

**AGENCY FOR
INTERNATIONAL
DEVELOPMENT**



**COUNTRY DEVELOPMENT
STRATEGY STATEMENT**

FY 1981

BANGLADESH

**DEPARTMENT
OF
STATE**

January 1979



This strategy statement has been prepared by the AID field mission. It is prepared annually and used for planning purposes in the field and in Washington but is neither officially approved nor disapproved by AID/Washington. It does not represent official Agency policy.

BANGLADESH
FY 1981
COUNTRY DEVELOPMENT STRATEGY STATEMENT

January 15, 1979
Joseph S. Toner
Mission Director

TABLE OF CONTENTS

| | <u>Pages</u> |
|---|--------------|
| I. SUMMARY | 1 |
| II. ANALYSIS | |
| A. Analytical Description of the Poor Majority | |
| 1. Economic indicators | 2 |
| 2. Social-cultural indicators | |
| a. Literacy and educational status | 6 |
| b. Health and population status | 6 |
| c. Availability of and access to educational and health facilities | 7 |
| B. Economic Trends | |
| 1. Aggregate indicators | 9 |
| 2. Balance of payments | 10 |
| 3. Rural unemployment | 11 |
| 4. Trends in income distribution | 12 |
| C. Identification of the Causes of Poverty | |
| 1. Rural social structure | 14 |
| 2. Constraints on growth with equity | 16 |
| a. The HYV production strategy | 17 |
| b. Foodgrain distribution and procurement policies | 17 |
| c. Land tenure | 19 |
| d. Population growth | 20 |
| e. Lack of basic infrastructure | 20 |

| | <u>Pages</u> |
|---|--------------|
| f. BDG control of industry | 21 |
| g. Political weakness | 23 |
| h. Institutional weakness | 23 |
| D. Progress and Commitment | |
| 1. Measures to address poverty; Indicators of BDG intent | |
| a. Agriculture | 23 |
| b. Rural unemployment | 28 |
| c. Export of manpower | 28 |
| d. Health and population | 29 |
| e. Education | 29 |
| f. Role of women | 30 |
| 2. BDG development planning | 31 |
| 3. Human rights | 32 |
| 4. The environment | 33 |
| E. Other Donor Assistance | 34 |
| F. Absorptive Capacity | 35 |
| III. STRATEGY | |
| A. Objectives | |
| 1. Introduction | 37 |
| 2. Increasing foodgrain production | 39 |
| 3. Reducing fertility | 40 |
| 4. Increasing employment | 40 |

| | <u>Pages</u> |
|---|--------------|
| B. The AID Assistance Strategy | |
| 1. Increasing foodgrain production | |
| a. Food and agricultural policy | 41 |
| b. Fertilizer subsidy | 42 |
| c. Effective delivery of HYV inputs | 43 |
| e. Creation of productive infrastructure | 44 |
| 2. Reducing Fertility | |
| a. Basic strategy; support of non- governmental agencies | 46 |
| (1) Voluntary sterilization | 47 |
| (2) Social marketing | 48 |
| (3) Other non-clinical delivery approaches | 48 |
| b. Women's programs | 49 |
| 3. Increasing Employment | |
| a. The HYV strategy | 49 |
| b. Rural public works | 50 |
| c. Market town development | 51 |
| C. Projections; economic and demographic indicators | 53 |
| IV. PROPOSED ASSISTANCE PLANNING LEVELS | 57 |

I. SUMMARY

The analysis section shows the majority of people in Bangladesh living in absolute poverty and almost the entire population living in relative poverty. Of those below the poverty line, there are two major groups, poor farmers subsisting on small, fragmented landholdings and landless agricultural labor. The HYV strategy, by which we mean grain price stability, the equitable distribution of modern agricultural inputs and the creation of productive rural infrastructure, is designed to benefit primarily the larger of these two groups, the poor landholding farmer. Given the dominance of agriculture in Bangladesh's economy and the socio-economic structure of the country, it is unavoidable that this strategy will also help farmers above the poverty line. Because of the increased labor demanded by the HYV strategy, landless agricultural laborers will benefit as a group because there will be more employment. However, because the HYV strategy cannot absorb all of the surplus labor available, increases in real income for those that are employed are unlikely.

The problem of surplus rural labor is acute and pressing. Although expanded rural public works can ameliorate the problem to an extent, no ready solution is at hand. AID will be actively pursuing the development of off-farm employment programs.

In order for national economic gains to be meaningful in real terms, Bangladesh will have to achieve a substantial reduction in its fertility rate over the next five years. We propose a two-track approach for attaining a 40% prevalence rate. To achieve the maximum possible reduction in fertility in the short term, AID will markedly increase

its assistance to non-governmental organizations (NGO) which have been the most effective in the delivery of family planning services. By providing greater resources, we believe we can enable these NGOs to expand their efforts throughout the rural areas. At the same time, we, along with other donors, will continue to assist the BDG in building its family planning service delivery systems in order that these systems can assume an effective role in the post 1985 period.

II. ANALYSIS

A. Analytical Description of the Poor Majority

1. Economic Indicators

Per capita GDP in Bangladesh in 1977/78 amounted to the equivalent of \$90, one of the lowest such levels, if not the lowest level, in the world. Per capita national income, a more meaningful indicator of individual well being, was \$80. Per capita income levels for the urban and rural sectors separately are estimated at \$99 and \$78 respectively.

The urban population, defined as all those living in population centers of over 5,000 has been expanding at a rate of over 6 percent per annum and contains a high proportion of unemployed and the extremely poor. Unskilled laborers who comprise roughly one-half of the urban work force, subsist on a per capita income averaging under \$60, which is well below the poverty level, as defined below. However, since the urban population even now comprises only 10 percent of the total population, it is clear that the vast majority of the very poor reside in rural areas.

In a survey of 1,774 rural villages undertaken by Salimullah and

Islam in 1973/74, the poverty level income in that year - defined as the amount necessary to afford a minimum daily food consumption bundle - was measured at 130 taka. Applying a composite index of food prices to measure the increased cost of food to rural dwellers since then, the same food basket cost 1,202 Taka in 1977/78, or the equivalent of U.S. \$78.

With that as background, Table 1 provides estimates of rural per capita income levels by the three main occupational groupings: farmers, agricultural laborers, and all others. It has not been possible to disaggregate farmers into the various tenure categories, e.g. owner-manager, owner-cultivator, etc. Instead, they have been divided into three separate groupings according to size of landholding. However, tenant farmers are shown as a distinct group cutting across the landholding categories (in fact most tenant farmers would fall within the 0.5 to 2.0 acre category.)

Table 1

| <u>Rural Per Capita Income By Occupational Category</u> (U.S.Dollars in 1977/78) | | |
|---|----------------------------------|--|
| | <u>Percent of Rural Pop.</u> | <u>Average Per Capita Income</u> |
| A. <u>Farmers</u> | <u>59</u> | <u>91</u> |
| Cultivators of: | | |
| 0.5 to 2.0 acres | 29 | 61 |
| 2.01 to 5.0 acres | 19 | 85 |
| 5.01 to 10 acres | 8 | 170 |
| Over 10 acres | 3 | 222 |
| (Tenant farmers) | (6) | (59) |
| B. <u>Agricultural Laborers</u> | <u>25</u> | <u>47</u> |
| C. <u>Others</u> | <u>16</u> | <u>78</u> |
| Rural Average | | 78 |
| Poverty Level Income | | 78 |

It can be seen that average per capita rural income is right at the calculated poverty level. However, given the highly skewed pattern of income distribution, more than half of the population have incomes below the poverty line. Farmers on the average have per capita incomes of \$91, but those with landholdings of from one half to two acres - comprising with their families one half of all farmers and 29 percent of the rural population - have an average income of \$61. Agricultural laborers, comprising 25 percent of the rural population, are still worse off with per capita incomes of only \$47. Only the 11 percent of the rural population with landholdings over five acres are comfortably above the poverty line, though even this group would be considered poor by western or even middle-income country standards.

The "other" category, those engaged in commerce, rural industry and services, appears to have increased its share of the rural population since the 1973/74 Census from 15 to 16 percent, not a surprising development considering the very rapid expansion - estimated at 5 percent per annum - of the landless category as a whole. The "landless," those owning less than 0.5 acres of other than homestead land, may be taken as the sum of the "Agricultural Labor" and "Other" categories in Table 1. It may be noted that this total - 41 percent - approximately matches the 40.9 percent of persons (N.B.: persons, not households) shown as landless in the AID-financed Land Occupancy Survey I.*

Using the data from Table 1, and with the aid of interpolations of the 1973/74 Household Expenditure Survey data, it is possible to make a

*Land Occupancy Survey, Phase II, published in December 1978, showed that by late 1978 the proportion of landless within the total rural population had risen to 42.4 percent.

crude estimate of the number of rural persons below the designated poverty line of \$78. Table 2 provides such an estimate by category expressed both as a percent of the rural population and in numbers of people.

Table 2

Share of Rural Population with Incomes Below Poverty Line
(Poverty Line = U.S. \$78)

| | % of Rural Pop. | Ave. Per Cap. Inc. \$ | Percent Below Poverty Line: | | No. Below Poverty Line (Million) |
|--------------------|-----------------|-----------------------|-----------------------------|-----------------|----------------------------------|
| | | | % of Group | % of Rural Pop. | |
| A. <u>Farmers</u> | <u>59</u> | <u>91</u> | <u>45</u> | <u>26.8</u> | <u>20.5</u> |
| 0.5 to 2.0 acres | 29 | 61 | 78 | 22.6 | 17.3 |
| 2.01 to 5.0 acres | 19 | 86 | 22 | 4.2 | 3.2 |
| Over 5 acres | 11 | 186 | -0- | -0- | -0- |
| B. <u>Laborers</u> | <u>25</u> | <u>47</u> | <u>95</u> | <u>23.7</u> | <u>18.1</u> |
| C. <u>Other</u> | <u>16</u> | <u>78</u> | <u>50</u> | <u>8.0</u> | <u>6.1</u> |
| TOTAL | 100 | 78 | | 58.5 | 44.7 |

Note: Rural population estimated at 76.5 million as of Jan. 1, 1978.

