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DECISION UNIT OVERVIEW

The Poor Majority

Bangladesh is rural, densely populated and very poor. The economy is heavily dependent on growth in the agricultural sector which has failed to keep pace with the annual growth in population since Liberation. A few macro indicators suggest the depth of poverty in Bangladesh:

- population density of 1,500 persons per square mile
- per capita GNP of about \$ 80 ^{1/}
- life expectancy of 46 years
- 25% of all children die before their fifth birthday

These stark averages veil the serious maldistribution of assets and income and, very probably, growing inequality in the distribution of the little economic growth which is occurring. We use four basic indicators to define poverty in terms that are relevant to Bangladesh: income, land ownership, employment and health.*

In a 1974 sample survey of rural households the Bangladesh Institute of Development Studies found that nearly 80 percent of rural households fell below the poverty line. Since the poverty line was defined as the financial cost to purchase a subsistence diet for an average person, i. e. Taka 735 per annum in 1973/74 prices the BIDS finding meant that 80% of rural families could not meet their minimum food requirements. Conversely, slightly less than 50 percent of all rural incomes accrued to the 20 percent of the rural population which lives above the poverty line. ^{2/} Since the average per capita

* This section of the ABS is based upon the Mission's forthcoming "Analytical Description of the Poor Majority"

income of those households below the poverty line was only Taka 341 per annum, both rapidly accelerating growth and a major redistribution of income would be required to merely bring the poor majority up to the poverty line.

In this subsistence agricultural economy, land is the most important social and financial asset and the most important factor of production. In 1977 nearly half of all rural households were functionally landless, i. e. they owned less than one half of an acre other than their homesteads. From another perspective, about 77 percent of the land area is cultivated by small farmers (about one acre holdings on the average), tenants, and attached agricultural laborers working for "owner-managers." ^{3/} With mounting population pressure, the conditions of these people can only worsen over time. Since these cultivators have no access to institutional credit at reasonable interest rates their ability to utilize yield increasing HYVs is severely limited. Furthermore, as their debt burden increases those who own some land will be forced into a state of partial tenancy or landlessness.

In 1976/77 the agricultural labor force was estimated to be about 21.8 million. Estimated employment was approximately 13.4 million work years which yields an unemployment rate of about 39 percent. ^{4/} Given the highly seasonal pattern in the demand for agricultural labor, the situation is better characterized as an extreme degree of underemployment widely shared by the 80 percent of the rural population below the poverty line. Again, previous high rates of population growth has increased the level of underemployment as evidenced by the decline in real agricultural wages over the years. For example, real wages in 1977 were 16 percent below the 1970 level despite a 26 percent decline in the price index since 1975.

Poor health and poverty are strongly correlated. We see the linkages as follows: underemployment results in a lack of purchasing power, which leads to insufficient food consumption, which causes malnutrition followed by susceptibility to disease. As noted above, about 80 percent of the rural population does not meet its minimum

food requirements. Further, real incomes are declining. This, in turn, is reflected in a decline in daily per capita consumption of foodgrain from 467 grams in 1964 to 399 grams in 1976.^{5/} The most recent survey shows that 86 percent of all rural children suffer from second and third degree malnutrition. These conditions are reflected in a crude death rate of about 18 per thousand, an infant mortality rate of 130 per thousand, a maternal mortality rate of 7 per thousand and a life expectancy at birth of 46 years.

Bangladesh's Commitment to Meeting Basic Human Needs

The Mission's detailed assessment of the Government's commitment to and progress in meeting basic human needs is contained in Annex D. While the Government's medium term goals, i. e. to 1985/86, are expressed in terms of meeting basic human needs, primarily food, the record of actual achievements is not inspiring. In general, domestic political and bureaucratic concerns of the moment take precedence over the difficult long run policy and resource allocation decisions required to address the needs of the poor. The moribund public industrial sector receives a disproportionate share of public investment, urban consumers have priority over rural producers, and poor people everywhere are discounted as being politically irrelevant. Still in the past year there has been some progress in the critical agriculture sector and in slightly improving poor people's access to an adequate supply of foodgrains. For the first time the Government successfully maintained the open market price of rice during the major Aman harvest through a vigorous procurement drive. This one effort, which must be sustained in the future, overcame one critical constraint to the participation of small farmers and sharecroppers in HYV led growth. We attach some importance to this success because increasing production among poor farmers has strong linkages to increasing food consumption, higher employment and a more equitable distribution of income among the poor. In addition, the Government increased the supply of imported foodgrain to poor rural people through the Modified Ration system. However, we see this as a short term palliative and therefore less significant than efforts designed to involve the poor in productive processes.

In health and education there has been no progress this past year in improving access of the poor to services and skills, respectively. The Government has expanded, however, family planning services in rural areas and women are the primary beneficiaries.

Long Range Goal

The Bangladesh Government's goal is to achieve foodgrain self sufficiency by 1985/86. The Mission first proposed to support this explicit goal in the FY 1979 Annual Budget Submission. Subsequently, the strategy designed to achieve the goal was reviewed and approved by the Asia Bureau in a special review in Washington in February, 1978. The record of the review is contained in Annex E. Also of note is that the program goal is consistent with, but more ambitious than, the Asia Bureau's food production and population goals as most recently articulated in the FY 1979 Congressional Presentation.

The theoretical underpinnings of the goal are strong. Foodgrain self sufficiency is the program goal because it encompasses the achievement of objectives in agriculture, rural development, population and health. Increasing agricultural production has a strong equity orientation, given an appropriate labor intensive strategy, since the achievement of the high production targets would involve the mobilization of the rural labor force to a greater degree than any other goal-strategy set we can envisage for Bangladesh. We have hypothesized the following linkages among growth, employment and equity which will be derived from increasing agricultural production:

-- if appropriate pricing policies are implemented, so as to assure an attractive return to production, Bangladeshi cultivators will adopt HYV technology (seeds, fertilizer, irrigation, etc.);

-- if HYV technology is adopted, there will be a substantial increase in the demand for agricultural labor;

-- if the demand for labor increases and, hence, rural incomes increase, there will be a new demand created for food, consumer goods and agricultural inputs;

-- if the demand for food, consumer goods and agricultural inputs increases, the conditions will exist for investment in the production of other crops and in rural industries to meet this demand; and

-- given a second round of investment in rural industries, additional employment and incomes will be created in Bangladesh.

In this formulation, agriculture is the leading productive sector. Given equal investments we believe that no other sector offers a greater hope of addressing the quality of life of the poor majority in Bangladesh. The development of an export sector of a rural industries sector may complement, but cannot replace, agriculture as the main source of employment and income for the rural poor.

From the Bangladesh Government's point of view, foodgrain self sufficiency is an urgent goal quite apart from the employment and income effects of its achievement. While estimates vary, there is a consensus among informed observers that the world food gap by 1985 to 1990, especially among the poorest countries, may be staggering. In a recent report the International Food Policy Research Institute had this to say about the prospects for Bangladesh:

"Unless food production in Bangladesh improves considerably, the country will have serious problems in the years ahead. Output of major staples expanded only 1.5 percent a year from 1960 to 1975 while population grew 2.4 percent per year. Population growth is projected to increase to 2.9 percent in the next 15 years. If the historical food production trend continues, the projected deficit under the two income growth assumptions would reach 6.5 - 8 million metric tons or about 7 - 8 times larger than the estimated shortfall in 1975. With a large part of the population underfed, the country would require an additional 4.5 - 6 million metric tons of major staples to meet the nutritional target.

"Based on these indications, domestic food output in Bangladesh would need to grow at an average annual rate of 4 - 4.5 percent to meet the increase in food demand arising from population growth and the assumed increase in per capita income; a higher growth rate of over 5.5 percent each year would be required if the projected energy deficit is to be filled." ^{6/}

A related and extremely serious question is whether the major exporting countries will be able to increase production to the extent required to accommodate the large import gap of developed countries (including the U.S.S.R.) and developing countries (including China). Relatedly, large transfers of foodgrain may well prove to be unmanageable in both financial and physical terms.

For the medium term (what the ABS guidance calls the "long range plan") the achievement of foodgrain self sufficiency requires that AID allocate a substantial share of available resources to efforts which will dramatically increase agricultural production by 1985/86. Technically speaking foodgrain self sufficiency can be achieved with only modest investment in rural infrastructure, e.g. roads, flood control and irrigation. For this reason, rural development has a slightly lower priority than investments in agriculture during the long range plan period. The Mission's current and proposed rural development projects will help create the physical infrastructure to sustain higher levels of foodgrain production and to generate off farm employment primarily in the period from 1984 to the year 2000. The Mission's on-going and proposed projects have been differentiated in the Decision Unit Packages to reflect these priorities.

Reducing population growth is imperative. The growth in agricultural and off farm employment must overtake total population growth and absorb, year-to-year, new entrants into the labor force, if there is going to be any improvement in the well-being of the rural poor. In Bangladesh, population growth has outstripped agricultural production and employment for decades. Therefore, and assuming substantial growth in agricultural production, Bangladesh must

have a dynamic and powerful population program if these long run trends are to be reversed. The Mission's population goal is ambitious, i. e. a net reproduction rate of one by the year 2000, but not as ambitious as the Government's which hopes to achieve a NRR of one by 1985/86. In our view, Bangladesh and U.S. investments in population programs will be enhanced by complementary initiatives to expand rural maternal child health services and to marry health, family planning and nutrition programs. In this particular case investments in health, as a basic human need, promises payoffs in declining fertility but perhaps not until sometime in the period 1985-2000. Again, these priorities are reflected in the Decision Unit Package for the minimum level.

The Mission's program for Budget Year 1980 emphasizes growth with equity while addressing basic human needs in the areas of adequate supply of foodgrain and population/health primarily. More needs to be done in the basic human needs area. For the remainder of the long range plan period, 1981-1984, the Mission is now considering problem identification and feasibility studies in related BHN areas. We are considering a project for financing as early as 1981 which would introduce nutritious crops -- coarse grains, sweet potatoes and vegetables -- to be produced and consumed by low income people on marginal land and homesteads and which have low or negative income elasticities of demand among upper income groups. The caloric and nutrient values of such crops would address known dietary deficiencies in Bangladesh.

It is now generally recognized that the services of health centers are often beyond the reach not only of those persons who are physically remote from the centers, but also those who are the poorest, female, youngest and the most sick. Accordingly, the Mission is planning to couple its Family Welfare Center project (proposed for FY 1979) with a new outreach project which will utilize the centers to identify, train and support village workers, primarily in the areas of maternal child health and nutrition. Such a project may be ready for financing as early as FY 1981 depending on progress implementing the Family Welfare Center project. The new outreach project, which we call "Low Cost

MCH/Nutrition" is one of our planning assumptions at the Minimum Decision Package level over the period 1981-1984.

The Mission also intends to mount with its own staff resources, a problem identification study of basic or primary education in 1979 which could lead to a feasibility study thereafter. Prospective AID investments in this BHN area may be displaced, however, by a major IDA credit for universal primary education along traditional lines or rendered infeasible by the Government's inability or unwillingness to reallocate scarce ordinary and development budget resources to authentic educational reforms.

Major Objectives

In this section the foodgrain self sufficiency goal by 1985/86 is disaggregated by its major components which are expressed in the form of targets. These in turn may be compared with the baseline year, 1976/77. While it is clear that the achievement of foodgrain self sufficiency will involve variables other than those which this Mission has chosen to address, we are convinced that there is no substitute for dramatic progress in population, agriculture, rural development and health. Even though other donors and the Bangladesh Government are investing in these sectors, the proposed level of AID resources is so significant that the Mission's progress should be measured against the sectoral targets over the term of the long range plan.

In addition, we have included a section entitled "employment" wherein we have estimated the possible impact of success in agriculture, population and rural development. This is a kind of double counting but necessary if we are to gain some insight into the problem of equity and measuring the well-being of the rural poor.

<u>Major Sector</u>	<u>1976/77 Baseline</u>	<u>1985/86 Targets</u>
<u>Agriculture and Rural Development</u>		
1. Foodgrain production (million tons)	11.8	18.2 ^{7/}
2. HYV acreage (percent total acreage)	14 %	38 %
3. Foodgrain yields per acre (tons)	.5	.7
4. HYV production (percent of total)	27 %	58 %
5. Fertilizer use (thousands tons)	507	2,000
6. Handpumps fielded (thousands)	20	1,000
7. Small farmer loans	nil	*
<u>Population</u>		
1. Total Population (millions) ^{8/}	82.7	103.8
2. Growth Rate (percent) ^{8/}	2.8 %	2.2 %
3. Family Planning Prevalence ^{9/} (as a percent eligible couples)	12.8 %	40 %
4. Number of Practicing Couples ^{9/} (thousands)	1,700	6,700
5. Crude Birth Rate (per thousand) ^{8/}	45	35
6. Total Fertility Rate ^{8/}	6.3	4.7

*to be determined in a subsequent rolling 5 year projection.

