million savings amongst female COs. Payback performance on credit so far is 100 percent.

A total of 1,838 CO meetings were held with over 60 percent attendance. Credit amounting to Rs. 22.141 million was disbursed during the period, including Rs. 20.878 million to male COs and Rs. 1.263 million to female COs.

A total 782 person were trained in a variety of fields such as community management skill training (CMST), livestock, agriculture, industrial and technical.

II. SOFTWARE DEVELOPMENT FOR PRSP

At PRSP, the importance of using Information Technology in Financial and Credit Operations was felt at a very early stage. A computer specialist was appointed who was supported by the Computer Systems Department of Sayyed Engineers (Private)

Limited⁴⁸ on a gratis basis, under the guidance of the Honourary Chief Executive Officer, to cater to the specific features of PRSP operations: A decentralized accounting system in which social mobilization, CO formation and a wide range of individual and collective activities were important elements.

The Financial Accounting System has been installed in all the regional offices. The development of a Credit Control System has been completed and trial run of this system is taking place. This system will be installed in the regional offices in the first week of December. The following is a brief description of these systems.

Financial Accounting System

The Financial Accounting System of PRSP has been installed at all regional offices in October 98. Financial data is being fed into this system on a daily basis. This system is running free of errors since we received the computerized monthly Trial Balance report from all regional offices.

There are three important reports that will be generated from Financial Accounting System:

- Trial Balance
- Comparison of Budgeted vs. Actual Expenses:
- Month-wise comparison of Actual Expenses

Credit Monitoring and Information System

Credit Control System is a core system for PRSP because it will not only help to record and maintain data but it will also help in analyzing, the information like technical appraisal and the sources of income of the borrower. The scope of this system is very wide since it is linked with Financial Accounting as well as Social Mobilization.

⁴⁸ The support of Mr. Irfan Saeed & his team of Software Experts at Sayyed Engineers (Private) Limited for the development of customized software for PRSP is gratefully acknowledged.

A significant advantage of this system is the ease with which loan repayment schedules can be prepared specifically catering to the gestation period of each project. Moreover Credit Control Officers will be able to inform and remind Social Organizers and subsequently Community Organizations about dates of their repayments a week ahead.

Technically, this system will consist of master databases of borrowers, Community Organizations where credit has been disbursed and two transaction files to record the disbursements and recoveries. The system will generate reports to summarize the loan information by Type of Loan, by Community Organization, by Social Organizer, by field unit or by regional office. On the other hand, it will take care of the most complex jobs of Credit Control Officer, like Bank Reconciliation, preparation of Income Statement and preparation of Loanee Ledger.

The tables in Appendix-2 indicate the Credit Monitoring & Financial Accounts Monitoring formats derived from the Information Systems Software Development for PRSP.

PROGRAM PROFORMANCE QUANTITATIVE DETAILS

Table PP-1
AGGREGATE ALL REGIONS JULY TO OCTOBER, 1998
PROGRAM PROGRESS REPORT

PARTICULARS	ACTUAL
Programme Introduction	1,305
Number of Male COs formed	542
Number of Female COs formed	211
Number of Mixed COs formed	11
Total	764
Number of COs members (Male)	11,944
Number of COs members (Female)	4,231
Total	16,175
CO's Savings (Male)	2,397,590
CO's Savings (Female)	180,608
Total	2,578,198
Number of CO meetings held	1,936
a) With over 60% attendance	1,806
b) Less than 60% attendance	130
Credit Disbursed to Male Members (Rs.)	20,878,100
Credit Disbursed to Female Members (Rs.)	1,263,000
Total	22,141,100
Credit Payback Performance	100 %
Number of Loanees (Male)	1,340
Number of Loanees (Female)	104
Total	1,444
Average Cash Income of Loanees	3,042
Average Non-Cash Income of Loanees	1,375
Number of Persons Trained in:	Male Female Total
<i>CMST</i>	304 16 320
<i>Live Stock</i>	33 - 33
<i>Agriculture</i>	124 - 124
<i>Poultry</i>	- 19 19
<i>Industrial Technical</i>	15 152 167
<i>Public Health</i>	- - -
<i>Others</i>	86 33 119
Total	562 220 782

COLLECTIVE SAVINGS

MONTHS	MALE	FEMALE	TOTAL
JUL	47,115		47,115
AUG	495,797	23,653	519,450
SEP	685,526	37,206	722,732
OCT	1,169,152	119,749	1,288,901
TOTAL	2,397,590	180,608	2,578,198