Thus, while agricultural laborers as a group are clearly the most distressed sector of the rural population, they are exceeded in terms of absolute numbers below the poverty line by small farmers. Fully 58.5 percent of the rural population, or 44.7 million persons, appeared to be below the poverty line in 1977/78. This finding compares closely with the results of an extensive survey carried out by the Institute of Nutrition and Food Science, Dacca University, in 1975/76, which showed that 59 percent of the rural population did not meet a minimum required calorie consumption standard.

2. Social/Cultural Indicators

a. Literacy and Educational Status

The national average literacy rate is between 20 and 25 percent and is not increasing. The urban population is twice as literate as the rural population (44 percent and 22 percent). Among the rural population, 31 percent of males and 13 percent of females are literate. No clear correlation between education and income has been established in Bangladesh but it is known that the higher the family income, the more likely a child will stay in school. It appears logical then that the poorest among the rural population would have the lowest literacy rates, i.e. extremely low.

b. Health and Population Status

The health status of the rural poor is directly related to their general economic status. For lack of purchasing power, the rural poor consume less than their minimum requirement of food. This leads to malnutrition which results in a high level of susceptibility to sickness and disease. According to the Institute of Nutrition and Food Science of Dacca University, 75 percent of rural children under the age of 3 suffer from second or third degree malnutrition. This is a function of behavioral patterns as well as income; e.g. delayed introduction of solid food and inadequate knowledge regarding the management of diarrheal infection.

The relationship between malnutrition and disease and death has been well documented. A study conducted in Matlab Thana showed a direct relationship between child mortality and declining nutritional status. Malnutrition is a major factor in the death of 25 percent of children

under 5 years of age.

Excepting Singapore, Barbados and Hong Kong, Bangladesh is the most densely populated (over 1500 per square mile) nation in the world, and growing at the rate of 2.7% per annum. The high growth rate is attributable to a number of social, cultural and economic factors, including strong social approval of large families, universal marriage, and the economic value of children (see Section 2.c.). There are indications that landless agricultural laborers have smaller families than do landowners but this is probably due to a higher mortality rate amongst the former.

c. Availability of and Access to Educational and Health Facilities

Bangladesh has 41,000 primary schools, of which 36,000 are Government operated. To staff these schools, the BDG employs 155,000 teachers. With an enrollment of about 8 million, the teacher/student ratio is 1:52.

Despite what appears to be extensive coverage of schools, very few students complete their primary education, i.e. through Class 5. For every 100 children reaching 6 years of age, 70 will enroll in school. Of this number, over half will drop out at the end of the first grade. Only 15 will complete the fifth grade and only 4 will complete their secondary education. The probability of a girl reaching the fifth grade is about half that of a boy. The school system is characterized by: the poor quality of the physical structures; a curriculum irrelevant to village life; lack of finances (recurrent costs are only 0.5 percent of GNP, with only Haiti, Afghanistan and Nepal being lower); an understaffed and undertrained administration; a general shortage of instructional

materials; teacher centered classes which inhibit student participation and fail to take into account varying levels of ability; and high rates of teacher absenteeism resulting from inadequate training, motivation and supervision. Added to this bleak picture are economic and social factors limiting attendance. From an economic standpoint, children are valuable. Virtually all children from the age of 7 or 8 can contribute something to family income, if only by tending younger siblings, thereby freeing their parents or older siblings for productive work. By age 15 a male child, working for a small landowning farm family, will probably contribute more, in the way of labor, to family farm production than he will consume. On the cultural side, many rural parents do not wish to send their female children to classes taught by men. Given that there are only 8,000 female primary school teachers, female attendance remains extremely low and helps to perpetuate the problem.

In general, health services available to most villages consist of the village midwife (dai), the local health practitioner and occasional visits by field based health and family planning workers. Doctors and hospitals are so remote as to be considered only at times of serious need and even then are likely to be beyond reach.

Bangladesh now has an estimated 7,000 physicians for a population of 87 million. Seventy-five percent of all doctors are located in the urban areas. Medical education is hospital-oriented and curative in nature, with a minimal emphasis on public health. An extensive field cadre of health and family planning workers has been built up in recent years, but they suffer from lack of motivation and supervision and there is little indication they are delivering services to the rural poor.

B. Economic Trends

1. Aggregate Indicators

Analysis of economic trends in Bangladesh depends largely on the analyst's treatment of the War of Liberation from Pakistan. The enormous destruction and dislocations that took place in 1971-72 resulted in declines of 19 percent in real GDP and 17 percent in foodgrain production. Thus, measurements that span the war period can be useful if they are understood as comparisons of conditions now with pre-war, but they do not constitute meaningful measures of "progress" over time. On the other hand, not enough time has elapsed since Liberation to enable meaningful trend measurements since then, especially since such measurements take the depressed environment of the immediate post-war period as their starting point.

With this in mind, it may be noted that during the past five fiscal years, 1972/73 - 77/78, real GDP increased at an average annual rate of 7.6 percent per annum and the population grew at a rate of 2.7 percent per annum. Given the heavy rate of rural-urban migration underway during this period, the population growth rate can be broken down as 2.4 percent rural and 6.3 percent in the urban areas. Overall, per capita GDP grew at a rate of 4.8 percent per annum. Agricultural output and foodgrain production grew at rates of 4.0 percent and 5.4 percent per annum, respectively, due to the expanding adoption of high yielding variety (HYV) technology. Manufacturing output increased at a rate of 5.7 percent per annum but employment in manufacturing rose during the period by some 130 percent.* Consequently, productivity in manufacturing declined

*Estimate based on employment data for four industries (jute, cotton, paper and steel) accounting for 65 percent of manufacturing output.

overall by some 43 percent.

While most of the economic indicators suggest good progress over the past 5 years, the national account data also indicate that in 1977/78 real GDP was 26 percent and per capita GDP only 5 percent above the 1969/70 level. Foodgrain production was only 9 percent and manufacturing output 6.5 percent above the level of the last pre-war year. The available studies agree that nutritional standards are lower than in pre-war years, and real wages are 20 to 40 percent below the 1969/70 level.* The existence of reduced nutritional standards and reduced real wages, taken together with the minimal rise in per capita GDP and the increasingly inequitable distribution of income (see below), leaves no doubt that the majority of people are worse off now than they were then. Moreover, fundamental problems have persisted or worsened during recent years, threatening such progress as has been made. Apart from the stagnation in industry already noted, mention may be made here of the balance of payments situation, rural unemployment, and the increasingly inequitable distribution of income.

2. Balance of Payments

Bangladesh has become increasingly dependent on foreign aid during the past five years. This was almost inevitable given the relatively stagnant world market for its principal export product, jute (and jute manufactures), the lack of a natural resource base from which to develop significant export alternatives, and rapidly rising import costs occasioned both by the country's growth and by worldwide inflation. Exports grew

* Bangladesh Bureau of Statistics data show that between 1969/70 and 1977/78 real wages in manufacturing and construction declined by 40 and 20 percent, respectively. Mission calculations indicate a 25 percent drop in real agricultural wages during the same period.

at a rate of 7.9 percent per annum during 1972/73-77/78, imports by 13.1 percent. Foreign aid disbursements were \$420 million in 1972/75, \$796 million in 1977/78. To be sure, Bangladesh can probably count on receiving top priority among aid donors for the foreseeable future, but it cannot rely on an increasing aid inflow indefinitely. Moreover, the relatively easy aid availability should not obscure the existence of a perennial, extremely tight foreign exchange situation that denies the flexibility needed to meet sudden and urgent needs, e.g. fertilizer or industrial raw materials.

3. Rural Unemployment

Rural unemployment is more a matter of widespread under-employment than of unemployment per se. It arises in the first instance from the absence of new land for cultivation, the rapid rate of population increase, and Moslem inheritance laws which decree that land be parcelled equally among surviving sons. Increasingly, those with very small landholdings are forced for economic reasons to sell to larger landowners or money-lenders. They thereby join the ranks of the landless, whose numbers are rising at an estimated 5 percent a year. At present, the off-farm rural economy is unable to absorb more than a portion of those displaced. Rural unemployment/underemployment is estimated at an unemployment equivalent - the equivalent of a situation in which laborers were employed full time or not at all - of at least 40 percent.

The higher per acre labor requirement of HYV (as opposed to traditional variety) cultivation has been responsible for a continuing rise in employment in foodgrain production. But this increase has measured no more than about 1.5 percent per annum in recent years (of mostly good

harvests). Thus, employment in the foodgrain sector, which accounts for 70 percent of agricultural and 60 percent of total rural employment, has not matched the ongoing 2.4 percent increase in the rural labor force. Little is known about employment in other sectors of agriculture, i.e. other crops, fisheries, forestry and livestock, but their contribution to the unemployment problem is believed to have been less than that of the foodgrain sector. Doubtless, work opportunities in the non-agriculture part of the rural economy - industry, transportation and services - have been increasing, and the expansion of rural works projects has helped. Nevertheless, it has to be concluded that rural unemployment is increasing, both absolutely and as a proportion of the rural labor force.

4. Trends in Income Distribution

On the basis of the post-Liberation trends noted above - rising agricultural output accompanied by rising landlessness and unemployment - it appears evident that rural income distribution has become increasingly skewed along the lines indicated in Part II.A. above. The poorest groups in the rural areas have been growing poorer, in relative if not absolute terms, while the relatively well-to-do larger farmers have been gaining ground both relatively and absolutely.

Considering the apparent failure of agricultural employment to keep up with the rise in the rural labor force (or landlessness), it is surprising that as best we can measure it, real agricultural wages have not fallen in recent years. Rather, they have remained stagnant or even risen slightly. It may be that real wages have fallen to a point at which supply/demand considerations no longer prevail. That is, a

laborer must be paid enough to sustain him through a day's work and no less. It is also possible that off-farm employment has been expanding more rapidly than is generally believed. But whatever the explanation for the seeming paradox between rising landlessness and rural unemployment and a stable, or slightly rising, real agricultural wage rate, the landless do not appear to have made any absolute progress since Liberation. This applies both to the 60 percent of rural landless dependent on an agricultural wage and the 40 percent who have found or who seek employment in non-agricultural areas. Clearly the landless have lost ground relative to farmers as a group.