<u>Major Sector</u>	<u>1976/77 Baseline</u>	<u>1985/86 Targets</u>	
<u>Health</u>			
1. Crude Death Rate (per thousand) ^{8/}	18	13	
2. Infant mortality rate (per thousand)	130	*	
3. Maternal mortality (per thousand)	7	*	
4. Daily per capita consumption of cereal grains (grams) ^{9/}	399	439	
<u>Employment (millions of person years) ^{10/}</u>			
	<u>1976/77 Baseline</u>	<u>1985/86 Targets</u>	<u>Percent Exponential Growth</u>
1. Total Labor Force ^{11/}	28	35.2	2.6
a. non agricultural labor force	6.2	9.7	5.1
b. agricultural labor ^{12/} force	21.8	25.5	1.8
2. Employment in agriculture	<u>13.4</u>	<u>16.2</u>	<u>2.1</u>
a. crop production	9.2	11.0	2.0
b. livestock, fisheries, and forestry	1.9	2.2	1.6
c. rural works	.6	.9	4.6
d. other	1.7	2.1	2.4
3. Unemployment in agriculture ^{13/}	<u>8.4</u>	<u>9.3</u>	<u>1.1</u>

Alternatives

The emphasis on population and health would continue under any strategy for development in Bangladesh. However, it would be feasible to achieve the goal of foodgrain self sufficiency by 1985/86 by supporting, rather than discouraging, the main elements of the Government's current agricultural strategy aimed at large farmers. In this strategy the emphasis is on creating the infrastructure and supplying the inputs through government channels for a rapid expansion of agriculture production with little regard for the equitable distribution of the incremental benefits. The benefits would be, as now, skewed in favor of relatively large farmers. Thus, the terms of trade and employment for small farmers, sharecroppers and the landless -- who constitute the overwhelming rural majority -- would continue to deteriorate. If there were no hope of gradually altering the Government's strategy, PL 480 resources would be used primarily to support the public ration system instead of as a tool, per our current Title III initiative, to support farm prices at harvest and to constrain them during the lean season. Similarly, there would be little need to improve the fertilizer marketing system -- again to benefit small farmers -- since large farmers already have access to adequate supplies. A "large farmer" strategy would also imply shifting resources from small scale irrigation and pumping (i. e. the Rural Works Irrigation and handpump tubewell projects) to large scale flood control and irrigation schemes which, experience has shown, benefit large farmers primarily. In addition, we would no longer need to work on the Rural Finance project which is an attempt to make production credit available to small farmers and sharecroppers; rather, the resource flows to large farmers could be increased through the Government's existing "cooperative" structure, especially through the so-called Rural Development Expansion Programme. Finally, and at the extreme, AID could support the mechanization of large unit agriculture.

It is possible that such a large farmer strategy would achieve foodgrain self sufficiency, albeit at a slower rate than a strategy which involves the majority of cultivators. Obviously, however, such a strategy is unacceptable on equity grounds alone.

Another strategy would be for AID to sponsor and partially finance a democratic agrarian reform wherein the actual cultivators of the land -- whether sharecroppers or attached agricultural labor -- would be given permanent status and the former landowners would be given full compensation. Provided that such a massive reform was accompanied by the immediate and comprehensive supply of inputs and credit to the new landowners, substantial increases in productivity and an equitable distribution of benefits could be anticipated. Based upon what we know now, full scale agrarian reform does not appear to be feasible given the technical, administrative and financial constraints which are in evidence. More importantly, such a reform would require a high degree of political adroitness. Nevertheless, the Mission is proceeding with a second phase of the Land Occupancy Survey to define better the actual tenorial conditions, especially as they relate to the adoption of HYV technology by small farmers. In addition, the Mission is considering a study to review the technical and administrative constraints with the purpose of determining what might be done in these areas.

Accomplishments

The Mission's progress in project implementation is spelled out in the individual Activity Data Narratives and in the sections which discuss PL 480. At the macro level, the U.S. has been instrumental in heightening the Government's awareness of its population problem. Similarly, the U.S. has been influential in the Government's slow shift from policies and programs favoring large farmers and the rural elite to programs which have the hope of addressing the needs of small farmers, sharecroppers and the landless. In this regard, the USAID financed 1977 Land Occupancy Survey -- which we intend to repeat in slightly different form in 1978 -- appears to have had an important impact on Government perceptions of the structure of land distribution in Bangladesh as well as the relationships of land tenure to agricultural production, i. e. equity.

In this context and in response to the Asia Bureau's query in the ABS guidance, the Mission has used PL 480 resources, both the quantum and the timing of delivery, to influence Government

thinking about how best to achieve foodgrain self sufficiency with the best distribution of benefits among the poor majority given prevailing political and bureaucratic constraints. The peculiar attribute of foodgrain provided under PL 480 is that it is the only resource that the Government literally cannot live without.

ANNEXES

- A. Commentary on Personnel and Operating Expenses
- B. Defense Expenditures - Implications for Development
- C. Human Rights
- D. Section 102(d) - Assessment and progress of Bangladesh toward helping its poor to meet their basic human needs.
- E. Bangladesh Strategy Review, AIDTO CIRC A-20, dated 4/12/78.

Notes to the Decision Unit Overview

1/ Bangladesh Bureau of Statistics, Statistical Pocket Book of Bangladesh, Table 7.13.

2/ Sahimullah and A. B. M. Shamsul Islam, "A Note on the Condition of the Rural Poor in Bangladesh", Bangladesh Development Studies, April, 1976, p. 269.

3/ F. Tomasson Jannuzi and James T. Peach, Report on the Hierarchy of Interests in Land in Bangladesh, September, 1977.

4/ Estimate based upon "Agricultural Employment in Bangladesh", FAO/UNDP Occasional Paper XI, April, 1977 as adjusted for population growth in World Bank Report No. 1469 BD, Table 1.5.

5/ Bangladesh Bureau of Statistics, op. cit. Table 13.1.

6/ International Food Policy Research Institute, Food Needs of Developing Countries: Projections of Production and Consumption to 1990, December, 1977, pp. 75-76.

7/ USAID estimate based upon 1985/86 population target. In Bangladesh the per capita foodgrain consumption requirement is estimated to be 15.5 oz. per day to meet minimum energy needs. However, averages conceal maldistribution of available foodgrain resources. On this point IFPRI (in the work cited above, pp. 114-115), suggests that the average requirement should be raised by 10 percent "... to allow for individuals whose consumption is above the average..." On this basis, the adjusted foodgrain self sufficiency goal in 1985/86 would be in excess of 20 million tons.

8/ World Bank Report No. 1931-BD, dated April 10, 1978, Annex 5, page 39, assuming NRR equals one by the year 2000.

9/ USAID estimate.

10/ USAID adapted the employment model in the FAO/UNDP Occasional Paper XI to the foodgrain self sufficiency production and population targets, adjusted to a growth rate of 4.9 percent per annum in crop production from the base year, 1976/77 to the target year, 1985/86.

11/ FAO/UNDP, op. cit., p. 7, assumes a constant labor force participation rate of .339 to total population throughout the period under analysis, including 11 percent for women.

12/ FAO/UNDP, op. cit., p. 6 "The agricultural work force consists of all those who are available for work in agriculture. This should not be confused with the rural work force which includes those who also find employment in non-agricultural activities within rural areas." Note that there are no reliable estimates of the civilian work force differentiated by urban and rural.

13/ The indicated unemployment rates are 39% in 1976/77 and 36% in 1985/86 as computed by USAID per the notes above. The USAID estimates may be too conservative, that is to say, pessimistic. The World Bank estimates, that the unemployment rate is 30 percent of the available labor force (Report 1931-BD, para 32). Similarly, the Bank estimates a total labor supply of 26.5 million in 1985 as compared to the USAID estimate of 35.2 million in 1985/86. These very large differences appear to derive from the assumptions employed: whereas the Bank assumed that a large fraction of the 10 to 14 age group is not a part of the labor pool, USAID did not; and whereas the Bank assumed a female participation rate of 3.4 percent, USAID assumed 11 percent. Suffice it to say that if the FAP/UNDP employment model was adapted to the World Bank's labor supply estimates, both the absolute and relative levels of unemployment would be drastically reduced in the period 1976/77 to 1985/86.

Commentary on Personnel and Operating Expenses.

I. The Bangladesh Government's Ability to Support and Commitment to AID Programs and Projects.

The BDG's ability to provide technical and managerial support to AID projects is extremely limited for several reasons. First, the BDG has the responsibility for maintenance of law and order, the administration of a plethora of regulatory activities, the operation of six public sector corporations -- which are holding companies for a larger number of other public sector companies -- and a large economic development program. The scope of these activities stretches the BDG's talent to the breaking point. Second, there is a continuing exodus of managers, technicians, medical personnel, skilled and even semi-skilled labor to the Middle East. This, in turn, means inadequate BDG project management, construction delays and deficiencies, cost overruns, lack of trained technical personnel to backstop the delivery of medical and social services, e.g. sterilization services, etc. Third, there is pervasive corruption within the BDG, which means unreliable performance by some officials. Fourth, there is a considerable lack of coordination among BDG agencies and a jealous guarding of bureaucratic "turf." For example, at least six different national agencies are involved in agricultural extension. Development problems are usually multi-faceted but it is extremely difficult to integrate the efforts of two separate agencies.

The BDG commitment to the objectives of AID's programs and projects is low. There is a strong BDG preference for imports, primarily food, and for infrastructure of various types. It has been and is the Mission's intention to utilize food and fertilizer imports desired by the BDG to re-orient their agricultural policies toward more equity-oriented objectives. Similarly, while being responsive to the BDG's desire for basic infrastructure, the Mission seeks to provide assistance for those projects which create rural employment and provide services for the poor, e.g. rural roads and family welfare centers.

II. The Relationship of BDG Ability and Commitment to Personnel Requirements.

As noted above, BDG talent, particularly at the middle-management and technical levels, is stretched very thinly. Because of this, the Mission, along with most other donors, must devote considerable time to project development. Although the BDG is involved in the project development process, it is usually in a consultative role, with the Mission doing most of the research, design work and writing. Further, because of the very weak data base, considerable time is spent in the collection of data necessary for analyses to support project development. This often requires considerable time in the field by both U.S. and Bangladeshi staff.

Five Mission activities have substantial commodity elements, Fertilizer Distribution Improvement, Population/Family Planning and PL-480 Titles I, II and III. To insure proper stock management and handling of U.S. financed food, fertilizer and contraceptive devices, the Mission maintains a sizeable staff of Bangladeshi employees who spend most of their time in the field, monitoring stock levels, checking ordering and procurement procedures and providing advice to field warehouse managers.

Most AID projects in Bangladesh have an infrastructure or construction element. Most notable are the warehouse and bulk handling facility components of Fertilizer Distribution Improvement, Rural Roads, Rural Irrigation and Family Welfare Centers. The Mission intends to use program-funded U.S. consultants to the fullest extent possible in construction supervision and management. We note, however, that U.S. consulting firms frequently have difficulty recruiting qualified personnel and keeping them at post, once assigned. We foresee a need to frequently "fill the gap" so that projects may proceed despite consultant delays in recruiting and replacing personnel.

Many of the infrastructure activities will be implemented on a fixed amount reimbursement (FAR) basis. U.S. direct-hire engineers are required to certify that structures are completed according to specifications. While recognizing that not every structure has to be given a final inspection by a USDH engineer and that U.S. consultants may be relied upon to a certain extent, our experience under the Relief and Rehabilitation Grant (1972-1975) indicates that the USAID Engineering

Staff will have to continuously monitor these activities, at least at the outset, and provide final inspection on about 60 - 70% of the structures.

For this reason, the Mission requested the assignment of an IDI-Engineer in FY 1978 to provide additional engineering capability for Fertilizer Distribution Improvement and Rural Roads. In FY 1979, an additional civil engineer will be required for the Family Welfare Centers. During FY 1980, the IDI-Engineer, recruited in FY 1978, will be converted to a regular position and another IDI-Engineer is to be recruited.

Given the relative weakness of most BDG agencies in project management, the Mission must devote a substantial portion of its workforce to project management. Most Mission project officers spend the largest portion of their time working with BDG counterparts attempting to resolve management problems, coordinating input from other Mission elements, BDG agencies and other donors, and visiting project sites. The major infrastructure projects, in particular, require an intensive effort. As the Rural Electrification project gets fully underway and requires more project management time, the Mission will require an additional Capital Project Officer in FY 1979 to manage Rural Roads and Rural Irrigation. In FY 1980, the addition of the Integrated Land and Water Use project to the Mission portfolio will require another Capital Project Officer.

We wish to note, at this point, that poor transportation facilities available has a major effect on workforce requirements. Except for those project sites close to Dacca, of which there are few, no site can be visited in a one-day trip. Frequently it takes one day to get to the project site, one day for inspection and one day to return to Dacca, even using domestic air service. Nor is it usually possible to inspect more than two sites per day.

The need for extensive field travel, the poor roads and inadequate vehicle maintenance capability (Bangladeshi mechanics are recruited by Middle Eastern countries), places an enormous demand on the Mission's fleet of vehicles. USAID is re-orienting the composition of its vehicle fleet to increase the transportation capability for field travel. In FY 1979 we are replacing 5 vehicles and adding 2 new ones. In FY 1980, 10 vehicles will be replaced and 1 new vehicle added to meet our objectives.

III. Impact on Decision Packages

A. Minimum

All but one (PL-480, Title I) of the Mission's low personnel intensity projects are contained in the minimum decision package. However, two of these, Fertilizer Distribution Improvement and PL-480, Title III, involve substantial annual funding. Therefore, despite their low personnel intensity -- in terms of the ratio of work years to funding levels -- these two projects alone will require almost 14 work years. There are also five high personnel intensity projects in the minimum decision package but we have the reverse of the situation with the low intensity projects. That is, the high personnel intensity projects have small annual incremental funding. The total personnel required for high personnel intensity projects in the minimum package is less than that required for the same number of low intensity projects in the same package. Total Mission personnel requirements are 25 USDH and 58 FNDH at the minimum level.