NUMBER OF CO FORMATION

MONTHS	MALE	FEMALE	TOTAL
JUL	79	17	96
AUG	109	47	156
SEP	157	50	207
OCT	221	101	322
TOTAL	556	198	764

CREDIT DISBURSEMENT

MONTHS	MALE	FEMALE	TOTAL
JUL	360,000		360,000
AUG	1,956,760	200,000	2,156,760
SEP	4,993,000	260,000	5,253,000
OCT	13,568,340	803,000	14,371,340
TOTAL	20,878,100	1,263,000	22,141,100

NUMBER OF PERSONS TRAINED

MONTHS	MALE	FEMALE	TOTAL
JUL	45		45
AUG	94	40	134
SEP	145	35	180
OCT	328	95	423
TOTAL	612	170	782

X. SUMMARY REVIEW

In the period July to October 1998 we have, by the Grace of God, not only established eight regional teams in our target divisions but have formed 764 community organizations with a collective savings fund of Rs. 2.758 million. We have disbursed Rs. 22.41 million of credit to 1403 beneficiaries in a wide range of fields including agriculture, livestock and micro-enterprises. The recovery rate of credit so far is 100 percent. Training has been imparted to 782 village activists in community management skills, agriculture and livestock.

Underlying this quantitative achievement in terms of verifiable indicators, is the fact that a change is beginning to take place in the quality of life of the rural poor in the areas of our operation. I have had occasion to talk with communities in all the eight regions. The hope that we have kindled and the love that I have received from them has deeply moved me. Across the eight regions, the organization of poor village communities and the start-up of income generation projects have not only given a new confidence and collective purpose in many cases, but has also significantly increased their individual incomes. For example, small household *durri* producers in one region were locked into an exploitative relationship of dependence on *arhtis*. The *durri* manufacturers were provided with raw materials at higher than the market prices by the *arhtis* and *durris* were acquired by the *arhtis* while at less than market prices. After PRSP intervention, these *durri* manufacturers now buy raw materials and sell *durris* independently leading to an increase in their incomes typically from about Rs. 2,500/- per month previously to about Rs. 4,500/- per month now. Similarly, in other regions, poor households have set up small village retail shops, acquired buffaloes, small goats, set up bicycle repair shops and *Chikkh* producing units. A total of 1403 households have benefited from such interventions. Beyond the income dimension I have noticed, for example, in Multan a village community reported that they are beginning to settle their disputes within the CO and have even resolved amicably the disputes, which they had earlier registered at the local police station. A women's CO in the same area have set up a girls school, indicating the beginning of collective action for the collective benefit of the community.

We have also succeeded, by the grace of God, in establishing linkages with government line departments and the private sector to bring their expertise to bear for

poverty alleviation at the village level. For example, the Department of Livestock and Dairy Development has been mobilized by our RGMs to provide training to village activists in improved livestock management, the Department of Agriculture has been mobilized to give advice on pesticide use and the Department of Health has been mobilized by our RGM in Lahore to provide their expertise at a community managed health camp for 650 members of various COs. In the private sector arrangements have been made with AEFSCO leading to the holding of workshops in our regional offices to inform CO members about the importance of soil testing and how a composite fertilizer that is congruent with the nutrient requirements of each farm can increase yield per acre by 15 to 50 percent. AEFSCO has offered to do soil testing in our target areas and provide custom-made composite fertilizer to farmers on demand. Similarly, Nestle Milkpak have been persuaded to offer their services to show to poor farmers how a scientific mix of cattle feed can both reduce the costs of feed and double milk yields of buffaloes and cows. They have also offered to pick up milk from villages on a pilot basis initially at Sahiwal.

In short, across the eight regions of the Punjab, the seed has been planted of community organization, improvement in incomes, skills, systematic provision of technical support at the village level, and a change in social consciousness. We may be witnessing the tentative beginning of a silent revolution in the lives of the rural poor in the Punjab.