Among farmers, owner-cultivators and owner-managers have been doing better than tenant farmers, and larger farmers better than smaller farmers. Tenant farmers, who along with owner-cum-tenants cultivate some 23 percent of the land, are in the worst situation because normally they must surrender half of the crop to their landlord while bearing all of the investment risk. Under the circumstances they are reluctant to undertake the risks inherent in an investment in HYV technology. They also lack access to institutional credit and other agricultural inputs, the provision of which tends to be controlled by cooperatives and other groups dominated by large farmers. Small farmers, those owning less than 2 to 3 acres of land, have been doing better than sharecroppers, but they also lack access to agricultural inputs and the benefits that flow from their adoption. In summary, small owner-farmers and tenant farmers have been making some progress in absolute terms while perhaps holding their own in relative terms; and larger farmers have increased both their absolute and relative shares of the total rural income.

C. Identification of the Causes of Poverty

1. Rural Social Structure

The rural social structure in Bangladesh is one of the most rigidly stratified of any non-caste system in the world. There is a strict hierarchy of rights, power and influence. Not surprisingly, about 20 percent of the rural population occupies the upper strata of that hierarchy.

Position in the rural social hierarchy can be determined by a variety of factors. One of the most common is ownership of land. An adult male who owns farm land becomes a malik, a socio-religious term which implies both a social status stemming from the possession of land and a religious status from being able to fulfill an Islamic covenant in mastering the land. However, about 33 percent of the heads of rural households do not own farm land* and thus do not qualify as maliks.

Becoming a malik does not guarantee the individual a higher position in the rural social hierarchy. To attain such a position, a malik must become influential. This is commonly accomplished by owning larger amounts of farm land (i.e. five acres or more). Only about 7 percent of heads of household fall into this category. Less influential maliks are those who own from 3 to 5 acres; they represent approximately 8 percent of all household heads.

Land ownership itself is not the sole means to achieve status and position in the social structure. Occupying a government administrative post automatically confers upon an individual a relatively high social position. Moneylenders, physicians, and larger-scale merchants also

*Not to be confused with the 41 percent described as "landless" for the purposes of Table 1. That measurement encompassed the entire rural population - i.e. farm families as well as household heads - and included as "landless" those families owning up to 0.5 acres of farm land.

occupy positions of substance in the hierarchy, but in any given locale these individuals represent only a small part of the community.

With status and economic well-being come regular access to such social resources as education, health care and institutional credit. Similarly, local political offices and local decision-making are primarily in the hands of the influential maliks and the non-agricultural elite who live in the rural towns.

One way for the powerless to acquire effective access to economic, political or administrative resources is to subjugate themselves to one or more of the influential families. Often the powerless (especially the landless) depend directly upon the influential families for all or part of their livelihood, since the only available employment may be in the fields or enterprises of the influentials. Such dependency makes the position of the elite all the more commanding and autocratic.

Efforts by those occupying the lower portion of the social hierarchy to obtain access to resources and services without the assistance of an influential are ordinarily met by demands for bribes and concessions. The lack of economic means among the poor makes the paying of bribes extremely difficult, and the granting of concessions would put them under the control of yet another master. Thus, the ability of the poor to obtain access to resources on their own initiative is severely retarded.

Usually, rural elites have gained control of rural programs instituted by the central government--even when the intended beneficiaries are the poor. Often, this usurpation of rural programs is motivated by the desire of the rural elites to maintain control and extend influence into any new pursuit which could represent an alternative source of

power to other individuals or families.

In this environment, the rural poor are effectively left out of any substantial decision-making. Their concerns are also rarely the factors motivating those who do make decisions in the rural areas. The prospects for changes in these social patterns in the near future are minimal.

2. Constraints on Growth with Equity

Bangladesh began with every disadvantage in 1971. Lacking natural resources, greatly overpopulated, an economy distorted by centuries of colonial domination and exploitation, its managerial class decimated, the country's plight went well beyond the ordinary "poor because it's poor" syndrome. It did, however, have the benefit of a sympathetic donor community and, therefore, some chance to move forward. Moreover, poor as the country is in natural resources, it could achieve foodgrain self-sufficiency if the known and available HYV seed technology could be introduced to and accepted by the majority of Bangladeshi farmers. Thus, progress would seem to be possible, albeit within the context of a poverty situation in Western terms.

The post-Liberation record indicates moderate success with respect to overall growth, despite the natural disasters in the form of cyclone and flood in 1972 and 1974/75, but no improvement in the lot of the poorest elements of the population, and an increasingly inequitable distribution of the country's national income. The remainder of this section deals with the principal constraints serving to limit growth and/or growth with equity. Section D will discuss BDG efforts to overcome these constraints or to work around them.

a. The HYV Production Strategy

In assessing policies that bear on equity, it must be recognized that the HYV production strategy itself is a factor in the increasingly inequitable distribution of rural income. This is inherent in the very nature of the strategy which implies increasing returns per unit of labor input. Put another way, production - therefore, farmers' profits - increases more rapidly than farm employment. The strategy has been pursued, nonetheless: (a) as the only conceivable path to foodgrain self-sufficiency; (b) in consideration of the fact that no other production strategy yet devised can provide more employment to the very poor; and (c) in the expectation that rising on-farm incomes would lead to increased demand for wage goods and the off-farm employment required for their production. While this last aspect has not worked out as well as hoped (see Strategy Section below), it appears that the HYV strategy has prevented an absolute decline in the incomes of agricultural laborers. That is equity in one sense but it is not equity if we mean by that term a more equitable distribution of rural income.

b. Foodgrain Distribution and Procurement Policies

For the foreseeable future, any significant economic growth will have to take place in the agriculture sector which accounts for some 57 percent of GNP. Past BDG policies have been detrimental, both to agricultural growth per se and to growth with equity, notably those policies having to do with foodgrain distribution and procurement.

The public distribution of foodgrains through a ration system at subsidized prices has constituted a major budgetary burden, draining funds badly needed for development purposes, and is probably the principal

factor in tilting the urban/rural terms of trade in favor of the urban areas. According to the World Bank, the food subsidy accounted for 26 percent of the BDG's revenue (operating) budget in 1977/78. Some 20 percent of the total distribution in that year was to Food For Work and relief recipients. Of the remainder, an estimated 70 percent was distributed to urban recipients who as a group are relatively better off than the rural population.

Responding to donor pressure, the BDG has periodically raised the ration price (the most recent increase being on January 1, 1978); has made some small progress in limiting access of better-off individuals to the ration rolls (in mid-1978 an income ceiling was placed on future entrants); and has increased the share of the total distribution effected through the Modified Ration System (mainly rural dwellers and residents of small towns). Offtakes in 1978 were substantially below the 1977 level (decline of 10 percent for the period, January-November). However, the reforms effected to date have been insignificant relative to the continuing pernicious aspects of the system. And, according to the BDG Memorandum For The Bangladesh AID Group, 1979-80, offtakes are to resume their upward trend in 1979-80, more than off-setting the decline expected for 1978-79. In short, the ration system remains as one of the country's more intractable economic and political problems.

Apart from its equity aspect, the ration system has adversely affected foodgrain production by diverting urban purchasing power from domestic output to imports. At the same time, until FY 1977/78, the BDG was unwilling or unable to support foodgrain prices at harvest time. In the absence of such support, output prices were depressed at levels

too low to induce investment in HYV technology which involves increased risk as well as greater expense. This was especially the case with small and tenant farmers unable to obtain institutional credit at low rates of interest. At the other end of the scale, the BDG did not seek to restrain prices during the "lean" season, i.e. the period immediately prior to the harvest, when prices often doubled. Since many low-income farmers had to buy foodgrains for consumption at this time, they were forced to borrow to meet the cost of the highly priced foodgrains. Accordingly, most low-income farmers were caught in a continuing spiral of greater indebtedness and failure to meet basic consumption requirements.

c. Land Tenure

Foremost among the constraints to both growth and growth with equity is the land tenure situation, which encompasses both the plight of tenant farmers and the inequitable distribution of landholdings. The impact of the situation on equity is obvious.* Most tenant farmers and many of the poorest of the small farmers cannot afford to invest in the total package of HYV technology which constrains growth. The whole country accordingly foregoes the benefits of the investments not made.

The BDG has periodically asserted its intention to decree a landlord-tenant arrangement more favorable to the tenant than the present one in which the tenant surrenders half of his crop while bearing all of the investment risk. The Mission believes that this has to be approached carefully to avoid a mass eviction of tenants by landlords.

The BDG's only action on land redistribution was the imposition of a 33-acre ceiling on landholdings shortly after Independence. Even this