B. Expanded

The expanded decision package is composed exclusively of high personnel intensity projects since it contains only rural infrastructure activities. This decision package would require an increment of 9 USDH and 17 FNDH. It should be noted, however, that nearly half of the program-funded workforce is contained in the expanded decision package alone.

C. Proposed (Mark)

This decision package, although representing a substantial increment in funding, requires the smallest additional increment of personnel, 6 USDH and 8 FNDH. This is due to the inclusion of PL-480, Title I, which will involve substantial funding but require little workforce attention.

Defense Expenditures - Implications for Development

Introduction

The Bangladesh armed forces comprise some 225,000 personnel. Of these, about 71,000 can be classified as regular military (Army, Navy and Air Force) and the remainder are in para-military units: the Bangladesh Rifles, Ansars (Armed Reserve Police), and Village Defense Party Forces (VDF). The para-military forces are assigned primarily to border patrol, anti-smuggling and internal security functions. Apart from materiel left behind by Pakistani forces in 1971, equipment has been supplied mainly by Egypt, the Soviet Union and China, although significant recent purchases have been made from the U.K. and France. The U.S. has not been a supplier of military equipment, nor will it be absent the required Presidential Determination.

Budgetary Impact

The available budgetary data show only a line item for "Defense" expenditures. Moreover, the Defense category does not include all of the para-military expenditures. The Ansars and Bangladesh Rifles are included in the "Police" category which has undergone a rate of increase nearly as rapid as Defense in recent years. The table below shows Defense expenditures during the period 1973/74 to 1977/78 along with Revenue and Development expenditures (of which they are a part) for the same years. Police expenditures are also shown in consideration of the fact that a sizeable proportion of these are properly included in a broad accounting of Defense expenditures. Complete data are not available concerning expenditures on the Ansars and Bangladesh Rifles. However, it is known that together they accounted for Tk. 95 million (42 percent) of Police expenditures in 1974/75 and Tk. 167 million (45 percent) in 1975/76.

Defense and Development Expenditures, 1973/74 - 1977/78 (Tk. Millions)

<u>Expenditures</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u> ^(a)	<u>1977/78</u> ^(b)
Defense	420	708	1,109	1,702	1,624
(Police)	(245)	(224)	(374)	(557)	(452)
Total Revenue	3,183	5,275	5,819	7,648	8,477
Exp.					
Development	5,253	5,252	9,500	10,057	11,506
Exp.					
Defense as % of:					
Revenue Exp.	13.2	13.4	19.1	22.3	19.2
Dev. Exp.	8.0	13.5	11.0	16.9	14.1

Notes: (a) Revised estimates.

(b) Budget estimates.

Defense expenditures rose rapidly during the period, 1973/74-1976/77, considerably more so than either ordinary (Revenue) or Development spending. Taking only the last two years of that period, however, the percentage increases in Defense and in Development spending have been about equal.

The budget estimates for 1977-78 indicate a sharp decline in Defense spending, even as other budget categories continue to increase. However, these figures may be viewed with skepticism. First, it is known that the budget figures did not make full allowance for the effect of the pay raise for government employees in July 1977. Other reasons for doubting the validity of the 1977-78 budget estimate are:

- the ongoing additions to the regular forces in a program to bring combat units up to full strength;

- the recent purchases of a frigate from the U. K. and a quantity of jet training aircraft from France, all of which seem likely to fall into the 1977-78 budget;

- the inclusion in the Revenue Budget for 1977-78 of a Tk. 1,000 million for "unexpected expenditures", which may be used to cover Defense expenditures.

All things considered, eventual Defense expenditures in 1977-78 appear likely to show an increase over 1976-77, though perhaps at a lower rate than the trend of recent years.

Balance of Payments Considerations

As noted, Egypt, the Soviet Union and China have been Bangladesh's principal suppliers of equipment. The equipment supplied by Egypt (tanks) and China (aircraft and other materials), as well as the related spare parts, has been on a grant basis. The aircraft from the Soviet Union were purchased, as were the frigate and jet training aircraft acquired from the U. K. and France, respectively, but the purchase terms are not known. Apart from these items, the only known military purchases are spare parts and perhaps some small arms from Western countries. These would presumably be a continuing requirement, but again, the terms are not known. The Mission knows of no plans for major equipment purchases within the near future.

In summary, much of the country's military equipment acquisitions have been on a grant basis. There remains, however, a fairly significant, if not precisely known repayment requirement for past purchases.

Conclusion

Although the increase in Defense spending has been relatively rapid, the size of Bangladesh's military establishment does not seem unduly large. The regular forces are moderate in number (granted that the country would not seem to face a significant external threat), and the more numerous para-military forces may be justified on the basis of real problems with smuggling and internal security. Manpower (wages and salaries) probably accounts for the bulk of Defense spending and this is in plentiful supply in Bangladesh. As to the foreign exchange requirement for past military equipment acquisitions, it is doubtful that this constitutes a significant impediment to development. Debt repayment does divert funds that could otherwise be devoted to equipment and materials needed to maintain the country's industrial establishment. However, since the development effort proper depends primarily on externally supplied materials and equipment, these are made available largely through project aid that functions independently of the foreign exchange resource constraint.

HUMAN RIGHTS

During the past year there have been successive releases of political prisoners. There continue to be some political detainees; they are a small proportion of the former number and the Government's record indicates it is continuing to examine the remaining cases. Martial law is being withdrawn in stages. There was a bloody mutiny within the armed forces and it was dealt with severely by the Government. The Government has embarked upon a program for the return to representative government with Presidential elections scheduled for early June and Parliamentary elections by December. Thus, while certain human rights problems persist, the trend has been favorable.

U.S. assistance is designed and implemented in such a fashion as to address the fundamental needs of the poor majority. The "decision unit overview" in this budget submission makes it clear that U.S. Development Assistance is directed to four key sectors which impact on the well being of the rural poor. These are agriculture, rural development, family planning and health. More detailed information on the project activities and the intended beneficiaries is contained in the project descriptions, Tables IV A. In addition and as discussed in the narrative sections on PL 480 Titles I, II and III U.S. commodities will be utilized to benefit, primarily, the rural poor.

F.A.A. Section 102 (d) Assessment of Progress of Bangladesh
Toward Helping Its Poor to Meet Their Basic Human Needs *

Measurements of Poverty:

In a survey of 1,774 rural villages in Bangladesh undertaken in 1973-74, Salimullah and A.B.M. Shamsul Islam found that 79.44 percent of the population had per capita incomes below a poverty line, defined as the level of income necessary to meet a minimum daily calorie requirement (in this case measured at 2,112 calories).^{1/} No account was taken of other needs such as clothing, shelter, etc., nor was the food basket in question deemed adequate to meet an individual's full nutritional needs. It was found, further, that the average income of those below the poverty line was 341 Taka, which compares with the Tk. 735 needed to purchase the food basket. Assuming that the average income of those below the poverty line could be taken as a median (half of that number having incomes below Tk. 341 and half over Tk. 341), it would follow that about 40 percent of the affected population had incomes 54 percent or more below the designated poverty line.

The Salimullah and Islam study was roughly corroborated by an ILO - financed study in the first quarter of 1975.^{2/} That study, taking account of the fact that consumption standards in Bangladesh are low even for a poor country, established two categories which they termed, "Absolute Poverty" and "Extreme Poverty," defined as those unable to afford daily consumption levels of 1935 calories (90 percent of the minimum requirement) and 1720 calories (80 percent), respectively. The study found that 61.8 percent were in absolute poverty, 41.0 percent in extreme poverty.

Summarizing to this point, the two studies between them indicated that 41 to 79 percent of the rural population had per capita incomes below poverty levels defined with varying degrees of severity, as follows:

<u>Study</u>	<u>Per Cent of Population Below Poverty Line</u>	<u>Poverty Line (Daily Consumption of Calories)</u>
Salimullah & Islam ^{1/}	79.4	2,112
ILO (A.R. Khan) ^{2/}	61.8	1,935
"	41.0	1,720

* AID Guidance Contained in AIDTO CIRC A 35 dated 2/3/78.

Trend in Numbers Below Poverty Line

The findings of the Salimullah and Islam study can be combined with those of a trend analysis by Alangir, 3/ covering (sporadically) the period, 1963/64 - 1968/69. The table shows the resulting numbers below the poverty line (defined as 2,112 calories in both studies) during the terminal years of the Alangir study and in 1973/74:

Percent and Numbers Below Poverty Line - Rural Areas

	<u>Percent</u>	<u>Number (Millions)</u>
1963/64	37.6	49.9
1968/69	71.3	45.3
1973/74	79.4	55.2 *

As can be seen, the situation was actually worse in 1963/64, with some 37.6 per cent of the rural population below the defined poverty line. Matters improved during the 1960's, consistent with the reported lessening of inequality during that period, 3/ but worsened again during 1968/69 - 1973/74.

No similar surveys have been undertaken since 1973/74 which would enable a carrying forward of the poverty line findings. However, data on agricultural wage rates may provide some clue to the subsequent trend, inasmuch as they apply to the rural landless who comprise the poorest elements of the population (and about 49 per cent of their number according to the Land Occupancy Survey). 4/ The following

Note: * USAID calculation based on reported rural share of total population (91.2%) in 1974.

Table shows the trend of nominal and real agricultural wage rates since 1973:

Agricultural Wage Rates
(1973 = 100)

<u>Calendar Years</u>	<u>Nominal Wages</u>	<u>Price Index For Agricultural Workers</u>	<u>Real Wages</u>
1973	100.0	100.0	100
1974	146.0	161.4	90
1975	165.6	192.1	86
1976	160.3	129.5	124
1977	163.9	143.3	114

Sources: Wages: Agricultural Directorate

Prices : Bureau of Statistics. Weights based on survey of spending by Rajshahi University.

The wage rate data are only indicative, but they clearly suggest an improvement in the situation of agricultural workers as compared with 1973-74 following a bottoming out in 1975. It may be noted, however, that the recent improvement in the situation was due entirely to a drop in consumer prices. Nominal wages have not risen since 1975, and in the meantime price inflation has resumed at a 15-20 percent annual rate, suggesting that the trend of real wages is again downward.

Trend of Per Capita Income: Share of Poorest 38 Per cent *

The following table, based on Household Expenditure Survey 5/ data

* The available historical data deal with income by household, as opposed to population, shares. According to the 1973/74 Household Expenditure Survey, 50 percent of the households accounted for 37.9 percent of the population. For these purposes, it is assumed that this relationship can be applied retroactively and that the "poorest 38 percent" can be analyzed throughout in terms of data available for the poorest 50 percent of households.

for the corresponding years, shows total income (represented here by GNP), the share of income accounted for by the poorest 38 percent of the population, and per capita income both for the population as a whole and for the poorest 38 percent:

Per Capita Income Shares
(1976/77 U.S. Dollars)

	Total Income (Million)	Share of Poorest 38%	Per All Capita Income	Income Poorest 38%
1963/64	5,026	25.7%	83.90	56.90
1968/69	5,972	30.0%	86.80	68.70
1973/74	5,814	26.6%	76.30	53.60
1976/77	6,616	NA	80.00	NA

Source: Bangladesh Bureau of Statistics; \$80 assumed as benchline per capita GNP in 1976/77, real GNP changes applied retroactively to 1963/64. Real GNP changes from Bangladesh Bureau of Statistics (for 1976/77) and World Bank. Population data from World Bank.

The findings with regard to the poorest 38 percent verify the basic trends noted earlier with respect to the poverty line data, namely that the situation improved during the 1960's but deteriorated from 1968/69 to 1973/74. *

* The table shows per capita income of the poorest 38% as \$ 53.60 in 1973/74. The Tk. 341 income of the (roughly) poorest 40% as indicated in the Salimullah and Islam study would translate to \$ 29 at 1976/77 prices and exchange rates, but to \$ 44 at 1976/77 prices and 1973/74 exchange rates. Much of the difference, therefore, reflects a valuation problem occasioned by the relative devaluation of the Taka. In addition, part of the difference can be accounted for by the fact that the Household Expenditure Survey data apply to national average, the poverty line study to the rural population only. Finally, the Salimullah and Islam study may have been "poverty biased" in that it was undertaken during the 1973/74 famine and that four of the eight survey villages were famine - affected.

However, these data take matters a step further in indicating that by 1973/74 per capita incomes of the poorest 38 per cent had declined even below the 1963/64 level (a finding not necessarily inconsistent with the poverty level findings). Inequality, as measured by the share in total income of the poorest 38 percent, worsened during 1968/69 - 1973/74, although it did not seem especially pronounced by developing country standards. Finally, as with the poverty level findings, matters have probably improved - that is the per capita incomes of the poorest have probably risen - since 1973/74, but the modest size of the gain in per capita income of the total population suggests that the increase cannot have been very great, and living standards certainly remain far below pre-liberation levels.

Government Expenditures Likely to Benefit the Poor

It would not be possible to provide precise amounts and percentages of Government expenditures likely to benefit the poor in Bangladesh. Certain areas at either extreme can be identified positively either as definitely benefiting or not benefiting the poor, but for most categories the matter is heavily judgmental. A critical problem is that while certain functional categories may broadly be considered as "benefiting the poor," sizeable programs within those categories may not, and the data are not available to permit the needed disaggregation. Thus, to obtain a measurement of spending likely to benefit the poor over a period of years there is no alternative to judging a functional category - e.g. education - as a whole and either including it, or excluding it, as a whole.