Table PP-2
Region-wise Cumulative Social Mobilization Report
July to October 1998

Region	CO's Formed		
	Male	Female	Total
Lahore	83	21	104
Gujranwala	73	15	88
Sialkot	84	23	107
Faisalabad	83	28	111
Sargodha	73	29	102
Sahiwal	61	38	99
Multan	44	38	82
Muzaffar Garh	52	19	71
Total:	553	211	764

Table PP-3
Region-wise Cumulative Credit Disbursement Report
July to October 1998

Region	Credit Disbursed			Number of Beneficiaries		
	Male	Female	Total	Male	Female	Total
Lahore	5,522,000	55,000	5,577,000	250	7	257
Gujranwala	1,380,000	-	1,380,000	53	-	53
Sialkot	5,982,000	650,000	6,632,000	369	43	412
Faisalabad	337,000	-	337,000	15	-	15
Sargodha	1,955,000	-	1,955,000	87	-	87
Sahiwal	2,427,000	419,000	2,846,000	123	30	153
Multan	538,840	25,000	563,840	43	2	45
Muzaffar Garh	2,736,260	114,000	2,850,260	400	22	422
Total:	20,878,100	1,263,000	22,141,100.00	1340	104	1,444

Table PP-4
Region-wise Cumulative Community Savings Report
July to October 1998

Region	Community Savings		
	Male	Female	Total
Lahore	556,500	43,500	600,000
Gujranwala	160,900	15,260	176,160
Sialkot	510,000	28,000	538,000
Faisalabad	103,774	9,911	113,685
Sargodha	398,791	16,682	415,473
Sahiwal	368,238	36,444	404,682
Multan	46,434	20,140	66,574
Muzaffar Garh	252,953	10,671	263,624
Total:	2,397,590	180,608	2,578,198

Table PP-5
Region-wise Cumulative Training Village Activists Report
July to October 1998

Region	Activists Trained		
	Male	Female	Total
Lahore	39	-	39
Gujranwala	90	35	125
Sialkot	84	6	90
Faisalabad	26	-	26
Sargodha	56	113	169
Sahiwal	30	-	30
Multan	115	19	134
Muzaffar Garh	120	39	159
Total:	562	220	782

Table PP-6
Credit Control Status Report by Region
Upto 31st October 1998

Region	Credit Disbursed	Credit Due	Credit Recovered	Credit Over Due	Pay Back Performance %
Lahore	5,577,000	57,750	60,655	-	105%
Gujranwala	1,380,000	43,035	43,035	-	100%
Sialkot	4,907,000	64,903	64,903	-	100%
Faisalabad	337,000	-	-	-	-
Sahiwal	2,676,000	36,187	48,192	-	133%
Sargodha	1,955,000	26,937	26,937	-	100%
Multan	563,840	3,300	3,302	-	100%
Muzaffargarh	2,850,260	35,729	39,307	-	110%
Total:	20,246,100	267,841	286,331	-	*107%

Note: *Some repayment dues were paid ahead of time by CO members.

Table PP-7
Composition of Credit Report
Regional Office Lahore
July to October 1998

Package Type	Purpose	Credit Period	Number of Loanees			Total Credit Disbursed	Total Credit	
			Male	Female	Total		Due	Recovered
Agri Inputs	Seed, Fertilizer, Agro Chemical, Feed/fodder	Upto 12 Months	50	-	50	1,035,000		
Enterprise Development	Working Capital	Upto 24 Months	124	5	129	2,772,000	34,781	35,704
Livestock Development	Fattening/ Breeding Sheep & Goats, Fattening of Calves	Upto 12 Months	75	2	77	1,745,000	22,969	24,951
	Milk Animals (Cows/ Buffaloes) Pulling/ Cartage Animals	Upto 30 Months	-	-	-	-	-	-
SIIE	Development of Productive Infrastructure	Upto 24 Months	1	-	1	25,000	-	-
		Individual Upto 60 Months for CO	-	-	-	-	-	-
Total:			250	7	257	5,577,000	57,750	60,655

Table PP-8
Composition of Credit Report
Regional Office Gujranwala
July to October 1998

Package Type	Purpose	Credit Period	Number of Loanees			Total Credit Disbursed	Total Credit	
			Male	Female	Total		Due	Recovered
Agri Inputs	Seed, Fertilizer, Agro chemical, Feed/fodder	Upto 12 Months	10	-	10	150,000	-	-
Enterprise Development	Working Capital	Upto 24 Months	22	-	22	630,000	27,935	27,935
Livestock Development	Fattening/ Breeding Sheep & Goats, Fattening of Calves	Upto 12 Months	18	-	18	540,000	15,100	15,100
	Milk Animals (Cows/ Buffaloes) Pulling/ Cartage Animals	Upto 30 Months	-	-	-	-	-	-
SIIE	Development of Productive Infrastructure	Upto 24 Months	3	-	3	60,000	-	-
		Individual Upto 60 Months for CO	-	-	-	-	-	-
			53	-	53	1,380,000	43,035	43,035