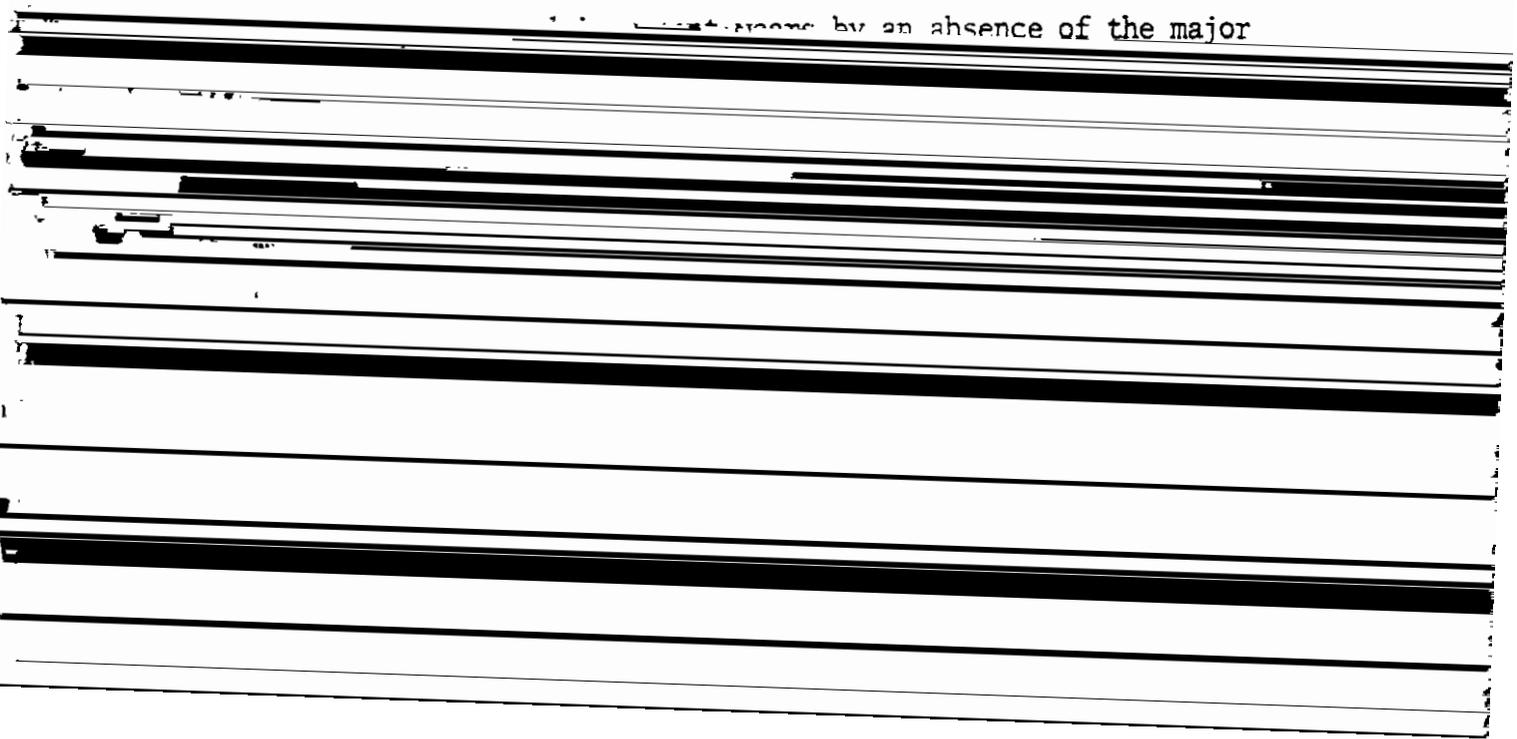
*If not, see 1977 Land Occupancy Study by Jannuzi and Peach.

measure, which in theory affected less than 0.5 percent of landowners, with at most 5 percent of total landholdings, has been easily circumvented. As unfortunate as the situation is, the Mission feels that an effective land reform is probably not feasible within the context of present socio-political realities. Equally important, given the population to land ratio, only the most drastic of land reform programs would suffice to provide landholdings of a viable size, e.g. about 2 acres, to all landless farm families. In short, there appears to be no way to alter effectively the present situation. Policy will have to be geared to meeting the needs of landless agricultural laborers to the extent possible within the current socio-political framework.

d. Population Growth

The population of Bangladesh, presently about 87 million, has grown at an annual rate of 2.6 percent since 1961. (The current growth rate is believed to be slightly higher at 2.7 percent.) Real GDP has grown at about the same rate, i.e. there has been no increase in GDP per capita. Since 1974, agricultural output has grown faster than the population but this could prove a temporary phenomenon as the country

... by an absence of the major



high of 3.6 million acres in 1974-75 to 3.0 million acres in 1976-77. Inasmuch as 90 percent of irrigated acreage is from surface water, this situation reflects the lack of expansion and improper maintenance of the system of irrigation canals, and a decline in the use of mechanical low-lift pumps in recent years.

By mid-1978 only 2 percent of all villages had electricity. It has been estimated that to achieve foodgrain self-sufficiency by 1985, Bangladesh will require twenty times the present electricity consumption and five times the present rate of diesel oil consumption in the rural sector. This does not include the increased demand on energy resources for the domestic production of fertilizer or for services, such as rice milling, related to the agricultural sector.

The lack of an adequate farm-to-market road system and inadequate inland water transport hampers the delivery of agricultural inputs and other services to the rural areas, while causing severe difficulties for small farmers in delivering their crops to markets and procurement centers. Many farmers are forced to deal with grain traders who take delivery at the farm level at prices substantially below prevailing market prices.

The lack of adequate road transportation, power and communications systems also constrains the development of rural industries and market towns. The resulting problem of rural unemployment/underemployment was discussed in the Economic Trends section.

f. BDG Control of Industry

A constraint obviously inimical to growth is the BDG's domination of major industry. Some 60 percent of manufacturing output is accounted

for by about 400 nationalized enterprises. The adverse impact on growth arises from operating inefficiencies evidenced by the declining productivity noted above but to some extent masked by interest free loans, inadequate depreciation allowances, and other dubious accounting practices which tend to obscure operating losses. An over-valued exchange rate for the Taka contributes to the ever-rising subsidy to the jute industry, expected to reach \$39 million in 1978. The public sector corporations are also highly capital intensive. Thus they do not effectively address the country's unemployment problem even though the industries themselves are grossly overmanned.

Public utilities are also inefficiently managed. Those in the important water and power sectors incur sizable annual losses, partly because of unrealistically low rate charges. Virtually all utilities would be seen as deficit operations if they followed realistic depreciation and other accounting practices.

The BDG has taken steps recently to ease restrictions on private investment and is promoting the development of small and cottage industries. However, the reservation of the major sectors of industry to government continues, as do attitudes of suspicion towards free enterprise. The combined output of all public sector manufacturing corporations accounts for only about 4 percent of GDP, but their operating deficits, whether open or concealed, constitute a major burden on the government's budget. These deficits are one of the main obstacles to raising the extremely low level of domestic resource mobilization (the domestic savings: GDP ratio was only 3.4 and 3.1 percent in 1976/77 and 1977/78, respectively). The effect on growth,

therefore, is both direct, through a sub-optimal rate of industrial growth, and indirect through reduced availability of Taka for development projects.

g. Political Weakness

Implied in much of what has been said to this point is the fact that the Government does not have the power to effect major and rapid changes in the social-economic-political structure. The price of trying to do so could be rural chaos and/or another coup. The advent of parliamentary democracy following the elections, scheduled for February 1979, is likely to bring a further dilution of central government political power considering that the Government's power base will, more than ever, be beholden to the Union Council Chairmen who were relied upon to get out the vote.

h. Institutional Weaknesses

The weak administrative/management structure of the BDG itself is a major constraint. This is discussed more fully in a subsequent section on Absorptive Capacity.

D. Progress and Commitment

1. BDG Measures to Address Poverty; Indicators of BDG Intent

a. Agriculture

Since the HYV production strategy appears essential to foodgrain self-sufficiency and to rural employment, government policy measures to extend HYV benefits to relatively small producers and to redress its inherently inequitable aspects would seem to be especially important. The BDG record in this respect is mixed.

A matter of primary importance has been the government's basic

approach toward the delivery of agricultural inputs. Throughout the First Plan Period (1972/73-77/78), its favored vehicle was the Integrated Rural Development Program (IRDP) cooperative system, which now covers some 200 of the country's 440 Thanas. The IRDP has not been effective in the management of the large-scale irrigation and deep tube well projects favored by the planners, nor has it helped significantly to improve the lot of small farmers. On the contrary, larger farmers have come to dominate cooperatives, thereby securing for themselves priority access to fertilizer (at official prices), institutional credit and irrigation water.

With that as background, the Two Year Plan for 1978/79-79/80 contains a depressing endorsement of both the IRDP and cooperative concepts, with only a nod toward including the landless in cooperatives. The TYP notes that "...only the ten percent of farmers with over five acres of land enjoy a marketable surplus and can thereby benefit from a foodgrain procurement program," and that "...another 25 percent of farmers with 2.5 to 5 acres could benefit provided they had access to institutional credit." In fact, Mission studies have shown that the majority of farmers sell a part of their harvest to repay debts to meet other cash needs.*

Given their expressed attitude on this point, it is remarkable that the BDG has, in fact, been running an effective procurement program beginning with the Aman harvest of 1977. Large-scale purchases of rice (550,000 tons in FY 1978) have supported the rice price at a level

*The point has now been confirmed by LOS II which found that 53.8 percent of rice farmers sold some of their crop during the past crop year. 46.3 percent reported selling more than half of their crop.

estimated to provide an adequate return to the farmer. Beginning with the 1978/79 crop year, the BDG is conducting open market sales operations using wheat supplied through P.L. 480 Title III in an effort to prevent overly high prices during the lean seasons when relatively little grain is moving to market. Thus, the range between high and low prices during the course of a crop year would be held to between 20 to 25 percent, as opposed to the 40 to 45 percent that has prevailed in the past.

The procurement program has provided a substantial stimulus to production and it has particularly benefitted small and tenant farmers, many of whom are for the first time enjoying returns to production sufficient to enable them to invest in fertilizer and HYV technology.*

The open market sales program has also provided a significant stimulus to

managed will result in real increases in income, not only to the rural landless but also to small farmers who must purchase grain to meet consumption needs during the lean seasons.

development budget for agriculture. This situation is responsible in part for an acute shortage of Taka for approved development projects. The fertilizer subsidy has enabled its purchase by small and tenant farmers who otherwise could not have afforded it. However, more of the benefit has accrued to the larger farmers who, it is believed, account for the greater part of fertilizer use (partly because in times and places of shortages large farmers have better access to the available supplies), and who do not need the help. In short, it appears unlikely that the benefits of extremely low-cost fertilizer outweigh the drain on the country's resources involved in the rising cost of the subsidy.

Irrigation subsidies are harder to justify than fertilizer subsidies since irrigation schemes cover only some 15 percent of the agricultural land, most of it held by the larger farmers. Recognizing this, the BDG has begun imposing rates on beneficiaries under large-scale irrigation schemes and raising rates on tube well irrigation where these already existed. From both the equity and resource mobilization standpoints, however, additional increases are warranted.

A matter of paramount importance to the farmer is the cost of agricultural credit. Institutional credit at rates of 12-17 percent per annum has been available to less than 15 percent of farmers, nearly all of it to larger owner-cultivators who are able to meet collateral requirements and who otherwise manage the disbursement machinery. Those without access to institutional credit must depend on relatives or money lenders who charge interest of at least 100 percent per annum. To redress this situation, the BDG launched a 100 Crore Taka (\$67 million) credit program in early 1977 targeted primarily at small farmers.