The following are Mission assessments of the areas suggested in the Guidance as "likely to benefit the poor," followed by comments on additional areas that the Mission would include in that category.

a - Agriculture - Expenditures on agriculture are likely to benefit the poor if only because the fertilizer subsidy accounts for some 61 percent (in 1977-78) of the total agriculture budget. The second largest category of expenditure is crop research, which if it doesn't benefit the poor directly is certainly essential to all farmers in the longer perspective. On the whole, agriculture falls into the "likely" category.

b - Health - As in many developing countries, doctors in Bangladesh are concentrated heavily in the urban areas. Even in the rural areas, health services have not in general reached the most remote areas which contain the poorest, sickest people. On an institutional level, there is a heavy emphasis on training in preventive as opposed to curative medicine. And the continuing large - scale export of doctors and nurses to the Middle East -- though not a budget expenditure item -- does not speak well of BDG intentions in the area of health. On the other hand, the Government has recently expanded its efforts in improving its outreach services (which will be an important component of the Mission's Family Welfare Center project planned for FY 79) and there is reason to hope for an increasingly poor-oriented approach for Health Services as a whole.

c - Education - For the most part, BDG expenditures on education cannot be said to benefit the poor. The entire education system, from course content to teacher training to the pattern of expenditures, is

geared to maintaining the privileged position of the upper classes. Despite a high dropout rate, primary schools accounted for 78 percent of total enrolment in educational institutions in 1976-77. Yet primary education received only 47 percent of the total budgetary allocation (both Revenue and Development budgets) for education. Universities, with 0.3 percent of total enrolment, received 16 percent. To be sure, many poor people attend primary schools and thereby benefit from the 47 per cent of education expenditures in this area. However, the poorest elements of the rural population either do not attend school or typically drop out a very early age, either because their families cannot afford the very modest fees, or because the children are needed at home to help with the farm work or with household chores. This is especially the case with female children.

Beyond the primary level the poorest elements form a progressively smaller proportion of total attendance. By the Government's analysis, course content from the secondary level onward is notoriously unsuited to the nation's real needs, and heavy in the academic areas preferred by the elite. Teacher training, especially at the primary level, is woefully inadequate. Still, matters may not be so bad that they cannot get worse. The country's First Five Year Plan (1973/74-1977/78) allotted 17.9 per cent of total development expenditures in education for primary and 10.9 per cent for university education. In the Two Year Plan covering 1978/79 - 1979/80, the shares will be: primary, 13.2 per cent, university, 13.1 per cent.

For the foregoing reasons, then, we would not include education among the categories of spending "likely to benefit the poor." For the record, however, the following are expenditures on education since 1973/74 as a proportion of total BDG expenditures, (both Revenue and Development budgets) adjusted to exclude debt service payments.

(c)

Expenditures on Education As Percent of Total Expenditures

<u>Year</u>	<u>Tk. Millions</u>	<u>Percent of Total BDG Expenditures</u>
1973/74	843	12.4
1974/75	797	10.9
1975/76	877	8.6
1976/77 (a)	805	8.8
1977/78 (b)	959	8.8

- Notes: (a) Revised estimate
 (b) Budget estimate
 (c) Adjusted to exclude debt service payments.

d - Population and Family Planning

Although the BDG has been having its problems in the population area, its efforts have been properly focused on bringing family planning services to the villages. This area is one in which expenditures are likely to benefit the poor.

e - Flood Control and Water Resources - Most of the Flood Control and Water Resources category of the BDG's Development budget would be justified for inclusion in the "likely to benefit ---" category on the basis of the end benefits to farmers. This despite the fact that certain programs, e.g. "Deep tubewells," (9.4 per cent of the 1976/77 budget) have done more for large than for small farmers. The principal reason for including this category, however, is the large-scale employment (roughly a quarter of a million) provided to landless laborers through the various programs of the Water Development Board. The BWDB accounts for 64 per cent of the Flood Control and Water Resources expenditures budgeted for 1977/78.

f - Rural Works - The BDG's Rural Works program, which provides employment for some 100,000 landless laborers, certainly should be included in the "likely to benefit ---" category. Unfortunately, except for 1976/77 and 1977/78 the exact amounts spent (or budgeted) for this category are not known. For these purposes (see table below), we have estimated Rural Works spending for the earlier years on the assumption that they bore the same proportion to total spending on Rural Institutions - data for which is available - as they actually bore in 1976/77, i.e. 55 percent.

From the foregoing we conclude that expenditures on Agriculture, Health, Population/family planning, Flood Control and Water Resources, and Rural Works are "likely to benefit the poor." The omission of Food For Work from this list is due, first, to the absence of data on FFW expenditures for all years, but also to the fact that the BDG's share of total program costs is negligible inasmuch as most of the cost takes the form of U.S. - supplied P.L. 480 wheat.

Expenditures Likely to Benefit the Poor as Share of Total BDG Expenditures
(Tk. Million)

<u>Exp. Category</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u> ^{a/}	<u>1977/78</u> ^{b/}
1. Agriculture	556	689	1359	1877	1565
2. Health	153	399	603	631	677
3. Population	350	77	196	216	288
4. Flood Control and Water Resources	700	860	1341	1199	1353
5. Rural Works ^(c)	<u>209</u>	<u>157</u>	<u>209</u>	<u>233</u>	<u>188</u>
6. Total, 1 to 5	1968	2182	3708	4156	4071
7. Total BDG Expenditures ^(d)	8253	10,215	14,912	17,017	19,243
8. 6 as % of 7	23.8	21.4	24.9	24.4	21.2

Notes: (a) Revised estimates
 (b) Budget estimates
 (c) For 1973/74 - 1975/76, estimated on basis of expenditures on Rural Institutions.
 (d) Adjusted to exclude service on foreign debt.

On the basis of these estimates, expenditures likely to benefit the poor fluctuated between 21 and 25 percent of total BDG expenditures during 1973/74 - 1977/78 and have reached their lowest point in the 1977/78 budget. The 1977/78 decline is attributable mainly to a decline in the amount budgeted for agriculture, a lamentable development not readily accounted for.

To obtain a perspective on spending that the BDG considers to be of a development nature, the following table shows the same categories of spending under their respective development budgets as a share of total development spending.

Development Expenditures Likely to Benefit the Poor
(Million of Taka)

<u>Category</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u> ^{a/}	<u>1977/78</u> ^{b/}	<u>2 year plan</u> <u>(1978-30)</u>
Agriculture	520	634	1302	1529	1513	4250
Health	X	218	330	320	383	1180
Pop./Family Planning	X 350	X	X	X	X	X
		77	196	216	288	1000
Flood Control and Water Resources	700	860	1341	1199	1353	3250
Rural Works ^(c)	<u>209</u>	<u>157</u>	<u>209</u>	<u>233</u>	<u>188</u>	<u>314</u>
Total	1779	1946	3378	3497	3725	10494
Total as per cent Total BDG Dev. Exp.	33.9	37.0	35.6	34.9	32.4	32.2

Notes: (a) Revised estimates

(b) Budget estimates

(c) For 1973/74 - 1975/76, estimated on basis of expenditures on Rural Institutions.

As was the case with total BDG expenditures, the share of planned expenditures "likely to benefit the poor" falls to a five-year low in 1977-78. Moreover, a further decline is indicated under the 2-Year Plan for 1978/79-1979/80.

Trends in Participation By the Poor

Neither the poor nor women (rich or poor) have an effective voice in development - related decision making in Bangladesh. At the national level the point is obvious. At the local level, the matter is often obscured by the existence of farmer cooperatives or similar local councils which are able to exert influence at the Union or even the Thana level. However, such bodies are invariably dominated by the relatively wealthy among the local populations.

Evidence of Progressivity/Regressivity of the Tax System

Tax revenues in Bangladesh are derived mainly from customs duties (37.5 per cent in 1976/77) and excise and sales taxes (42.4 per cent). The incidence of these taxes falls almost entirely on the relatively affluent among the urban population because they are the principal consumers of the affected products (or of the final products of local manufacturing where the initial incidence - in the case of a customs tax - is a manufacturing corporation). The income tax, which accounted for 11.2 percent of tax revenues in 1976-77, is also, perforce, borne by the relatively well-to-do. Only land revenue (2.3 percent of 1976-77 tax receipts) can be identified as a tax levied mainly on the agriculture sector, but even here the incidence is surely borne by the relatively affluent.

In short, much as blood cannot be got from a stone, the poor pay few taxes in Bangladesh. Thus, the country enjoys the rather negative virtue of having a highly progressive tax system.

Private Savings and Capital Formation

Estimates are available on savings and investment for each year of the First Five - Year Plan period, 1973/74 - 1977/78, but a breakdown between the private and public sectors is available only for the aggregate of those years. Public investment is estimated to have accounted for 83 percent, private investment for 17 percent of total plan investment. However, it is cautioned that the public sector share may be overstated by the inclusion in the data of "more or less completed development projects which have not been transferred to the revenue budget," and that private investment is understated by the non-inclusion of expenditures on transport, rural housing, agriculture, and working capital.

Savings and Investment in First Plan Period
(Million of Taka)

	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>
1. Investment	5,360	7,740	11,820	10,340	14,250
(Fixed)	(4,580)	(5,450)	(9,040)	(9,530)	(11,000)
(Working Capital)	(780)	(2,290)	(2,780)	(810)	(3,250)
2. Net external resources	3,680	7,380	11,090	7,130	10,930
3. Savings (1-2)	1,680	360	730	3,210	3,320
4. As a percent GDP:					
(a) Investment	8.22	7.87	11.95	11.00	13.31
(b) External Re- sources	5.64	7.50	11.20	7.59	10.21
(c) Savings	2.58	0.37	0.74	3.42	3.10

Sources : Planning Commission, The Two-Year Plan, 1978-80, March 1978.

Thus, savings dwindled almost to zero during the oil crisis year of 1974/75 and in 1975/76, and have since recovered only to a bit more than 3 percent of GDP. These rates in turn compare with a savings to GNP ratio of 7.1 percent in 1969-70, the last pre-liberation year. ^{6/} The investment ratio is approximately the same as the pre-liberation ratio of 11-12 percent; the share of investment financed by external resources has risen to fill the gap.

Growth Rate Data

Determination of an economic growth rate in Bangladesh depends on how one treats the 1970-71 war of liberation from Pakistan. The enormous disruption of those years resulted in a two - year decline (1969 - 70 to 1971 - 72) in real GDP of 19 percent, and recovery did not get fully underway until 1973-74. Any GDP measurement that compares post - war with pre - war years necessarily reflects the influence of this catastrophic period. As such, it may be an acceptable measure of actual performance but misleading as a measure of the economy's potential. On the other hand, measurements of post - war growth cover too brief a period as yet to be very meaningful, while measurements of pre-war growth reflect earlier - now altered - conditions (when, for example, there was still fallow land to be put into production).

The record of past growth, therefore, depends on what one wants to measure, bearing in mind the limitations of any particular measurement. In the following summary, growth rates are shown for selected periods grouped separately according to : long - term (post - war compared with pre - war); post - war; and pre - war. With one exception, 1973/74 - 1976/77, the two years at the beginning and end of each period have been averaged to obtain the terminal points of the measurement. For example, 1959/60 - 1969/70 means the average of the financial years 1968/69 and 1969/70 compared with the average of the years 1958/59 and 1959/60.

Average Annual Rates of Growth in GDP

(Percent)

<u>Financial Years</u> <u>Ending June 30</u>	<u>Real GDP</u>	<u>Real Per</u> <u>Capita GDP</u>
<u>A. Long Term, Post-war</u>		
<u>Compared with Pre-war</u>		
1969/70 - 1976/77	1.23	-0.99
1966/67 - 1976/77	2.15	-0.27
1956/57 - 1976/77	2.86	0.38
1950/51 - 1976/77	2.71	0.19
<u>B. Post - War</u>		
1974 - 1977	4.40	1.59
1973/74 - 1976/77	5.66	2.90
<u>C. Pre - War</u>		
1959/60 - 1969/70	4.73	1.93
1950/51 - 1969/70	3.25	0.63

Sources:

GDP - 1975/76 - 1976/77 : Bangladesh Bureau of Statistics
 1969/70 - 1975/76 : Bangladesh:Current Economic Situation and
 Development Policy Issues, IBRD, May 19, 1977.
 1950/51 - 1969/70 : Some Analysis of Distribution of Income,
 Consumption, Saving, and Poverty in
 Bangladesh, Mohiuddin Alamgir, Bangladesh
 Development Studies, Oct. 1974.

Population - 1959/60 - 1976/77 : IBRD, Ibid.
 1950/51 - 1959/60 : Alamgir, Ibid.

Domestic Revenues, Deficits and Foreign Aid
As Percent of Government Expenditures

BDG budget accounting uses the concept of a Revenue Budget, which is normally more than covered by tax revenues, and a Development Budget, which is financed by the surplus (if any) on revenue account and Foreign Aid. In the following summary, Revenue and Development expenditures have been combined for the purpose of arriving at an overall budget deficit. Domestic revenues are defined as all tax revenues less customs taxes.