Table PP-9
Composition of Credit Report
Regional Office Sialkot
July to October 1998

Package Type	Purpose	Credit Period	Number of Loanees			Total Credit Disbursed	Total Credit	
			Male	Female	Total		Due	Recovered
Agri inputs	Seed, Fertilizer, Agro Chemical, Feed/fodder	Upto 12 Months	83	6	89	1,307,000	-	-
Enterprise Development	Working Capital	Upto 24 Months	153	5	158	2,545,000	57,209	57,209
Livestock Development	Fattening/ Breeding Sheep & Goats, Fattening of Calves	Upto 12 Months	-	-	-	-	-	-
	Milk Animals (Cows/ Buffaloes) Pulling/ Cartage Animals	Upto 30 Months	41	9	50	885,000	7,694	7,694
SIIE	Development of Productive Infrastructure	Upto 24 Months	9	-	9	170,000	-	-
		Individual Upto 60 Months for CO	-	-	-	-	-	-
Total:			286	20	306	4,907,000	64,903	64,903

Appendix I

Table PP-10
Composition of Credit Report
Regional Office Faisalabad
July to October 1998

Package Type	Purpose	Credit Period	Number of Loanees			Total Credit Disbursed	Total Credit	
			Male	Female	Total		Due	Recovered
Agri Inputs	Seed, Fertilizer, Agro Chemical, Feed/fodder	Upto 12 Months	1	-	1	7,000	-	-
Enterprise Development	Working Capital	Upto 24 Months	7	-	7	175,000	-	-
Livestock Development	Fattening/ Breeding Sheep & Goats, Fattening of Calves	Upto 12 Months	7	-	7	155,000	-	-
	Milk Animals (Cows/ Buffaloes) Pulling/ Cartage Animals	Upto 30 Months	-	-	7	-	-	-
SIIE	Development of Productive Infrastructure	Upto 24 Months	-	-	-	-	-	-
		Individual Upto 60 Months for CO	-	-	-	-	-	-
Total:			15	-	15	337,000	-	-

Table PP-11
Composition of Credit Report
Regional Office Sahiwal
July to October 1998

Package Type	Purpose	Credit Period	Number of Loanees			Total Credit Disbursed	Total Credit	
			Male	Female	Total		Due	Recovered
Agri Inputs	Seed, Fertilizer, Agro Chemical, Feed/fodder	Upto 12 Months	48	-	48	793,000	-	-
Enterprise Development	Working Capital	Upto 24 Months	59	5	64	1,280,000	29,554	40,636
Livestock Development	Fattening/ Breeding Sheep & Goats,	Upto 12 Months	16	25	41	603,000	6,633	7,556
	Fattening of Calves							
	Milk Animals (Cows/ Buffaloes) Pulling/ Cartage Animals	Upto 30 Months	-	-	-	-	-	-
SIIE	Development of Productive Infrastructure	Upto 24 Months	-	-	-	-	-	-
		Individual Upto 60 Months for CO	-	-	-	-	-	-
Total:			123	30	153	2,676,000	36,187	48,192

Appendix I

Table PP-12
Composition of Credit Report
Regional Office Sargodha
July to October 1998

Package Type	Purpose	Credit Period	Number of Loanees			Total Credit Disbursed	Total Credit	
			Male	Female	Total		Due	Recovered
Agri Inputs	Seed, Fertilizer, Agro Chemical, Feed/fodder	Upto 12 Months	9	-	9	125,000	1,385	1,385
Enterprise Development	Working Capital	Upto 24 Months	39	-	39	875,000	18,500	18,500
Livestock Development	Fattening/ Breeding Sheep & Goats,	Upto 12 Months	23	-	23	515,000	-	-
	Fattening of Calves							
	Milk Animals (Cows/ Buffaloes) Pulling/ Cartage Animals	Upto 30 Months	14	-	14	380,000	7,052	7,052
SIIE	Development of Productive Infrastructure	Upto 24 Months	2	-	2	60,000	-	-
		Individual Upto 60 Months for CO	-	-	-	-	-	-
Total:			87	-	87	1,955,000	26,937	26,937

Table PP-13
Composition of Credit Report
Regional Office Multan
July to October 1998