Of this amount 23 crore were disbursed in FY 1977 and another 70 crore in FY 1978. The disappointing aspects of the program have been the tendency of larger farmers to secure the bulk of the credit, and the extremely high rate of defaults. Moreover, investigations have shown that the highest default rates have occurred among the larger farmers. The high default rates have caused the decapitalization of agricultural banks and credit cooperatives, thereby hindering the expansion of regular lending programs. The BDG is concerned about this situation and is endeavoring to expand the number of branch banks engaged in agricultural lending operations, to improve the training of bank officials, and to attack the institutional and psychological obstacles that inhibit lending to small farmers. Whether these efforts can make an impact on the entrenched interests of the rural elite is not clear.

Notwithstanding the primitive state of rural infrastructure noted earlier, considerable progress has been made, even in so starved an area as village electrification. In irrigation, the focus has shifted from the large-scale projects that tended to benefit only the larger farmers to smaller-scale systems. For example, over 60,000 hand pumps for irrigation of very small plots of the poorest farmers were introduced in the last two years.

Extension programs and rural integration schemes continue to grow in number but remain understaffed with under-skilled technicians. Part of the problem is supervision; there is only one extension agent for every 14 villages or 1400 farm families. Awareness of this imbalance exists but resolve to correct it is missing. Recently, increasing attention has been focused on "village self-reliance" schemes, perhaps

to compensate for limited Government staff and equally limited capability.

b. Rural Unemployment

Until recently, efforts to cope with rising rural unemployment were focused entirely on public works programs, both those financed by the BDG (Water Development Board projects and the Rural Works Program), and the Food For Work programs financed by USAID/CARE and the World Food Program. Combined, all of these programs provide about 600,000 person years of employment, which compares with rural unemployment of over 10 million person years. Recently, the BDG has attempted to stimulate off-farm employment through a vaguely defined rural industries strategy, the main vehicle for which is the reactivated Bangladesh Small and Cottage Industries Corporation. In addition, the Government decreed a widespread relaxation of restrictions on private investment in October, 1978. The new measures included special incentives to investment in "...less developed areas of Bangladesh." It is unlikely that these measures will prove sufficient relative to the need.

c. Export of Manpower

One development affecting many areas of economic growth and the delivery of services to the rural poor is the continuing large-scale exodus of manpower to the Middle East. By the end of May, 1978, those departing included 923 doctors and nurses and over 3,600 skilled workers and technicians. The program is pursued as an important earner of foreign exchange (worker remittances totalled about \$115 million in 1978), which the Government needs. However, that portion of the return associated with the loss of many of the country's best trained people cannot be worth it. Legal restraint of those wishing to emigrate

might not be appropriate within the context of a democratic society, but the BDG's active promotion of exports of skilled workers who are badly needed at home casts doubt on its commitment to development with equity.

d. Health and Population

Notwithstanding the dismal record of rural health care cited in Section II.A., the BDG's increased emphasis on rural services is apparent. Since 1973, the number of Thana Health Centers, county level inpatient/outpatient facilities run by physicians and supporting staff, has grown from 150 to 235. The BDG also has begun to construct Family Welfare Centers, with plans to establish one for each of the country's 3,698 rural unions. At the same time, the BDG is training curative health care practitioners, known as "village doctors", to be the primary village resource for medical care and first aid.

In the area of population control, BDG policy is to make contraceptive services easily accessible to all Bangladeshis through a system of domicilliary fieldworkers supported by union level clinics. The system is still fairly new, understaffed, and hampered by major organizational inefficiencies. Besides the Government system, there exists a very active commercial contraceptive distribution system. Pills and condoms are available at small shops all over the country, many at highly subsidized rates. Progress is being made, but for the immediate future many Bangladeshi families will remain beyond easy access to contraceptive supplies, services, and education.

e. Education

The regrettable state of education in Bangladesh, its elitist

bias and general unsuitability to the country's development needs, was brought out in Section A. Planned budgetary allocations indicate a continuation, or worsening, of the present situation. Under the First Five Year Plan, primary education was allotted 17.9 percent and university education 10.9 percent of total development expenditures for education. Under the Two Year Plan for 1978/79 - 79/80, the respective shares are: primary, 13.2 percent; university, 13.1 percent.

A possibly hopeful sign has been the formation by President Zia in August, 1978 of a National Educational Advisory Council (NEAC) to suggest a reform program for the sector. In its debates thus far, it is clear that NEAC generally believes that the present system is irrelevant to the nationalistic, development and employment needs of the country and that fundamental changes are required. However, it remains to be seen if the powerful rhetoric will be supported by a reorientation of policy backed by resources.

f. Role of Women

Although there is a long way to go, the BDG has taken first steps toward improving the economic and social status of women. The Government has decreed that ten percent of Government positions are reserved for women. All levels of Government, from national parliament to union parishad, provide for specified numbers of women officials. A female cabinet level Minister for Women's Affairs has been appointed. A major constraint to the recruitment of female workers has been the scarcity of educated women. In some cases, eligibility requirements have been lowered and job training enhanced to overcome this factor.

2. BDG Development Planning

The operative planning document in Bangladesh is the Two Year Plan (TYP) for 1978/79-79/80. The TYP is intended to span the period between the conclusion of the First Five Year Plan (1972/73 - 77/78) and the Second Five Year Plan to begin in 1980/81. In accordance with that concept, the TYP purports to emphasize completion of unfinished projects as opposed to new undertakings. However, the TYP appears deficient in its identification of specific projects, whether underway or contemplated.

The TYP lists as areas of highest priority economic growth (including the goal of foodgrain self-sufficiency by 1985), employment creation, and population control. Rural development, a more equitable distribution of income, and improved provision of basic needs such as food, clothing, health services, etc., are also mentioned as areas of high priority. Except for the omission of education, this list would seem to qualify as an appropriate statement of good intentions. However, actual spending allocations cannot be reconciled with the stated priorities. Moreover, the Plan lacks a clear indication of resource availabilities to meet Plan goals and is short of specific policy recommendations.

As an example of inconsistencies between stated goals and spending allocations, agriculture, water resources and rural institutions together are allotted 27 percent of TYP expenditures. They accounted for 32 percent under the First Plan. Foodgrain production is to rise at an annual rate of 3.7 percent per annum whereas a 4.1 percent rate is required to meet the foodgrain self-sufficiency goal.

The plan contains no indication of the sectors in which the projected 2.3 million new jobs are to be created (N.B.: the foodgrain sector, which now accounts for about 50 percent of total employment, could provide about 400,000 person years of additional employment assuming the TYP's projections for foodgrain production). The crude birth rate is projected to fall from the present level of 45 (or 40, as stated at another point) to 37, but there is no indication of how this is to occur. The list of shortcomings could be greatly extended. On the credit side, the plan endorses a number of broad policy measures - e.g. foodgrain procurement and reduction in the food subsidy - which aid donors can readily endorse. But even these lack specificity, and the inclusion of such items is overshadowed by the plan's defects. In short, the TYP cannot be taken seriously as a blueprint for addressing the country's fundamental problems.

3. Human Rights

Since President Ziaur Rahman assumed power in 1975, there has been a gradual improvement in the human rights situation in Bangladesh. While the broad range of human rights guaranteed by the Bangladesh Constitution has been curtailed under Martial Law, there has been a loosening of restrictions over the past year. It is anticipated that Martial Law will be terminated and the basic rights contained in the Constitution substantially restored following Parliamentary elections scheduled for February, 1979.

The Government released over 3800 prisoners in 1978, 838 of which it identified as political detainees. The number of people held without trial has been reduced and a continuation of this trend is expected.

While prisons are overcrowded and conditions far from ideal, this situation is mainly the result of a lack of resources, and there appears to be no pattern of torture, cruel and unusual punishment, or invasion of homes.

At the time of the mid-1978 presidential campaign, most restrictions on political activity were lifted. The few remaining restrictions were lifted in December, 1978 in preparation for the 1979 parliamentary elections. Parties no longer require government approval to operate (i.e. there are no banned parties) and may hold public meetings without obtaining government approval. Opposition politicians can and do criticize government policies vigorously. The press, while required to exercise a degree of self-restraint, is becoming increasingly independent, with frequent articles and editorials broadly critical of the Government. Freedom of religion is effectively maintained.

4. Environmental Considerations

Unchecked poverty causes degradation of the environment in many ways, one form of which is continuous intensive cultivation. In the Government's effort to reach foodgrain self-sufficiency by 1985, fallow periods have been necessarily shortened and in some cases no longer exist. Incessant use of the soil through a widespread monocrop system is not without cost, but unfortunately Bangladesh cannot afford to do otherwise. The intensity of human concentration in Bangladesh raises serious questions for waste disposal. The few remaining forests are not being harvested but rather they are being mined as the growing poor population widens its search for fuel. Heavy deforestation in upstream areas of Nepal has caused eroded soils to pollute waters

used by Bangladeshi farmers. Increasing irrigation demand for the Ganges waters running through India has reportedly caused salt water intrusion in some areas of Southwest Bangladesh. A 5-year agreement for sharing the waters of the Ganges was concluded between the Governments of India and Bangladesh in 1977. Longer-term arrangements have yet to be achieved.

With the exception of the Ganges water sharing, none of these environmental questions have been systematically addressed by the BDG. Recently, the UN Environmental Program undertook an environmental assessment of Bangladesh. This assessment will serve as guidance for proposed programs, to assure that planned projects do not exacerbate existing environmental problems.

E. Other Donor Assistance

Four international agencies (the World Bank, the Asian Development Bank, the United Nations and the European Economic Commission) and fifteen bilateral donors make up the Bangladesh Aid Group. Within the UN Group most of the specialized agencies have resident offices in Dacca and play leading roles in their areas of concern. Several Middle Eastern countries, primarily Saudi Arabia, provide assistance but on an intermittent basis. Added to this are a multitude of private and voluntary organizations and foundations which are engaged in development activities. Further, the International Monetary Fund plays a major role in providing policy advice to the BDG. The World Bank, the U.N. agencies, the Asian Development Bank, Japan, the United Kingdom and the U.S. provide about three-fourths of all assistance. New aid commitments during FY 1979 are estimated at more

than \$1.5 billion.