BDG Expenditures, Revenues, Foreign Aid
(Million of Taka)

	(a)				(b)
	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>	<u>1976/77</u>	<u>1977/78</u>
1. Rev. Budget Exp.	3,183	5,275	5,819	7,648	8,477
2. Dev. Budget Exp.	<u>5,253</u>	<u>5,253</u>	<u>9,500</u>	<u>10,057</u>	<u>11,507</u>
3. Total BDG Exp.	8,436	10,528	15,319	17,705	19,984
4. Tax Revenues	3,100	5,417	8,269	7,692	9,034
5. (of which: Domestic)	(1,913)	(3,900)	(4,773)	(4,802)	(5,194)
6. Deficit (3-4)	5,336	5,111	7,050	10,013	10,950
7. Foreign Aid	4,181	8,982	8,141	5,020	NA
As Percent of Total Exp.:					
a. Dom. Revs.	22.7	37.0	31.2	27.1	26.0
b. Deficit	63.2	48.5	46.0	56.6	54.8
c. Foreign Aid	49.6	85.3	53.1	28.4	NA

Notes: (a) Revised estimates for budget data.

(b) Budget estimates for budget data.

Sources: Planning Commission for budget data; IBRD for aid disbursement data.

Both the deficit and domestic revenues have maintained a fairly steady share of BDG expenditures. Foreign aid has declined very sharply as a share of BDG expenditures since 1974/75 owing entirely to difficulties in effecting disbursements. This, in turn, is reflected in the rising pipeline of undisbursed foreign aid, which increased from \$766 million at July 1, 1973 to \$1,540 million on July 1, 1977.

Rates of Inflation

The price index chosen for these measurements is the Consumer Price Index for Industrial Workers at Narayanganj. This is generally regarded as a representative price index and unlike most others it is available in enough detail to permit disaggregation. The table shows annual rates of increase in the Narayanganj index for all items, food (which accounts for 69.77 percent of the index weight), and all items except food.

Annual Rates of Increase in Cost of Living
For Industrial Workers at Narayanganj
(Percent Increase Over Previous Year)

<u>Years Ending</u> <u>June 30</u>	<u>All Items</u>	<u>Food</u>	<u>All Items But Food</u>
1973/74	30.0	34.8	22.3
1974/75	63.8	81.3	33.2
1975/76	-19.0	-21.8	-12.4
1976/77	-3.8	-5.5	-1.7
Ave. Annual inc., 1972/73 - 1976/77	13.5	15.8	8.8

(Percent Inc. over Corresponding Quarter of Previous Year)

Quarterly Periods:

Jan-Mar. 1977	-2.5	-4.7	2.0
Apr. -June 1977	10.3	10.5	10.0
July-Sept. 1977	16.3	16.2	16.3
Oct-Dec. 1977	18.6	19.9	19.0
Jan-Mar. 1978	22.4	NA	NA

Source: Economic Indicators of Bangladesh,
Bangladesh Bureau of Statistics, Jan. 1978.
Bangladesh Bank

Actual BDG Expenditures as Compared With Announced Budgets
and Development Plans

Measured in nominal terms, Actual BDG expenditures, under both Revenue and Development budgets, have been quite close to announced targets in recent years. Development Budget expenditures were substantially the same as the announced budgets in 1974/75 and 1976/77. They were 14 percent below the announced budget in 1973/74 and 12 percent below in 1975/76. Of more significance than these results, however, has been the very large shortfall in real development expenditures, that is, after allowing for the effect of price inflation. Measured in real terms, it is estimated that only 49.1 percent of development expenditures planned for the First Five Year Plan period, 1973/74 - 1977/78, were realized. *

Actual Plan expenditures as a percent of Plan target were lowest for industry (33.3 percent), education (35.1 percent), and health and social welfare (36.4 percent), highest in transportation (63.8 percent), communication (59.6 percent), and agriculture (58.9 percent).

The shortfall in Plan expenditures reflects in part the acute shortage of competent administrative personnel in the wake of the 1970/71 war of liberation and related inefficiencies in government. Of probably more significance, however, have been external events beyond Bangladesh's control, notably the oil crisis of 1973-74.

The oil crisis and related worldwide inflation led to an average 80 percent increase in Bangladesh's import prices and a sharp decline in real imports. Real expenditures in the first Plan year were an estimated 43 percent below Plan target. A further setback was suffered in 1974/75 as a result of floods which brought about a two percent decline in agricultural output.

With two disastrous years at the outset of the Five Year Plan period, the BDG decided essentially to scrap the remainder of the Plan and substitute a "Hardcore Program" for the remaining three years, 1975/76 - 1977/78. The Hardcore Program involved a raising and reallocation of investment with the emphasis on

* All data on Plan results are from The Two Year Plan, 1978 - 80, Planning Commission, March, 1978.

"productive sectors." Agriculture, Water Resources and Rural Development received 29.7 percent of the Hardcore Plan allocation as compared with 26.3 percent under the Five Year Plan. Based on actual expenditures for the first two years of the Plan period and planned expenditures for 1977/78, it is estimated that by the end of the period 81 percent of planned Hardcore Plan outlays will have been realized.

Footnotes:

1. A Note on the Condition of Rural Poor in Bangladesh, Salimullah and A.B.M. Shamsul Islam, Bangladesh Institute of Development Studies, April 1976.
2. Poverty and Inequality in Rural Bangladesh, A.R. Khan, World Employment Program Working Paper, International Labor Office, Geneva, March 1976.
3. Some Analysis of Distribution of Income, Consumption, Saving and Poverty in Bangladesh, Mohiuddin Alamgir, Bangladesh Institute of Development Studies, Oct. 1974.
4. Report on the Hierarchy of Interests in Land in Bangladesh, F. Tomasson Jannuzi and James T. Peach, Sept. 1977.
5. Statistical Yearbook of Bangladesh, 1975, Bangladesh Bureau of Statistics.
6. Bangladesh: Current Economic Trends, IBRD, April 10, 1978.

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FROM - AA/ASIA, John H. Sullivan 4/12/78
SUBJECT - Bangladesh Strategy Review

The Asia Bureau hosted a meeting, February 6 - 7, 1978, of persons within AID and the Department and from multi-lateral institutions and the academic community to review the goals of and strategy for AID development assistance to Bangladesh. The list of review participants, the agenda and the bibliography of materials used in the meeting are included in Appendix A. The purpose of this memorandum is to summarize the discussion and to indicate consensus or important minority views which arose from the discussion.

After two days of wide ranging discussion, the meeting concluded with a majority of participants expressing general approval of the Mission's program, given the circumstances. There was not, however, general agreement as to what additional programs and projects the Mission should try. There was broad agreement that the Bangladesh Government's goal of achieving foodgrain self sufficiency by simultaneously decreasing the rate of population growth and increasing agricultural production warrants AID support. The participants took as given the imperative of reducing population growth. A primary focus of discussion was on the feasibility of the Mission's High Yielding Variety (HYV) strategy and whether the benefits of increasing agricultural production would be equitably distributed among the rural population.

With respect to the HYV strategy it was generally agreed that the Mission's efforts -- particularly in the food policy area -- to improve the terms of trade for rural producers are well placed. There was general agreement on the need for more stable grain prices and there was strong support for a Mission proposal which would use PL 480 Title III foodgrain resources in support of a grain price stabilization program. The discussion clarified the Mission's view

that it would be possible to improve the input cost - output price ratio by increasing prices at harvest and reducing them during the four month period of grain scarcity to reduce fluctuations to a range of 20-25% throughout the year.

There was doubt, however, about the Mission's proposal included in the FY 1979 ABS, to reduce PL 480 imports in order to increase Bangladesh's agricultural prices and to stimulate production. A number of participants felt that Bangladesh will continue to need substantial food imports, particularly if purchasing power is expanded among the rural poor and the ration system focuses increasingly on poorer people. These are the goals of the donor group. While endorsing maintenance of incentive prices, participants felt that increases in Bangladesh's production would not occur automatically, nor quickly enough to compensate for reduced imports in the near term.

Participants agreed that mechanisms must be found to make short and medium term credit available to all cultivators, particularly sharecroppers. The availability of credit for the poor majority was perceived to be a crucial element in both reducing the cost (and risk) of investment in HYV technology and decelerating the rate at which small holders become landless due to a heavy debt burden. It was noted that the Mission is just beginning to implement a project wherein experimental systems to mobilize savings and provide credit to sharecroppers and other small holders will be tested. Most seemed to agree that if the input cost-output price ratio could be improved and if all rural producers had access to production credit at no more than 24 percent per annum, small farmers and sharecroppers would have an adequate incentive to invest in HYV technology.

While these elements of the Mission's HYV strategy were thought to be valid there was profound concern expressed about the distribution of land holdings and the significant rate of tenancy and landlessness as revealed by the AID financed "Report on the Hierarchy of Interests in Land in Bangladesh." Much of the rest of the discussion focussed on whether the Mission's program is adequate to the situation.

Dr. Jannuzi, a co-author of the above named report, argued for structural tenancy reforms meaning that the state would guarantee more secure rights of tenancy and enforce more favorable input and/or

output sharing for sharecroppers. Professor Prosterman argued for "zero tenancy retention" wherein the state would attempt democratic tenancy reform by making full compensation for the value of land given to sharecroppers. By his rough calculation this would involve about 4.3 million acres of land and impact upon about 3.2 million households at a cost in a range of five to six billion dollars. The professors agreed that a reduction of the currently ineffective land holding ceiling would be meaningless. The view of most discussants was that tenancy reform, if feasible, would provide a greater assurance of an equitable distribution of benefits from an HYV strategy. Except for Dr. Prosterman, there was, however, also a consensus that a comprehensive tenure reform is infeasible in Bangladesh at this time. This is due to the fragility of political institutions which rest upon the maintenance of the status quo, the profound lack of administrative and technical competence to undertake such reforms, and the low probability that the community of donors would coalesce to agree on the necessity of such reforms and to underwrite the staggering cost.

The participants reviewed the extent to which the Mission's HYV strategy, without tenancy reform, would ameliorate the high rate of unemployment especially among landless agricultural labor. The Mission's analysis indicated that over the next eight years, and assuming the full implementation of the HYV strategy, new employment in foodgrain crop production would exceed the growth in the agricultural labor force as a whole. However, there is also some evidence to suggest that the growth of hired labor employment would be still greater and, therefore, the rate of unemployment among the landless would be reduced somewhat. There appeared to be a consensus that these conclusions were valid; however, some participants thought that the employment effects of the HYV strategy would be greater than the Mission had estimated. It was observed that while the employment gains would not be as dramatic as the donors and Bangladesh Government would like, they would represent a very substantial improvement over the situation of the past three decades wherein unemployment has increased and agricultural wages have fallen almost every year.

Given the predominance of the agriculture sector in the national economy the rapid adoption of HYV technology is a crucial but not sufficient component for creating the additional employment and, hence, rural incomes. The participants agreed that attention must be directed to the generation of "off farm" employment in rural areas and, in this regard, gave strong endorsement to the Mission's current efforts to study the feasibility issues associated with formulating a "rural industries" strategy and portfolio of projects. In addition, lack of information on rural marketing as well as size of non-agricultural family income were identified as important areas for further study.

Dairying and farm animal production were mentioned as possible sources of additional rural income and means of employing rural labor. The Mission representatives said they had explored a number of possibilities along these lines. Two ideas which seemed most promising were fish and duck production.

The discussion of "Basic Human Needs" centered on the questions of priority, the interest and capacity of the Government to undertake substantial BHN initiatives and whether any future AID financing of BHN activities should supplement or substitute for the Mission's current and planned portfolio of projects in agriculture, rural development and population.

There was a consensus that agricultural production is at the heart of meeting basic human needs in Bangladesh. In this context, the HYV strategy and related project activities (as well as food policy reforms related to P.L. 480) must remain the core of the U.S. program. Support was again expressed for the idea of establishing a grain price stabilization program as a direct means to improve real rural incomes.

While the Mission is now developing an integrated family planning and health project at the lowest administrative level in the country, the Mission was encouraged to look into other opportunities for programs which address the health, nutritional and educational needs of poor rural people. It was noted that there may be a correlation between improvements in health and education and increased acceptance of family planning. In mounting such programs special consideration should be given to their impact on women.

Mission representatives acknowledged these points and indicated a receptiveness to consider any experience or new ideas in these areas. However, they expressed some skepticism that the Bangladesh Government has either the necessary will, or administrative capacity to make reforms and reallocate scarce resources in such a way that the poorest stratum of the society will benefit from new programs. It was pointed out that Bangladesh already has a vast, expensive and moribund institutional super-structure for the delivery of social services. As in other areas, e.g. food policy, some participants were pessimistic that the BDG would be able to muster the will or mobilize its resources to make these institutions more effective vehicles for the delivery of BHN services.

While other IBRD representatives were not necessarily in agreement, Paul Isenman repeatedly emphasized his personal view that AID should recognize the crucial long run impact of education and training programs and undertake initiatives in this area. He suggested AID assume leadership in providing assistance to mass education, even if such an effort required the reallocation of available U.S. resources from agriculture and rural development to accomplish it. The basis for this view was that AID has a comparative advantage over other donors in designing projects for mass education.

The Mission representatives expressed some doubt about the relevance and efficiency of AID educational efforts (except for elite educational projects) in other poor LDCs. However, they indicated a willingness to explore any pertinent experience or promising new ideas in this area, provided this would be done in the context of additive resources to those already planned. There was general agreement among the participants that resource flows to education should supplement the financing of the core of the Mission's program. PPC representatives encouraged the Mission to feel that such supplemental funding would be forthcoming.