Package Type	Purpose	Credit Period	Number of Loanees			Total Credit Disbursed	Total Credit	
			Male	Female	Total		Due	Recovered
Agri Inputs	Seed, Fertilizer, Agro Chemical, Feed/fodder	Upto 12 Months	8	-	8	67,840	-	-
Enterprise Development	Working Capital	Upto 24 Months	26	1	27	360,000	3,300	3,302
Livestock Development	Fattening/ Breeding Sheep & Goats, Fattening of Calves	Upto 12 Months	9	1	10	126,000	-	-
	Milk Animals (Cows/ Buffaloes) Pulling/ Cartage Animals	Upto 30 Months	-	-	-	10,000	-	-
SIIE	Development of Productive Infrastructure	Upto 24 Months Individual Upto 60 Months for CO	-	-	-	-	-	-
Total:			43	2	45	563,840	3,300	3,302

Appendix I

Table PP-14
Composition of Credit Report
Regional Office Muzaffargarh
July to October 1998

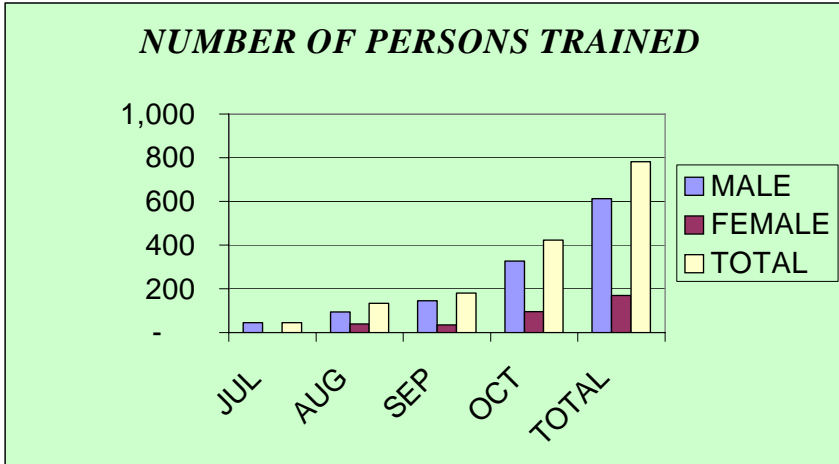
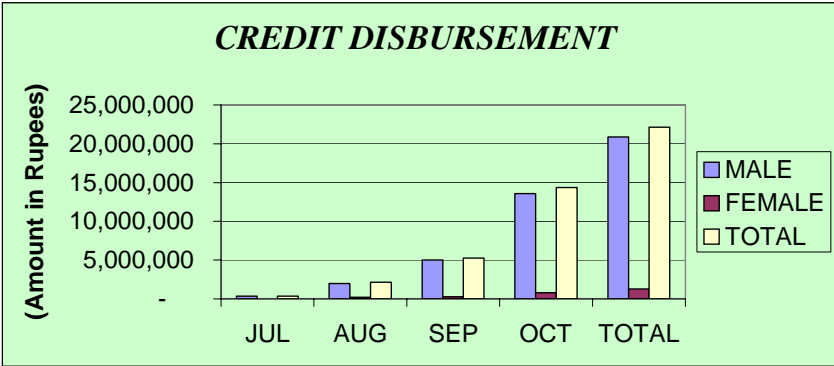
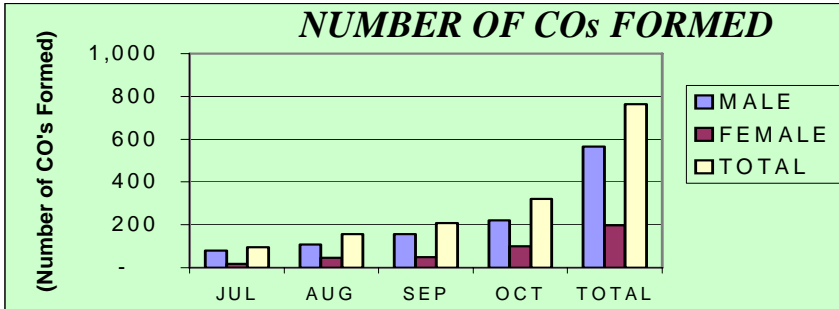
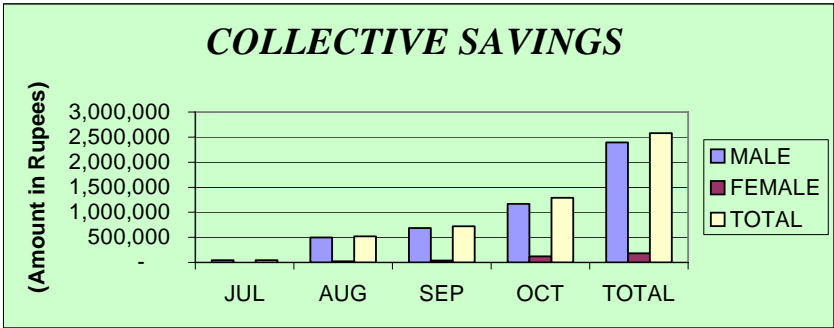
Package Type	Purpose	Credit Period	Number of Loanees			Total Credit Disbursed	Total Credit	
			Male	Female	Total		Due	Recovered
Agri Inputs	Seed, Fertilizer, Agro Chemical, Feed/Fodder	Upto 12 Months	101	-	101	585,760	-	-
Enterprise Development	Working Capital	Upto 24 Months	61	-	61	519,000	35,729	35,729
Livestock Development	Fattening/ Breeding Sheep & Goats, Fattening of Calves	Upto 12 Months	238	22	260	1,745,500	-	3,578
	Milk Animals (Cows/ Buffaloes) Pulling/ Cartage Animals	Upto 30 Months	-	-	-	-	-	-
SIIE	Development of Productive Infrastructure	Upto 24 Months Individual Upto 60 Months for CO	-	-	-	-	-	-
Total:			400	22	422	2,850,260	35,729	39,307