Among donors, there is widespread agreement on major policy objectives. However, emphasis varies with regard to each donor's policy goals, and differences naturally arise as to means for their attainment. Most donors want to increase their aid levels to Bangladesh, and given the number of donors involved, this leads frequently to the phenomenon of "money chasing projects". Moreover, the need to deal with a variety of donors on a multiplicity of projects further strains the already thinly stretched BDG structure.

This competition for feasible projects and thus for BDG attention and manpower resources frequently forces donor agencies to demand new organizations to implement their projects. Since most donors are in the same sectors, this leads to a proliferation of BDG agencies dealing with one problem. For example, there are presently 15 BDG agencies engaged in field agricultural extension services. The BDG's inability to coordinate effectively among the donors or its own agencies often leads to donors agreeing to fund almost identical projects.

Given the priority Bangladesh has with most donors and the BDG's limited capacities, it is unlikely this situation will change. The only thing that can be done for the present is to support current donor efforts to improve coordination and to assess carefully the BDG's capability before proceeding with new activities.

F. Absorptive Capacity

The BDG's difficulty in absorbing the large amounts of available aid is illustrated in the wide gap between aid commitments and disbursements. In 1977-78, project aid commitments were \$450 million,

and disbursements \$255 million (the highest disbursement level yet reached). While recognizing that a smoothly functioning aid program requires a project pipeline, the present (end FY '78) \$1.5 billion level seems excessive.

The BDG's management problems are rooted in the country's history. Few Bengalis were involved in top management under British or Pakistani rule, and since the little talent available after Independence had immediately to begin running the country, there was little opportunity to develop and train new managers. The Government retains a closed civil service system of elite generalists drawn from liberal arts university graduates. The management system is characterized by over-centralization and an absence of delegation of authority and responsibility. Central national administration is favored at the expense of local administration and there is a failure to develop adequate numbers of junior officers for future management roles.

Procedures and systems are exceedingly cumbersome and hamper the expeditious release of project funds, the recruitment of needed personnel and internal agency realignments. Further, there is little communication, coordination or cooperation among ministries and agencies. There are few rewards for effective management. Corruption is becoming an increasing problem. Finally, there is the problem of the technological "brain drain" to the Middle East, discussed above.

III. STRATEGY

A. Objectives

1. Introduction

The major goal of the Bangladesh Government is foodgrain self-sufficiency by 1985/86. The Mission fully supports this goal which implies more than just increased agricultural production. It encompasses the achievement of major objectives in agriculture, rural development, population and health. To achieve and maintain foodgrain self-sufficiency requires reduction in the fertility rate. The major health problem of Bangladesh is malnutrition, which can best be attacked by increasing the availability of food. And if self-sufficiency is to mean meeting the basic food requirements for all people, the lowest income groups must have the purchasing power to buy the food made available.

In support of the major goal, USAID has chosen to concentrate on three major objectives: increasing foodgrain production, reducing the fertility rate and increasing employment. The objectives in one area must be pursued in such a way as to support and reinforce programs and activities directed at objectives in other areas. For example, projects designed to increase agricultural production must encourage the most labor-intensive technology available.

The achievement of these objectives is constrained by three obstacles (of the seven major constraints listed earlier) which are outside the scope of AID's strategy. Obviously, the Government's political weakness is one of these; and political weakness is itself one factor in another of the constraints with which AID will not be

able to deal, namely, the land tenure situation. Land reform is often mentioned by donors and the BDG as a possible solution to the problems caused by poverty, overpopulation and the lack of unsettled or sparsely settled land. The issue has been raised repeatedly in the context of the AID program; that is, should AID assistance somehow be applied toward alleviating the existing inequitable land distribution? Thus far, none of the proposed solutions has appeared to be workable. The dominant position of the larger landowners in rural politics and administration, the absence of organization among or on behalf of the rural poor, and the conservative, elitist orientation of the central government preclude an effective land reform. The BDG's lack of administrative capability is being addressed by various donor programs, but for the time being it serves as a further obstacle to attempts to alter either the terms of tenure or the pattern of land ownership. It is entirely beyond the capacity of donors to alter significantly these realities. Nonetheless, AID is the first donor to assist the BDG in illuminating the structure of landholding interests in Bangladesh. This was done through the two-phased AID-financed Land Occupancy Survey (LOS). The BDG has come to rely on the LOS information as the definitive analysis of the existing situation. The other constraint with which AID programs do not attempt to deal is the Government's control of industry. This constraint does impact on both growth and equity, but the impact on the rural poor is indirect.

The other principal constraints - agriculture and food policy, population growth, lack of basic infrastructure and institutional weaknesses - will be addressed directly by AID. It should be noted

that the latter two are obstacles to the achievement of all objectives.

2. Increasing Foodgrain Production

Agriculture is the leading productive sector in Bangladesh. No other sector holds equal promise for achieving growth with an improvement in the living standards of the poor majority. Since virtually no new land will become available for cultivation, increased production means higher yields per acre. The adoption of high yielding variety foodgrain technology, while for purposes of maximizing employment and avoiding large-scale mechanization, is the only possible way to achieve an increase in yields per acre at a rate rapid enough to achieve foodgrain self-sufficiency.

The key constraint on the adoption of HYV technology has been the mix of BDG agriculture and food policies, particularly pricing policies, which have tended to skew the urban-rural terms of trade against the small farmer. Knowledge of HYV technology appears to be sufficiently widespread to ensure its adoption given the prospect of adequate returns to production.

Equally important are food policies which take into account the severe malnutrition problem among the poor in Bangladesh. Emphasis should be placed on increased production of crops such as wheat, sorghum and sweet potatoes which are more nutritious, as well as less costly, than rice.

At the same time, the supply of modern inputs must be widely available at reasonable prices. To ensure this availability, distribution systems must be improved and strengthened. In most cases, this means new or improved infrastructure, e.g. roads, fertilizer warehouses,

electrical power distribution lines, and strengthening the institutions concerned with distribution through technical assistance and participant training.

3. Reducing Fertility

The population of Bangladesh is approximately 87 million and growing at the rate of 2.7 percent per year. Family planning prevalence is estimated at about 13 percent of eligible couples. Thus, a reduction in the fertility rate is imperative.

Travel in Bangladesh is difficult, particularly during the rainy season. Most women do not travel outside their own villages due to cultural and religious constraints. Widespread illiteracy and absence of mass media require that information be communicated through personal contact. Therefore, except for the actual performance of sterilization where travel to Thana health centers is normally necessary, reduction of fertility can be achieved only through the effective delivery of family planning information and services on a personal basis in the 65,000 villages of Bangladesh.

4. Increasing Employment

Unless substantial new employment opportunities are created, the lowest income group - the landless laborers - will not benefit from economic development. Nor will they benefit from a foodgrain self-sufficiency program if that term is defined as a level of production (net of wastage, etc.) sufficient to provide an adequate daily intake of cereals for all Bangladeshis. Distribution problems will remain. Those with above average incomes will consume more than their share; those below will remain undernourished even though on the average there

is enough for all. It is, therefore, essential that substantial off-farm employment be generated to absorb the rapidly increasing numbers of landless laborers.

B. The AID Assistance Strategy

This section discusses the main problem areas (sub-sectors) to be addressed by AID in the context of achieving the major objectives.

1. Increasing Foodgrain Production

a. Food and Agricultural Policy

The major focus will be on foodgrain price stabilization. The goal is to contain the fluctuations of the price of foodgrains, primarily coarse rice, in a range which at the lower end offers an incentive to farmers to adopt HYV technology, and at the upper end assures a fair price to consumers. The majority of poor consumers are also producers, i.e. farmers at or below the poverty level. Therefore, the BDG must support prices at harvest time when most farmers enter the market and restrain prices during the lean season when they are buyers.

AID's major tool in affecting prices is the PL 480, Title III, Food for Development program. In exchange for Government action to support farmgate prices at harvest time through nationwide procurement programs and to constrain prices during the lean season through grain sales in the open market, the United States has agreed to a multi-year commitment of wheat under Title III. The wheat provides the BDG with the food security to undertake the open market sales program. Given the inequities of the present public food distribution system and its financial drag on the budget, which many BDG officials have come to appreciate, there is promise that over the long term the open market

sales program may replace the ration system.

In its food and agricultural policies, AID will attempt to maximize the nutritional impact of the increasing availability of food. In the aggregate, the increased availability combined with increased purchasing power among the poor will do much to alleviate malnutrition. Parallel efforts can impact on specific target groups. For example, a recent test conducted by USAID/Bangladesh in conjunction with the Ministry of Food shows that sorghum is not only cheaper and more nutritious than rice and wheat, it is also an acceptable food for the lowest income groups. Thus, providing sorghum through the present ration system as an alternative to rice and wheat will directly benefit the lower income groups.

AID intends to seek an agreement with the BDG to provide sorghum through the ration system under PL 480, Titles I or III. Also, AID is examining the possibility of assisting the BDG in establishing a nutrition unit in the Agriculture Ministry to provide inputs to agricultural policy making.

b. Fertilizer Subsidy

AID has supported a policy of low fertilizer prices at the farm level in order to promote its use, especially by small and tenant farmers. Thus, the Bangladesh farmer currently buys fertilizer, assuming he can get it at the official price, about 68 percent of its cost on world markets, and the subsidy amounts to about 60 percent of the overall costs of import, production and distribution. Over time the subsidy has grown until it now accounts for 75 percent of the BDG's Agricultural Development budget, and is a key reason for the current extreme shortage of

Taka for approved development projects. AID believes that the cost of the subsidy has reached the point at which its harmful effects outweigh the advantages of its continued low cost to farmers. Accordingly, AID and other major donors are urging a significant price increase to be offset by an increase in the procurement price for foodgrains. A concomitant increase in the ration price of rice would be a very desirable, but not an essential part of the package approach.

c. Effective Delivery of HYV Inputs

In addition to promoting incentive prices, the AID strategy will seek to ensure the widest possible availability of modern inputs at reasonable costs to small farmers and to support continued adaptive research in HYV and appropriate technology. By keeping the costs of production down, incentive and market prices can be held at affordable levels for poor consumers.