There was general agreement that in Bangladesh, certain infrastructure investments were prerequisite to meeting basic human needs and increasing agricultural production. There was no agreement, however, as to who should finance these investments. The Mission Director is exploring possibilities with other donors, and the proposed USAID program also contains some limited investment of this type.

Over the course of the two days of the review there were proposals discussed which would carry very large price tags. Such proposals could only be affected with increased agency resource allocations to Bangladesh.

Further, the solution to Bangladesh's problems only partially relates to the level of donor resources; the more important factors are the BDG's commitment to solve its own problems with, to the maximum extent possible, its own human and financial resources.

As part of the concluding comments, Mr. Prosterman proposed three options for a U.S. Assistance strategy:

- a) a reform package assembled by a consortium of donors to support a massive land reform and rural development program. Prosterman saw this as the only real solution in spite of the political difficulties it entails.
- b) If land reform is not possible, a program to link fertilizer to small farmer and sharecropper tenancy reforms, using the local currency from food aid for small farmer credit. Projects would be focussed in regions where small owner/operator farms predominate. Programs in areas of high rates of landlessness would be kept small. Population control assistance would be supplemented by clean water and health service programs.
- c) A still less desirable option was an "amplified basic human needs" strategy, more than doubling the present size of the program, but without addressing the need for fundamental reforms. Prosterman thought that ultimately, such a program would not be effective.

In concluding, AA/ASIA, Jack Sullivan observed that U.S. economic assistance to Bangladesh carries with it more "interventionist" policy prescriptions at the macro-economic level than AID assistance to other countries of the Asia region. While such activism is justified in critical areas such as food policy where U.S. resource flows are a very significant proportion of total donor assistance, there is a question as to the number of complex problem areas in which the U.S. should attempt such influence. Another very important question is whether U.S. intervention is appropriate in some other sensitive policy areas such as the land tenure situation. The question of resources remains, and that of the U.S. interest as it relates to the costs of increased U.S. involvement in Bangladesh's development efforts. We will consider the suggestions made at the review during the months ahead.

TABLE I - LONG RANGE PLAN
(\$ Millions)

DECISION UNIT: USAID/Bangladesh

	FY 1978 Estimate	FY 1979 Request	FY 1980		P L A N N I N G P E R I O D							
			Minimum	Expanded Proposed	FY 1981	FY 1982	FY 1983	FY 1984				
Food & Nutrition												
Grants	93.3	78.0	66.5	82.5	111.5	143.7	189.2	244.1	272.5			
Loans	-	-	-	-	-	-	-	-	-			
Population												
Grants	9.4	8.5	11.8	11.8	11.8	14.9	19.0	22.0	28.0			
Loans	-	-	-	-	-	-	-	-	-			
Health												
Grants	-	2.5	3.0	3.0	3.0	3.6	4.0	4.0	1.5			
Loans	-	-	-	-	-	-	-	-	-			
Education												
Grants	-	.2	-	.1	.3	2.4	3.4	6.5	12.5			
Loans	-	-	-	-	-	-	-	-	-			
Selected Development Activities												
Grants	4.9	.4	-	-	2.4	2.4	.4	.4	.5			
Loans	-	-	-	-	-	-	-	-	-			
Total Functional Accounts												
Grants	107.6	89.6	81.3	97.4	129.0	167.0	216.0	277.0	315.0			
Loans	-	-	-	-	-	-	-	-	-			
Other Accounts (Specify)												
Grants	-	-	-	-	-	-	-	-	-			
Loans	-	-	-	-	-	-	-	-	-			

TABLE I - LONG RANGE PLAN
(\$ Millions)

DECISION UNIT: USAID/Bangladesh

	FY 1978 Estimate	FY 1979 Request	FY 1980		P L A N N I N G P E R I O D							
			Minimum	Expanded	Proposed	FY 1981	FY 1982	FY 1983	FY 1984			
Total Program												
Grants	107.6	89.6	81.3	97.4	129.0	167.0	216.0	277.0	315.0			
Loans	-	-	-	-	-	-	-	-	-	-	-	-
PL 480 (non-add)												
Title I	50.3	33.3	-	-	35.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6
Title II	16.0	12.3	-	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3
Title III	-	46.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4	48.4
Housing Guaranties (non-add)	-	-	-	-	-	-	-	-	-	-	-	-
Personnel (in work years)												
Mission - U.S.	34.4	38.9	25.7	35.1	41.0	43	46	49	52			
- FN	63.0	75.7	58.5	75.7	84.0	86	90	95	100			
TDY - USDH	1	1	1	1	2	2	3	3	3			
Contract, Other -	1.8	1.0	-	-	-	-	-	-	-			
Operating Expenses	2.7	4.1	2.2	2.9	3.8	4.0	4.3	4.6	4.9			

TABLE III - SUMMARY OF RESOURCES - BY ACTIVITY
(FUNDING IN \$ 000 AND OPERATING EXPENSES-FUNDED PERSONNEL IN WORKYEARS (XX, X))

ACTIVITY	DECISION UNIT												PAGE	OF		
	FY: 1978				CY: FY 1979				BY: 1980							
	FUNDING	PERSONNEL US	PERSONNEL FN	FUNDING	PERSONNEL US	PERSONNEL FN	FUNDING	PERSONNEL US	PERSONNEL FN	FUNDING	PERSONNEL US	PERSONNEL FN				
PROGRAM ACTIVITIES																
<u>Food and Nutrition</u>	(93,295)			(78,000)			(66,500)			(82,500)		(11,500)				
Rural Finance Experimental Proj. (0025)	-	1.2	0.5	-	1.2	0.5	-	0.9	0.7	-	0.9	0.7	-	-	-	-
Rural Finance (0037)	-	-	-	-	-	-	1,000	0.9	0.5	-	1,000	0.9	0.5	-	-	-
Fertilizer Dist. Improvement (0024)	50,000	2.0	5.1	50,000	2.3	5.1	50,000	2.3	5.1	-	50,000	2.3	5.1	-	-	-
Fertilizer Storage (0030)	-	1.0	1.0	-	1.0	1.0	-	-	-	-	-	-	-	-	-	-
Small Scale Irrigation I (0019)	-	1.2	2.0	-	1.2	2.0	-	0.2	0.8	-	0.2	0.8	-	-	-	-
Small Scale Irrigation II (0023)	-	-	-	-	-	-	14,400	1.2	2.0	-	14,400	1.2	2.0	-	-	-
Agricultural Inputs III (0035)	-	0.3	3.0	-	0.5	1.0	-	-	-	-	-	-	-	-	-	-
Agricultural Research (0003)	920	1.2	1.1	900	1.2	1.1	200	0.6	1.1	-	200	0.6	1.1	-	-	-
Pilot Crop Outreach (0043)	-	-	-	-	0.4	0.4	900	0.8	1.3	-	900	0.8	1.3	-	-	-
Ashuganj Fertilizer (0016)	20,000	0.7	0.5	-	0.4	0.3	-	0.4	0.3	-	-	0.4	0.3	-	-	-
Rural Irrigation (0012)	-	-	-	3,000	1.3	2.2	-	-	-	3,000	1.3	2.2	-	-	-	-
Rural Roads (0032)	-	-	-	10,000	1.8	2.3	-	-	-	11,000	1.8	2.3	-	-	-	-
Food For Work (0017)	425	1.4	4.2	500	1.4	4.2	-	-	-	1,000	1.4	4.2	-	-	-	-
Technical Resources (0027)	950	0.5	0.1	600	0.9	3.5	-	-	-	1,000	0.9	3.5	-	-	-	-
Rural Industries (0042)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Integrated Land & Water Use (0040)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Project Development Grant (0031)	-	1.5	1.0	-	0.5	0.3	-	-	-	-	-	-	-	-	-	-
Development Services & Trng. (0002)	-	0.7	3.0	-	0.3	1.0	-	-	-	-	-	-	-	-	-	-
Rural Electrification (0021)	21,000	1.2	1.0	13,000	2.4	2.6	-	-	-	-	-	-	-	-	-	-
Reg'l. Proj. Dev. & Support (0249)	-	0.2	0.4	-	0.2	0.4	-	0.2	0.4	-	0.2	0.4	-	-	-	-
<u>Population</u>	(9,365)			(8,500)			(11,800)			(11,800)		(11,800)				
Pop/Family Planning (0001)	9,365	2.6	6.3	8,500	2.6	6.3	11,800	2.6	6.3	-	11,800	2.6	6.3	-	-	-
														15,000	1.1	0.7
														14,000	1.8	1.1
														-	-	-
														-	-	-
														-	-	-

TABLE III - SUMMARY OF RESOURCES - BY ACTIVITY
(FUNDING IN \$ 000 AND OPERATING EXPENSES-FUNDED PERSONNEL IN WORKYEARS (XX, X))

ACTIVITY	DECISION UNIT												PAGE ____ OF ____				
	FY: 1978				FY: 1979				BY: 1980								
	FUNDING		PERSONNEL		FUNDING		PERSONNEL		FUNDING		PERSONNEL			FUNDING		PERSONNEL	
	US	FN	US	FN	US	FN	US	FN	US	FN	US	FN		US	FN	US	FN
<u>Health</u>																	
Family Welfare Centers (0038)	-	-	2.0	-	(2,500)	3.5	3.7	(3,000)									
<u>Education/Human Resources</u>																	
National Women's Dev. Academy(0028)	-	-	0.5	0.2	-	0.5	0.2	3,000	3.5	3.7							
Nat'l. Women's Dev. Academy(0044)	-	-	-	-	-	0.6	0.1										
Technical Resources (0027)	-	-	-	-	200	0.1	0.1										
<u>Selected Development Activities</u>																	
	(4,850)				(350)												
PVO Co-Financing (0010)	350	1.5	1.0		350	0.5	0.9										
PVO Co-Financing II (0045)	-	-	-	-	-	0.1	0.4										
Flood & Cyclone Warn. Syst. (0046)	-	-	-	-	-	0.3	0.4										
Karnaphuli 3rd Unit (0018)	4,500	0.3	0.6		-	0.5	0.7										
Total Program Funding	107,530	20.0	31.0	89,550	25.7	40.7	81,300	13.6	22.2	67,400	21.5	37.4	129,000	26.7	42.6		

TABLE III - SUMMARY OF RESOURCES - BY ACTIVITY
 (FUNDING IN \$,000 AND OPERATING EXPENSES-FUNDED PERSONNEL IN WORKYEARS (XX.X))

ACTIVITY	DECISION UNIT												PAGE ___ OF ___					
	FY: 1978				CY: FY 1979				BY: 1980				PROPOSED					
	FUNDING		PERSONNEL		FUNDING		PERSONNEL		FUNDING		PERSONNEL		FUNDING		PERSONNEL			
	US	FN	US	FN	US	FN	US	FN	US	FN	US	FN	US	FN	US	FN		
PL-480, Title I	50,300	1.0	5.0	33,300	0.5	2.0								35,600	0.2	1.1		
Title II*	16,030	-	-	12,290	-	-								11,300	-	-		
Title III	-	1.0	-	46,400	1.3	3.0								48,400	1.3	5.0		
*Personnel requirements included in Food-For-Work (388-0017)																		
<u>NON-PROGRAM ACTIVITIES</u>																		
Policy Direction and Management		5.6	-		5.6	-									5.1	-	5.6	
Financial Management		1.9	12.0		1.9	14.0									1.9	15.0	1.9	16.0
Mission Support		1.9	14.0		1.9	15.0									1.9	16.0	1.9	17.0
IDI's		2.0	-		1.0	-									1.0	-	1.0	-
Project Development		-	-		-	-									1.4	1.3	1.4	1.3
Non-Mission Specific Personnel		1.0	1.0		1.0	1.0									1.0	1.0	1.0	1.0
<u>OPERATING EXPENSES:</u>																		
Personnel	(2,713)			(4,063)										(2,888)			(3,825)	
Housing	1,788			2,155										1,829			2,110	
Office Operations	304			651										323			371	
	621			1,247										736			844	

FY 1980 ANNUAL BUDGET SUBMISSION
(in \$000)

DECISION UNIT: Bangladesh

DECISION PACKAGE: Minimum

ACTIVITY DESCRIPTION : The major objectives of the Mission strategy, in the medium term, are to achieve a total domestic foodgrain production of 18.2 million tons, to achieve a family planning acceptor rate of 40% and to increase the total labor requirement for crop production to 11 million work-years by 1985/86. The minimum decision package includes those activities which impact directly on achieving these medium-term goals. As such it includes those projects which contribute directly and immediately to increasing foodgrain production, particularly by small farmers. It also includes those activities which the Mission views as critical to increasing the acceptance of family planning.