Table B-4
Present Discounted Value of Future Streams
of Earning Resulting from 1 Year's Credit Rs. 6,242
per person for Micro Enterprises

Annual Income (Rs)	9,363
No. of Years	6
Discount Rate	18%
Present Value of Income (Rs)	32,748
Less Interest Payment in First Year (Rs)	1,248
Net Present Value of Income (Rs)	31,500

Table B-5
Present Discounted Value of Future Stream
Of Earnings Due to Skill Acquisition

Annual Income per Person (Rs)	60,000
Number of Years for which Income is Earned	20
Interest Rate	18%
Present Value of Income (Rs)	321,165



Formats of Reports of Credit Control System and Financial Accounting System:

**Financial Accounting System
Trial Balance**

July – October 1998
Regional Office: Muzaffargarh

CODE	Account HEAD	DEBIT	CREDIT
1120	OFFICE EQUIPMENT	18,300 DB	
1122	COMPUTER & PRINTERS	159,000 DB	
1124	PHOTOCOPIERS	46,500 DB	
1130	FURNITURE & FIXURES	101,832 DB	
1140	MOTOR VEHICLES	1,087,069 DB	
1144	AIR CONDITIONERS	25,254 DB	
2010	PRSP HEAD OFFICE CURRENT ACCOUNT		2,245,855 CR
2480	PREPAID EXPENSES	96,000 DB	
2810	BANK OF PUNJAB: OPER.	140,563 DB	
2820	HABIB BANK LIMITED –CR POOL	1,000 DB	
6000	OPERATING EXPENSES	379,776 DB	
7000	PROGRAMME EXPENSES	2,325 DB	
8040	SUNDRY EXP. CARRIED FORWARD	188,236 DB	
		2,245,855 DB	2,245,855 CR

**Financial Accounting System
Trial Balance**

For the month ending October 1998
Regional Office: Muzaffargarh

CODE	Account HEAD	DEBIT	CREDIT
6010	SALARIES AND BENEFITS	82,537 DB	
6020	WAGES	2,500 DB	
6050	STAFF TRAVELLING	76,930 DB	
6120	POSTAGE AND TELEGRAM	536 DB	
6130	TELEPHONE AND FAX	2,182 DB	
6140	VEHICLE PETROL, OIL, LUBRICANTS	36,227 DB	
6142	VEHICLE REPAIR AND MAINTENANCE	2,292 DB	
6145	VEHICLE HIRING	18,350 DB	
6150	OFFICE SUPPLIES	13,455 DB	
6160	MEETING AND CONFERENCES	134 DB	
6170	FREIGHT AND CARRIAGE EXPENSES	738 DB	
6184	STAFF GUEST HOUSE EXPENSES	23,350 DB	
6200	BUILDING MAINTENANCE	1,401 DB	
6210	EQUIPMENT MAINTENANCE	43,953 DB	
6230	BOOKS MAPS AND PERIODICALS	1,153 DB	
6240	COMPUTER CONSUMABLES	3,373 DB	
6300	PRINTING AND STATIONERY	40,233 DB	
6320	UTILITY EXPENSES	432 DB	
6400	TRAINING EXPENSES	9,640 DB	
6410	TRAINER ALLOWANCE	20,000 DB	
		379,776 DB	