For small and tenant farmers, a major production cost is the interest on credit. Because present institutional credit systems are complex, often do not reach to the village level, and require that land be mortgaged as collateral, low-income farmers are dependent on non-institutional sources. While relatives and friends can be relied on to a certain extent, the small farmer is frequently forced to rely on moneylenders who charge 100 percent or more per annum. A major element of AID's program will be to assist the BDG in establishing self-financing, village-based institutional credit systems which are procedurally simple and do not require land as collateral.

At the same time, AID will support Government efforts to make two other inputs, fertilizer and water, widely available at reasonable

prices, consistent with budgetary considerations as expressed above. Substantial funding will be allocated for imports of fertilizer and raw materials for the manufacture of inexpensive manually-operated hand pumps for shallow tube wells. The latter are suitable for individual ownership by small farmers and capable of irrigating small plots. Efforts will be made to improve the distribution system for both fertilizer and hand pump tube wells, as well as to strengthen the planning and management capability of the Bangladesh Agricultural Development Corporation, which is responsible for both programs.

Continued adaptive research related to HYV technology will be required. AID will support research in small farm cropping systems, low cost nutritious crops and appropriate technology. In addition, AID will continue to provide grants to U.S., international and indigenous private and voluntary organizations (PVOs) working at the village level, in an attempt to increase small farmer income through the introduction of HYV and appropriate technology.

d. Creation of Productive Infrastructure

The primary infrastructural needs of rural Bangladesh are additional surface water irrigation systems, an all-weather transportation system and reliable energy sources. Minor scale surface water irrigation systems which use small low-lift pumps or traditional manual methods irrigate about 2.5 million acres annually, whereas large-scale surface water systems, e.g., Ganges-Kobodak, and power-operated tube wells, cover only approximately 500,000 acres. AID and the BDG will seek to extend the coverage of small-scale, surface systems and to adapt various irrigation technologies to the needs of different areas. The latter effort

will be integrated with the delivery of other inputs. The Ministry of Local Government and Rural Development (MLGRD), which is primarily responsible for the development of irrigation works, will receive technical assistance in the planning, design and execution of these activities.

MLGRD is also the agency responsible for construction and maintenance of farm-to-market roads. Based on the number of proposals submitted by locally elected Union Councils, roads are the most desired type of infrastructure. AID will finance the construction of farm-to-market roads in high priority districts. The selection of projects will be based on local initiative and construction methods will be labor intensive. As with the irrigation systems, institution building within MLGRD will be a major component.

The need for a quantum increase in electricity consumption was mentioned in the Analysis Section. Since the generating capacity for the supply of electricity to a substantial portion of rural Bangladesh already exists, AID and other donors will finance its distribution. Electric power will be cheaper than diesel oil, which must be imported at the cost of scarce foreign exchange, and will operate pumps and rice processing machinery more efficiently, thereby reducing maintenance costs. The program will be channeled through cooperatives with priority attention given to establishing safeguards against domination by the rural elites. AID recognizes that electrification is not the total solution and that alternative energy sources, e.g. photovoltaic cells for irrigation, will need to be developed. AID is undertaking exploratory work in developing appropriate energy resources.

It should be noted that while AID is exercising a leadership role

in the activities discussed above, other donors are also involved, or soon will be. Thus, AID is not attempting to blanket the entire country with its limited resources.

2. Reduced Fertility

a. Basic Strategy; Support for Non-Governmental Agencies

AID's current population strategy is described in the approved Multi-Year Population Strategy (MYPOPS) paper. The strategy is to assist the BDG to develop the institutional capability to deliver family planning services and information in order to reduce fertility. The program supporting this strategy includes support for non-governmental organizations (NGOs) working in family planning and closely related activities.

The assumption at the time of writing the MYPOPS, late 1977, was that if major improvements in the management of the national family planning program were made expeditiously in the late seventies and early eighties, the Government would be able to raise the contraceptive prevalence rate to 40 percent by 1985. AID now believes that the time required to build the needed basic infrastructure and to develop the necessary program management and supervisory skills has been greatly underestimated. A much longer time and substantial donor support will be needed by the BDG to develop this institutional capability. Sole reliance on the BDG would, therefore, involve indefinite delays in meeting population goals at a time when Bangladesh's excessive fertility problem requires immediate action. Accordingly, AID intends to modify the present strategy to assure that the BDG can sustain an effective national program by the mid-1980s and, during the 1981 to 1985 period,

to place equal emphasis on non-governmental service delivery programs in order to have a more immediate impact on fertility.

AID's plan to increase support for NGO family planning activities is consistent with the BDG's current population policy. Such programs have achieved high rates of contraceptive prevalence in short periods of time through a variety of approaches. At the same time, in order to ensure the delivery of services over the longer term, continued support will be given to the BDG programs. Through this combined approach, it should be possible to achieve the original goal of 40 percent prevalence of contraceptive use by 1985.

AID expects to complete discussions with Government and NGOs in early 1979 and to begin channeling resources through various intermediaries, including some not now receiving assistance. Support to the non-governmental sector will be focused on three areas of service delivery: voluntary sterilization, social marketing of contraceptives, and non-clinical delivery systems.

(1) Voluntary Sterilization

The Bangladesh Association for Voluntary Sterilization (BAVS) is a strong and well-managed organization. AID intends to add resources to BAVS over and above its current support from an AID/W funded grant to the Association of Voluntary Sterilization (AVS), so it may expand its training and services in voluntary sterilization. The expansion of service points will be commensurate with the strengthening and expansion of BAVS's management capability. By the end of 1979, BAVS is planning to have one service center in each of the country's 63 sub-divisions.

By the end of 1985, the backlog of sterilization cases will have

been reduced and the BDG's health system improved to the degree that the Government should be able to maintain the services needed to match demand.

(2) Social Marketing

The Social Marketing Project (SMP) is undertaking a major expansion. In addition to its present marketing of pills and condoms, the SMP will soon introduce a contraceptive foaming tablet, a low dose oral contraceptive, an oral rehydration solution for the treatment of diarrhea, and possibly other health products. AID intends to increase funding to the SMP to enable it to expand further into the rural areas than its present funding allows.

(3) Other Non-Clinical Delivery Approaches

How to expand non-clinical services through the use of NGOs without duplicating or causing BDG efforts to atrophy presents the greatest challenge to an expanded population strategy.

In urban areas, Family Planning International Assistance (FPIA), Pathfinder Fund, Bangladesh Family Planning Association and other groups will be encouraged to develop delivery programs for poor people. In the rural areas where the Government now has posted up to 13,500 field workers, AID will encourage and support activities of a wide variety of NGOs to work with BDG field workers and supervisors to improve the Government's ability to deliver services. These organizations will act primarily as teachers and catalysts for the Government program, and will develop increased community support for fertility limitation.

While it is difficult to estimate the impact on the fertility rate of 40 percent contraceptive prevalence, AID believes that a crude birth rate (CBR) of 30 (per 1000) or lower is possible, thus yielding at least

a 32 percent decrease from the present CBR of 44. By that time, AID believes that continued IBRD, UNFPA, and AID support to the BDG will have resulted in its ability to deliver services to the majority of the people. These activities address both short and medium-term objectives. To sustain these achievements and reach longer-term goals, AID believes greater attention must be given to participation of women in all aspects of development. In Bangladesh, as elsewhere, one of the most significant fertility determinants is the status of women, their place in society and especially in the economy.

b. Women's Programs

AID now participates with the BDG in training women to improve home-based activities and income-generating skills. AID plans to continue and expand that participation. AID will give first attention over the planning period to developing with the BDG formal and non-formal education and training programs to reach young girls. If attitudes about the roles of women and family size are to be modified, the change must come before the girls are married. In rural Bangladesh the majority of girls marry very young. AID envisions programs which teach literacy, motherhood skills, fertility control, health and hygiene, and income generating skills to pre-adolescent and adolescent girls.

3. Increasing Employment

a. The HYV Strategy

An important aspect of the theory underlying the HYV strategy has been the belief that the spread of HYV technology, given its increased labor input requirement, would lead through a process of increased on-farm employment and demand for wage goods to the development of rural industries

or market towns, and ultimately to absorption of most of the rural unemployed. As noted, the spread of HYV technology has substantially increased on-farm employment, but at a rate less than the rate of growth in the rural labor force, and secondary employment effects have been far less than hoped for.

It may be that HYV cultivation has not yet achieved a scale sufficient to test its potential as an indirect generator of off-farm employment. Even now less than 15 percent of total acreage sown to foodgrains is accounted for by HYVs. Thus, farm incomes may not yet have grown sufficiently to create the required demand. Other constraints such as lack of transport, communication and power as well as shortages of credit, raw materials or intermediate goods may have had an impact. In any event, the linkages that were to provide the connection between an expanded adoption of HYV technology and a growing off-farm rural economy have not developed. Thus, reliance on HYV technology alone would probably result in a continuing rise in rural unemployment, both in absolute terms and as a share of the rural labor force. At the same time, while it is relatively simple to demonstrate the need for a new approach to the rural unemployment problem, it is another matter to prescribe a comprehensive solution to this intractable problem. AID's proposal is to follow a two-track approach involving expanded rural works programs and an effort to evolve a Market Town Development strategy.

b. Rural Public Works

To date, the only significant and successful employment generation program in Bangladesh has been the dry season Food For Work program, supported by the World Food Program and by AID through CARE. These

activities are devoted to the labor-intensive construction and maintenance of irrigation canals, flood embankments, dirt roads and small ponds. A significant constraint to further development of these activities is the lack of sufficient administrative, engineering and supervisory talent both to permit expansion to levels needed to absorb the increased labor surplus and to effect a fundamental redirection of the program to enhance the productive impact of the infrastructure. AID has financed one study which identified certain constraints to program expansion and recommended specific actions which are being taken. Additional studies are being undertaken by AID to find additional ways of expanding this important program, both qualitatively and quantitatively.