	1980	
	<u>THIS PACKAGE</u>	<u>CUMULATIVE TOTAL</u>
<u>RESOURCE REQUIREMENTS</u>		
Food and Nutrition	70,920	50,900
Population	9,385	8,500
Health	-	2,500
Education	-	-
Selected Development Activities	-	-
Total Program	<u>80,305</u>	<u>61,900</u>
<u>NON ADD</u>		
PL 480 Title I	50,300	46,400
(of which Title III)	-	(46,400)
PL 480 Title II	-	-
Housing Guaranties	-	-
	<u>81,300</u>	<u>81,300</u>
	48,400	48,400
	(48,400)	(48,400)
	-	-
	-	-

FY 1980 ANNUAL BUDGET SUBMISSION
(in \$000)

DECISION UNIT: Bangladesh

DECISION PACKAGE: Minimum

NON ADD:	1978		1979		1980	
	1978	1979	1978	1979	THIS PACKAGE	CUMULATIVE TOTAL
Employment - Full-time Permanent						
U.S. Direct Hire	26	26	26		26	26
Foreign Nationals	58	51	51		59	59
TDY	1	1	1		1	1
Total	85	78			86	86

FIVE YEAR PROJECTIONS

	1981		1982		1983		1984	
	BY 80	BY + 1	BY + 2	BY + 3	BY + 3	BY + 4	BY + 4	BY + 4
Program	81,300	93,700	109,700	153,600	153,600	187,500		
Personnel (in workyears)								
Mission - US	26	26	17	28	28	28		
- FN	59	59	61	63	63	65		
TDY - USDH	1	1	1	2	2	2		

SHORT-TERM OBJECTIVES :

For FY 1980, the Mission's short-term objectives at the minimum level are:

- A. Increase in fertilizer sales over previous year 15%
- B. Irrigation handpumps distributed 100,000
- C. New Family Welfare Centers providing services 90
- D. Voluntary Sterilizations 400,000

FY 1980 ANNUAL BUDGET SUBMISSION
(in \$000)

DECISION UNIT: Bangladesh

DECISION PACKAGE: Minimum

SHORT-TERM OBJECTIVES

E. Oral Contraceptive cycles distributed	15,000,000
F. Credit made available to small farmers/sharecroppers	\$ 3,000,000
G. Agricultural Research Institute established at new site	X
H. Foodgrain price stability established	20% fluctuation

IMPACT ON MAJOR OBJECTIVES

Within the minimum package are included two key projects designed to have substantial impact on the family planning acceptor rate. The Population/Family Planning project is providing along with other donor projects the commodities and services necessary to achieve the 40% acceptance rate by 1985/86. The Family Welfare Centres project is crucial for both improving the health of mothers and infants (a determinant of fertility) and establishing the rural base for increasing contraceptive usage. To achieve foodgrain self-sufficiency by 1985/86, agricultural production must increase at the rate of 4.9% per annum. This rate of increase cannot be achieved without a rapid expansion of HYV technology which, in turn, is dependent on reasonably priced institutional credit available to small farmers, sharecroppers and landless people. The Rural Credit project is directed toward providing this target group with the means to invest in HYV technology. Similarly, fertilizer is a key input to the expansion of HYVs. As an agricultural input it is divisible and, hence, usable by small farmers on an individual basis. Further, the returns on the investment are recovered in a relatively short period. Handpump tubewells, financed under the Small Scale Irrigation projects, are also suitable for small

FY 1980 ANNUAL BUDGET SUBMISSION
(in \$000)

DECISION UNIT: Bangladesh

DECISION PACKAGE: Minimum

IMPACT ON MAJOR OBJECTIVES

farmer use on an individual basis and provide a third key input, water, needed for HYV expansion. Adaptive research must continue to provide improved varieties of seed and cropping practices to support the HYV strategy. The Agricultural Research and the Crop Research Outreach Pilot project are directed toward this end. Finally, the PL-480 Title III program is designed to stabilize foodgrain prices at levels which will induce farmers to invest in HYV technology while assuring reasonable prices to consumers.

OTHER INFORMATION

As this is the minimum decision package the consequences of not approving this package are termination of assistance to Bangladesh by FY 1980, reduction of the Mission staff to a level necessary to complete the disbursement of on-going projects and a re-orientation of our FY 1979 program to implement an orderly phase-out. Doubtless such action on the part of the United States would be viewed with some concern by the world community.

As discussed in the "Commentary on Personnel and Operating Expenses" and again in the "Commentary on Operating Expenses and Workforce" (and we wonder if this level of re-iteration is really necessary), reduced workforce levels would greatly constrain the Mission in project implementation and commodity monitoring. As discussed in the Decision Unit Overview, the program content, particularly in the minimum package, reflects the only possible combination of activities we can devise for achieving the Mission objectives. Also, as noted in the "Commentary on Operating Expenses and Workforce" the mix of personnel is decided on a project-by-project basis and reflects the optimal input for each project.

FY 1980 ANNUAL BUDGET SUBMISSION
(in \$000)

DECISION UNIT: Bangladesh

DECISION PACKAGE: Expanded

ACTIVITY DESCRIPTION. At the expanded level the Mission introduces projects which promise immediate employment and longer run agricultural payoffs. Rural Roads and Rural Irrigation Works are projects which create the physical infrastructure for the future expansion of agricultural production. As such, the potential productive impact may be greater in the period 1986 to 2000. These two projects and Food For Work also address the immediate problem of rural unemployment since all construction will be labor intensive. The Technical Resources project enhances the Government's limited capability to plan and implement its slowly expanding portfolio of development projects targeted on the rural poor.

	1980		
	1978	1979	THIS PACKAGE
<u>RESOURCE REQUIREMENTS</u>	<u>1978</u>	<u>1979</u>	<u>CUMULATIVE TOTAL</u>
Food and Nutrition	22,375	27,100	16,000
Population	-	-	-
Health	-	-	-
Education	-	200	100
Selected Development Activities	-	-	-
Total Program	22,375	27,300	16,100
			82,500
			11,800
			3,000
			100
			-
			97,400

FY 1980 ANNUAL BUDGET SUBMISSION
(in \$000)

DECISION UNIT: Bangladesh

DECISION PACKAGE: Expanded

1980

NON ADD:

PL 480 Title I
(of which Title III)
PL 480 Title II
Housing Guaranties

Employment - Full-time Permanent
U.S. Direct Hire
Foreign Nationals
TDY

	<u>1978</u>	<u>1979</u>	<u>THIS PACKAGE</u>	<u>CUMULATIVE TOTAL</u>
PL 480 Title I	-	-	-	48,400
(of which Title III)	-	-	-	(48,400)
PL 480 Title II	16,030	12,290	11,300	11,300
Housing Guaranties	-	-	-	-
Employment - Full-time Permanent				
U.S. Direct Hire	9	10	9	35
Foreign Nationals	14	22	17	76
TDY	-	-	-	1
Total	23	32	26	112

FY 1980 ANNUAL BUDGET SUBMISSION
(in \$000)

DECISION UNIT: Bangladesh

DECISION PACKAGE: Expanded

IMPACT ON MAJOR OBJECTIVES. The most immediate impact of the projects included in this package will be on rural unemployment. The Rural Irrigation, Rural Roads and Food-for-Work activities will generate directly 150,000 workyears of employment in FY 1980 alone. The expansion of surface water irrigation systems through both Rural Irrigation and Food-for-Work, the electrification of irrigation power pumps and an improved rural road system will contribute to increases in agricultural production, although less so than the projects included in the minimum decision package. The impact of Rural Irrigation, Rural Roads, Rural Electrification and Technical Resources will become greater after 1985/86. The first three activities, in particular, will doubtless be expanding after FY 1980, funded either by USAID or other donors, and as more land is irrigated and the rural roads improvements are extended to new areas the benefits will be greater and more widespread.

OTHER INFORMATION. All but one of the projects in this package are characterized as high personnel intensity projects and use the fixed amount reimbursement (FAR) system of funding. The one exception is Rural Electrification. The Mission intends to use program-funded contract personnel to the fullest extent possible but the FAR certification responsibility remains squarely with the USDH personnel of the Mission.

The consequences of not approving this package would be a serious reduction in the ability of USAID and the BDG to generate significant additional rural employment among primarily landless laborers and, while perhaps foodgrain self-sufficiency could be achieved in 1985/86 without this package, the maintenance of self-sufficiency and the economic growth of the rural areas after 1985 would be hampered.

FY 1980 ANNUAL BUDGET SUBMISSION
(in \$000)

DECISION UNIT: Bangladesh

DECISION PACKAGE: Proposed (Mark)

ACTIVITY DESCRIPTION: FY 1980 is the proposed first year of financing for both the Integrated Land and Water and Rural Industries projects. Rural Industries will complement the basic agricultural strategy by creating employment for a portion of the growing rural labor force that cannot be absorbed in on-farm labor. The Integrated Land and Water project will contribute to the further expansion of agricultural production in the long run, i.e. primarily after 1985/86. Under PL 480 Title I the Mission proposes to import cotton and vegetable oil, both directed to the needs of the rural poor. The Government would use the sales proceeds to help finance its annual Development Budget. The National Women's Academy project will build upon the experience gained from the USAID's FY 1977 grant. The Mission will continue to support those private and voluntary organizations who are developing and testing village - based projects directed toward meeting basic human needs. Finally, the Flood and Cyclone Warning System will significantly advance the BDG's capability to deal with the environmental disasters which annually threaten the country.

RESOURCE REQUIREMENTS	1980	
	THIS PACKAGE	CUMULATIVE TOTAL
Food and Nutrition	29,000	111,500
Population	-	11,800
Health	-	3,000
Education	200	300
Selected Development Activities	4,850	2,400
Total Program	4,850	31,600
	350	129,000

FY 1980 ANNUAL BUDGET SUBMISSION
(in \$000)

DECISION UNIT: Bangladesh

DECISION PACKAGE: Proposed (Mark)

	1980				CUMULATIVE TOTAL
	1978	1979	THIS PACKAGE	1980	
<u>NON ADD:</u>					
PL 480 Title I	-	33,300	35,600	84,000	
(of which Title III)	-	-	-	(48,400)	
PL 480 Title II	-	-	-	11,300	
Housing Guaranties	-	-	-	-	
Employment - Full-time Permanent					
U.S. Direct Hire	1	2	6	41	
Foreign Nationals	7	6	8	84	
TDY	1	1	1	2	
Total	9	9	15	127	
<u>FIVE YEAR PROJECTIONS</u>	<u>BY 80</u>	<u>1981 BY+1</u>	<u>1982 BY+2</u>	<u>1983 BY+3</u>	<u>1984 BY+4</u>
Program	129,000	167,000	216,000	277,000	315,000
Personnel (in workyears)					
Mission - US	41	43	46	49	52
- FN	84	86	90	95	100
TDY - USDH	2	2	3	3	3

FY 1980 ANNUAL BUDGET SUBMISSION
(in \$000)

DECISION UNIT: Bangladesh

DECISION PACKAGE: Proposed (Mark)

SHORT-TERM OBJECTIVES

In Fiscal Year 1980, the short-term objectives of the proposed level are:

- | | | |
|----|---|-----|
| A. | Rural Industrial Product Development Centers established | 3 |
| B. | Development of area specific irrigation/cropping pattern package | X |
| C. | Field workers under Women's Rural Outreach Program trained and assigned | 300 |
| D. | Flood and cyclone telemetry system established | X |
| E. | PVO activities funded | 4 |

IMPACT ON MAJOR OBJECTIVES

The impact of the proposed decision package would be on the longer-term objectives of sustaining the continued growth of agricultural production in the post-1986 period and stimulating the growth of off-farm employment. Although they do not directly impact on the major objectives, the National Women's Academy project, the PVO Co-Financing project and the Flood and Cyclone Warning System project address important problems of special concern to the Mission and the Government.

FY 1980 ANNUAL BUDGET SUBMISSION
(in \$000)

DECISION UNIT: Bangladesh

DECISION PACKAGE: Proposed (Mark)

OTHER INFORMATION

Without the proposed decision package, the Mission would have to defer until a future date the Rural Industries and Integrated Land and Water Use projects. Support to PVOs would be ended, except for what the Mission might obtain from regional funds. The Flood and Cyclone Warning project would also have to be deferred. This latter project is important to the Government, since it would enhance its ability to protect the people from loss of life and property.

The personnel implications for this package are not great in terms of numbers. Although the additional number of personnel needed is small, this decision package would require an increase in the MODE ceiling from the present 39 to 42 positions.

TABLE V - PROPOSED PROGRAM RANKING

NAME OF DECISION PACKAGE SET

USAID/BANGLADESH

DECISION PACKAGES/PROGRAM ACTIVITY/SUPPORT ITEM

RANK	DESCRIPTION	APPROPRIATE ACCT	PER-SONNEL INTENSITY	OPERATING EXPENSES	WORKYEARS (XX, X)	RESOURCE REQUIREMENTS		PROGRAM FUNDING (000)	INCREMENTAL	CUMULATIVE
						MISSION TDY	PROGRAM ACCOUNT			
13	<u>Decision Package - Expanded</u>									
	012 Rural Irrigation (GO)	FN	H	3.5	-	3.0	3,000			84,300
14	032 Rural Roads (GO)	FN	H	4.1	-	5.0	11,000			95,300
15	PL - 480, Title II*	-	-	-	-	-	11,300			95,300
16	017 Food-For-Work* (GO)	FN	H	5.6	-	11.0	1,000			96,300
17	021 Rural Electrification (GO)	FN	H	5.0	-	15.0	-			96,300
18	027 Technical Resources Development (GO)	EH	H	4.9	.1	5.0	1,100			97,400
	Summary by Personnel Intensity:									
	High (5 projects)			(23.1)	(.1)	(39.0)	(27,400)			
	Cumulative Total			(65.2)	(.3)	(65.0)	(157,100)			

* Food-For-Work is integrated activity using both Title II and grant funds. Workforce levels have been attributed to grant activity.