Parallel to the FFW effort, and as discussed earlier, AID is also supporting MLGRD's irrigation and road construction programs, which are also highly labor-intensive and have the potential for providing significant dry season employment.

c. Market Town Development

The development of market towns is a concept currently under discussion by several donors and BDG agencies. For spatial planners, market town development is a means to decentralize the substantial urban growth that will inevitably occur, so that it does not continue to be concentrated in Dacca, Chittagong and Khulna. Those three cities have grown at a rate of nearly 9 percent per annum over the past two decades, far outstripping the rate at which new urban services could be provided. Those concerned with agricultural development see market towns as service centers for agriculture - supplying pump and small machinery repair services, grain drying, milling and storage and other types of food

processing - and serving as intermediate distribution points for agricultural inputs. Industrial planners foresee market towns as the location for a wide variety of small-scale and cottage industries.

These different objectives could be complementary but at present there is no coherent set of objectives and means for their achievement that could be identified as a market town strategy. Since rural work programs can absorb no more than a fraction of the available surplus labor, AID believes that market towns should be a major focus for off-farm employment efforts. Employment can be provided by small-scale and cottage industries supplying goods and services to surrounding rural communities.

We believe that continued emphasis on increased production by small farmers may yet bring their incomes to levels at which an effective demand for goods and services will appear. AID programs in rural electrification, roads and credit should help to overcome constraints in those areas, and AID is seeking ways to eliminate other constraints on the growth of rural enterprises. However, from the discussion in Section a. above, it is clear that the HYV strategy alone cannot be counted on to create the demand necessary to support market town development. AID is beginning to formulate a market town development strategy with the major objective of creating off-farm employment. Since market town development as an off-farm employment strategy has never been attempted anywhere to our knowledge, we will be proceeding with caution, but we are working toward a comprehensive strategy to be included in future CDSS's.

C. Projections

Tables A, B and C show the principal economic and demographic indicators, with 1977/78 as the base year and projections to 1985/86. The population projections are based on the assumption that the BDG will be able to achieve a net reproduction rate of one (NRR = 1) by the year 2000. Assuming a steady rate of progress in fertility control between now and then, this would mean a population growth rate of 2.2 percent per annum in 1985/86. Given that the growth rate would be coming down between now and then, the intervening growth rate from 1977/78 to 1985/86 would be 2.53 percent. Foodgrain output in 1985/86 is calculated as the level of production necessary, after allowance for seed, feed and wastage, to feed the projected population. A 4.1 percent rate of increase in output is implied. Note again that the foodgrain self-sufficiency assumption does not mean that everyone would have enough to eat. That would occur only if everyone consumed the 15.5 ounces per day considered necessary to satisfy the minimum basic calorie requirement. Minimum family incomes play a determining role here.

In Table C, the projections of agricultural employment are based upon the assumed rate of increase in foodgrain output and related projections derived from Tables appearing in the UNDP/FAO Occasional Working Paper XI. Factored in is an arbitrary target of a 5 percent rate of increase in off-farm employment for the period. This may seem somewhat optimistic considering the absence of significant growth at present. Nevertheless, even with a 5 percent rate of increase in off-farm employment, the number of rural unemployed would rise over the period by some 1.5 million person-years. Moreover, the figure would be far higher

without the presumed ongoing rate of migration to the cities where work opportunities may or may not be found. Under this scenario the rate of unemployment would decline from 40 percent currently to 38.6 percent in the target year.

Table A

| <u>Major Sector</u> | <u>1977/78 Baseline</u> | <u>1985/86 Targets</u> |
|---|-----------------------------|----------------------------|
| <u>Agricultural Production</u> | | |
| 1. Foodgrain production (million tons) | 13.2 | 18.2 |
| 2. HYV acreage (percent total acreage) | 16% | 38% |
| 3. Foodgrain yields per acre (tons) | .52 | .7 |
| 4. HYV production (percent of total) | 29% | 58% |
| 5. Fertilizer use (thousand tons) | 716 | 2,000 |
| 6. Hand pumps fielded to date (thousands) | 60 | 830 |
| 7. Small farmer loans | (a) | (b) |

Table B

| | | |
|--|-------|-------|
| <u>Population</u> | | |
| 1. Total population (millions) | 85.0 | 103.8 |
| 2. Growth Rate (percent) | 2.7% | 2.2% |
| 3. Family Planning Prevalence (as a percent eligible couples) | 12.8% | 40% |
| 4. Number of Practicing Couples (thousands) | 1,800 | 6,700 |
| 5. Crude Birth Rate (per thousand) | 44 | 30 |
| 6. Fertility Rate | 6.3 | 4.7 |

(a) Negligible

(b) To be determined in a subsequent rolling 5 year projection.

Table CEmployment (Millions of Person Years)

| | <u>1977/78</u> | <u>1985/86</u> | <u>% Rate of Inc.</u> |
|---|-----------------|-----------------|---------------------------|
| I. <u>Labor Force</u> | <u>28.8</u> | <u>35.2</u> | <u>2.53</u> |
| A. Urban | 2.9 | 4.6 | 6.0 |
| B. Rural | 25.9 | 30.6 | 2.1 |
| II. <u>Rural Labor Force</u> | <u>25.93</u> | <u>30.61</u> | <u>2.1</u> |
| A. Employed | 15.56 | 18.78 | 2.4 |
| 1. <u>Agriculture</u> | <u>12.47</u> | <u>14.20</u> | <u>1.7</u> |
| - Crops | 9.04 | 10.11 | 1.4 |
| - Livestock, Forestry & fisheries | 1.91 | 2.25 | 2.1 |
| - Other | 1.52 | 1.84 | 2.4 |
| 2. Rural Works* | 0.60 | 0.90 | 5.2 |
| 3. Other non-agriculture | 2.49 | 3.68 | 5.0 |
| B. Unemployed (As percent of rural labor force) | 10.37 (40.0) | 11.83 (38.6) | 1.7 |

Note: *Although Rural Works employment is treated separately from Agriculture for these purposes, it should be recognized that workers on rural works projects are almost entirely drawn from the Agricultural Labor Force as it is commonly considered.

IV. PROPOSED ASSISTANCE PLANNING LEVELS

The key assumption with regard to program and workforce levels is that AID will be able to replicate during the 1981-85 planning period, at generally higher levels, second phase projects for at least eight activities which are currently undergoing their initial phases. PL 480 Titles I, II and III will be continued as well. The PAPL must be sensitive to program proliferation given likely AID-wide staffing limitations and the limited ability of the BDG to undertake new initiatives. Workforce accretions, therefore, are mainly civil engineers attributed to increased monitoring responsibilities for projects in the implementation stage. To limit the risk of diversion, poor quality construction and failure to perform on time, the Mission will use expatriate A&E firms to design, inspect and supervise construction projects. Since infrastructure programs are a key component of the proposed levels, increases in manpower will be required. AID will have to curtail severely some projects currently in implementation or in planning should additional monitoring capability - either in the form of direct hire or A&E firms - not be forthcoming.

The IPA of \$285 million is of the same order of magnitude as the AID projection of \$299 million for FY 1985.

Goal - Food Grain Self-Sufficiency
Proposed Assistance Planning Levels
(\$ 000)

IPA \$285 million

| Sub Goals/Problem Areas | FY 1981 | FY 1982 | FY 1983 | FY 1984 | FY 1985 | Totals |
|--|-----------|-----------|-----------|-----------|-----------|-----------|
| <u>Increasing Food Production</u> | | | | | | |
| Fertilizer | 60,000 | 70,000 | 100,000 | 100,000 | 100,000 | 430,000 |
| Food and Fiber Imports (non-add) | (103,286) | (113,614) | (124,974) | (137,470) | (151,216) | (630,560) |
| Credit | 11,000 | 20,000 | 30,000 | 40,000 | 40,000 | 141,000 |
| Land and Water Management | 28,500 | 31,000 | 34,000 | 35,000 | 40,000 | 168,500 |
| Agricultural Research and appropriate technology | 1,000 | 1,100 | 1,200 | 1,300 | 1,400 | 6,000 |
| Sub Total | 100,500 | 122,100 | 165,200 | 176,300 | 181,400 | 745,500 |
| <u>Decreasing Fertility</u> | | | | | | |
| Contraceptives | 7,784 | 10,016 | 11,023 | 14,397 | 17,318 | 60,538 |
| Voluntary Sterilization | 780 | 1,100 | 1,300 | 2,000 | 2,500 | 7,680 |
| Operations Research | 400 | 500 | 500 | 500 | 500 | 2,400 |
| Training | 400 | 500 | 500 | 500 | 500 | 2,400 |
| Support to Non-Govt. Family Planning Program | 8,500 | 8,500 | 10,500 | 12,000 | 12,500 | 52,000 |
| Rural Women's Education | 2,600 | 3,600 | 5,400 | 8,900 | 10,400 | 30,900 |
| Rural Health | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 15,000 |
| Sub Total | 23,464 | 27,216 | 32,223 | 41,297 | 46,718 | 170,918 |
| <u>Increasing Employment</u> | | | | | | |
| Rural Roads | 12,000 | 14,000 | 16,000 | 18,000 | 20,000 | 80,000 |
| Rural Energy | 22,500 | 22,000 | 21,500 | 22,000 | 22,000 | 110,000 |
| Rural Employment (Food non-add) | (21,570) | (23,627) | (25,889) | (28,377) | (31,114) | (130,577) |
| Rural Employment (non-food) | 16,000 | 17,000 | 18,000 | 19,000 | 20,000 | 90,000 |
| Sub Total | 50,500 | 53,000 | 55,500 | 59,000 | 62,000 | 280,000 |

| <u>Strategy Support</u> | <u>FY 1981</u> | <u>FY 1982</u> | <u>FY 1983</u> | <u>FY 1984</u> | <u>FY 1985</u> | <u>Totals</u> |
|-----------------------------------|----------------|----------------|----------------|----------------|----------------|---------------|
| Basic Needs Research and Training | 1,000 | 1,000 | 1,500 | 1,500 | 1,500 | 6,500 |
| Workforce | 4,358 | 5,033 | 5,773 | 6,590 | 7,490 | 29,244 |
| Other | 400 | 400 | 400 | 500 | 500 | 2,200 |
| Sub Total | 5,758 | 6,433 | 7,673 | 8,590 | 9,490 | 37,944 |
| GRAND TOTAL | 180,222 | 208,749 | 260,596 | 285,187 | 299,608 | 1,234,362 |
| Work Force (Work Years) | (43) | (46) | (49) | (52) | (55) | |