TABLE V - PROPOSED PROGRAM RANKING

USAID/BANGLADESH

DECISION PACKAGES/PROGRAM ACTIVITY/SUPPORT ITEM

RESOURCE REQUIREMENTS
WORKYEARS (XX, X)
PROGRAM FUNDING (\$ 000)

PROGRAM INCREMENT CUMULATIVE

APPROPRIATE PERSONNEL INTENSITY

ACCT CITY

MISSION TOY

OPERATING EXPENSES

PROGRAM ACCOUNT

RANK	DESCRIPTION	APPROPRIATE PERSONNEL INTENSITY	ACCT CITY	MISSION TOY	OPERATING EXPENSES	PROGRAM ACCOUNT	PROGRAM INCREMENT CUMULATIVE
	<u>Decision Package - Mark/Proposed</u>						
19	0042 Rural Industries (GN)	M	FN	1.8	.5	4.0	15,000
20	0040 Integrated Land and Water Use (GN)	M	FN	2.9	-	10.0	126,400
21	0044 National Women's Academy (GN)	H	EH	2.5	-	0.5	126,600
22	PL - 480, Title I	L	-	1.3	-	-	(33,270)
23	0010 PVO Co-Financing (GO)	H	SD	0.7	-	1.0	126,600
24	0045 PVO Co-Financing II (GN)	H	SD	0.7	-	1.0	400
25	0046 Flood and Cyclone Warning System (GN)	M	SD	0.7	-	1.5	2,000
26	0018 Karnaphuli Third Hydro-Electric Unit (LO-GO)	M	SD	1.1	.1	2.5	
	Summary by Personnel Intensity:						
	Low (1 project)			(1.3)	-	-	(33,270)
	Medium (4 projects)			(6.5)	(.6)	(18.0)	(31,000)
	High (3 projects)			(3.9)	-	(2.5)	(600)
	Cumulative Total			(76.9)	(1.9)	(85.5)	(221,970)

TABLE IV.A.

POPULATION/FAMILY PLANNING (388-0001)

Purpose: The purpose of this activity is to assist the BDG to develop a functioning national institutional structure providing family planning services and population/family planning information and education on a continuing basis to the people of Bangladesh.

Background: Bangladesh's population density is 1,500 persons per square mile. It will double in 25 years if the current estimated 2.8 percent annual rate of natural increase is sustained. The economy is largely dependent upon agriculture. There is an imposing backlog of unmet basic human needs. It is obvious that meeting these needs is hopeless unless the growth rate is reduced without delay. Both the BDG and USAID assign highest priority to agricultural development--in particular, to increased food production. Recognition of the futility of that effort without a simultaneous attempt to reduce fertility drastically is reflected in the BDG's labelling of population growth as the nation's No. 1 problem and USAID's Decision Package ranking of Population/Family Planning as No. 1.

Progress to Date: When this activity began in FY 1976, the objectives were to have a functioning national family planning organization and a reduced population growth rate of 2.8 percent (from 3.0 percent) by the end of FY 1978. Based on early 1976 data of the Bangladesh Project of the World Fertility Survey and extrapolations from rising contraceptive use, the BDG estimated that the latter target had been met by the end of FY 1977. They raised their demographic target for achievement of replacement-level fertility from the turn of the century to 1985. While such an accomplishment would be unprecedented, USAID's intent is to help the BDG reach the target as soon as possible.

Adequate contraceptive supplies are deployed throughout the country and are accessible to the majority of the population through home-visiting field workers in the rural areas and through rural and urban clinics. USAID is maintaining the supply pipeline. Nearly all of the planned service delivery structure is in place. By the end of

FY 1977, eighteen persons were in long-term participant training and 59 persons had completed short-term training in the U.S. and third countries. USAID is giving technical assistance in family planning training and research and, in the near future, expects to provide a communication consultant. An A.I.D.-supported project for commercial marketing of contraceptives through the established retail network is the source of protection for an estimated one-fourth of the 10 percent of eligible couples using modern methods of birth control. A.I.D. assistance in development of voluntary sterilization services has been given both through private-sector intermediaries and through the bilateral program. Clinical facilities have been equipped with kits supplied by USAID and by other donors.

Beneficiaries: The target group is the entire population of Bangladesh--92 percent rural and with a per capita income of \$80. The most frequently expressed reason for practicing family planning is inability to support more children. This is consistent with the fact that nearly 50 percent of agricultural families are landless or near-landless and need fewer family members for labor. The cost of the FY 1977 project, divided by the estimated 1.6 million families practicing contraception, is \$4.72 per family. However, this does not take into account the benefit to the whole population from births prevented nor the presumed generalized modernizing effect of successful adoption of the innovative practice of birth control.

FY 1979 program: The following results are expected during the current year, most of them from FY 1978 inputs:

- 1) Contraceptive availability is sustained at the level of at least one year's requirement in country and one year's in pipeline.
- 2) Thana and union MCH/Family Planning clinics will be equipped with 1,000 IUD insertion kits at the rate of one kit per paramedic on the clinic staff (i.e., one per union, 2 to 4 per thana), and a reserve stockpile will be created to supply hospitals, voluntary agency clinics, replacement needs, and a cushion against future-year deliveries which may be late in relation to graduation of new paramedics.

3) Hospitals and clinics offering voluntary sterilization services will be equipped with 4,500 minilap kits and 500 vasectomy kits (@ approximately 10 kits each).

4) 13 long-term participant trainees and 12 short-term will complete training; 6 long-term academic programs will begin.

5) Approximately 200,000 voluntary sterilization clients will receive surgical garments to reduce risks of wound infection.

6) Support of operational costs of subsidized commercial marketing of contraceptives will be assumed under the bilateral program after termination of A.I.D./Washington funding. Currently, contraceptives sold through this channel afford about 400,000 couple-years of protection; sales continue to increase.

7) BDG capabilities are further developed in family planning training, research and communication and in providing family planning education through women's activities by use of contracted technical assistance.

8) Project evaluation data have been collected and analysis has begun to measure demographic impact of the family planning program (i.e., progress towards goal achievement), with results expected by the 1980 end-of-project and the beginning of the BDG Second Five Year Plan.

9) Approximately seven operations research studies are in progress on problems relating to service delivery systems.

The planned current year program and funding differ from the FY 1979 CP request in the following respects:

a) Quantities of oral pills and condoms programmed are reduced to adjust stock levels to the effects of the unexpected decline in user offtake during the first three quarters of CY 1977. A sustained upward trend resumed in October 1977.

b) Funds requested in the CP for other contraceptives and equipment have been reduced because the expectation that the

BDG would introduce Depo-Provera into the national program and the hope that the U.S. FDA would approve it for contraceptive use have not yet been realized. In the event that these two actions occur, USAID may request additional funds, well under the level of the CP request. Alternatively, the BDG may request another donor for this support. Provision is made for the possible introduction into the program of Copper-T IUDs and Neo Sampoo Tablets.

c) Participant training funds are increased over the CP request because of higher U.S. training costs and earlier under-estimation of time required to complete long-term academic programs.

d) Support for voluntary sterilization services has been reduced because of heavy other-donor support of some components of these services. Some of U.S. assistance anticipated for FY 1979 was provided for with FY 1978 funds, i.e., sterilization-related medical kits, a reflection of BDG's prompt action to train nearly 500 doctors and open about 450 service centers.

e) Support for the operational costs of the commercial marketing project was not included in the FY 1979 CP. It is included in the program as a contingency in case of any decision to make this a bilateral activity.

f) Project evaluation, in the CP request, is to be funded in FY 1978 in order to have time to prepare for CY 1979 data collection, three years after the Bangladesh Fertility Survey baseline.

The adjustments described above bring the estimated FY 1979 funding level down to \$8.5 million from \$12.6 million in the CP request of that year. Beyond the individual item explanations above, it should be noted that the aggregate assistance available from A.I.D. and other donors taxes the absorptive capacity of the BDG's national family planning program. To be specific, resources available and under discussion from the other two major donors are as follows:

1975-1979:	UNFPA	\$10 million
	IBRD and bilateral donors	40 million
Beyond:	UNFPA and bilateral donors (1980-1985)	50 million *
	IBRD and bilateral donors (1979-1982)	125 million *

FY 1980 program: During the budget year, the following results are expected, principally from FY 1979 inputs:

- 1) Contraceptive supply levels and pipeline will be maintained.
- 2) 300 paramedics based in thana and union MCH/FP clinics will be equipped with IUD insertion kits.
- 3) Additional clinical facilities offering voluntary sterilization services will be equipped with 500 minilap kits and 250 vasectomy kits (@ approximately 10 kits each).
- 4) 9 long-term participant trainees and 6 short-term will complete training; 3 long-term academic programs will begin.
- 5) Approximately 400,000 voluntary sterilization clients will receive surgical garments.
- 6) Contraceptives continue to be available to the public at subsidized prices because of USAID support of operational costs.
- 7) Consultant services are programmed, as agreed with the BDG; subject matter area(s) to be determined.

* Indicative amounts for discussion purposes; subject to change. Actual amounts will depend to large extent on willingness of bilateral donors to participate and the ability of the BDG to plan and implement projects.

8) Evaluation of the demographic impact of the family planning program is completed, yielding fertility, mortality and prevalence rates, as well as the impact of prevalence levels, by method, on fertility in Bangladesh (i.e., a measure of use-effectiveness).

9) Recommendations regarding service delivery problems are available to administrators from completed operations research studies.

The budget year program is basically a continuation and expansion of the current year program, predicated on the assumption of continued increase in the use of reversible and permanent methods of contraception. It takes into account massive inputs of other donors and USAID's estimates of the BDG's preferences for sources of assistance for various components of the program. Participant training funds continue their downward trend, as the backlog of unmet training needs is further reduced and as in-country training capability is developed. Support for the commercial marketing activity is reduced, in anticipation of increasing use of sales proceeds for operational costs. These proceeds in prior years had been used to develop an expanded line of MCH/FP-related products.

Major Outputs: This project will contribute towards achievement of the Mission's goal of increasing the number of family planning acceptors from approximately 10 percent of eligible couples in the base year 1976/77 to approximately 35 percent in 1985/86.

a) Contraceptive supplies are available to program personnel throughout the country at a level of one year's requirement in country with an additional year's supply on order.

	Est. Mid-CY 1980 levels	
	In Country	On Order
Oral pills (million MCs)	23.6	31.4
Condom (000 gross)	959.5	1,181.4

b) Thana and union MCH/FP clinics equipped with IUD insertion kits by 1981.

2,070 distributed at rate of 1 per paramedic on staff (1 in union clinic, 2-4 in thana clinic).

- c) Clinics and doctors supplied with 1,200 vasectomy kits by 1981. 1 per doctor; from 1 to 10 per clinic or mobile team.
- d) Hospitals, clinics and mobile teams equipped with 5,500 minilap kits by 1981. Approximately 550 surgical facilities.
- e) 125 persons trained abroad by CY 1982.
- f) Approximately 1,065,000 sterilization patients supplied with surgical garments for added protection from wound infections.
- g) BDG capabilities increased in areas of family planning training, communication, research, and nonformal education of women through provision of technical assistance.
- h) Between 10 and 15 percent of the demand for oral pills and condoms is being met by the commercial marketing project by 1980.
- i) Project evaluation has given a measure of 1979 fertility, mortality and prevalence of contraceptive use by 1980, for comparison with the benchmark data from the 1975-76 Bangladesh Fertility Survey.

**TABLE IVB
ACTIVITY BUDGET
DATA**

ACTIVITY TITLE Population/Family Planning	DECISION UNIT USAID/Bangladesh	DECISION PACKAGE Minimum	BUDGET YEAR 1980
	INITIAL OBLIGATION FY 1976	FINAL OBLIGATION FY 1980	TOTAL COST 39,606
	DATE PP/REVISION April 1978	DATE LAST PAR Feb. 1978	DATE NEXT PAR Feb. 1979
PROJECT NUMBER 388-0001	APPROPRIATION PN	ESTIMATED U. S. DOLLAR COST (\$ 000)	

ACTIVITY INPUTS	FY: 1978			CY: 1979			BY: 1980				
	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE
TOTAL-	9,385	4,712	9,947		8,500	7,595	10,852		11,800	9,523	13,129
<u>AID-FINANCED Commodities:</u>											
Surgical Apparel	460	115	345	4/79-10/80	1,200	645	900	4/80-10/81	1,766	1,342	1,324
Oral Pills 1/	3,800	2,527	5,073	12/78-3/81	3,696	3,173	5,596	12/79-3/82	5,060	3,748	6,908
Condoms 1/	3,690	1,605	2,768	12/78-9/81	2,035	2,092	2,711	12/79-9/81	3,357	2,726	3,342
Contraceptives	135	-	135	4/79-6/80	485	135	485	4/80-6/81	600	485	600
Medical Kits	684	10	684	4/79-6/80	134	684	134	4/80-6/81	159	134	159
Vehicles	25	25	-	-	-	-	-	-	-	-	-
Contract Services	53	132	347	5/79-9/80	50	229	168	5/80-5/82	200	124	244
Technical Assistance	(26)				(30)				(122)		
Support Costs	(27)				(20)				(78)		
Participant Training	238	273	320	1/79-7/81	200	262	258	1/80-7/82	108	226	140
Other Costs:											
Commercial Marketing	-	-	-	4/79-6/80	700	175	525	4/80-6/81	550	663	412
Project Evaluation	300	25	275	-	-	200	75	-	-	75	-
TOTAL-	19,478				27,283				94,380	3/	
<u>MC AND OTHER DONOR</u>											
DG-Operational Costs	3,200				3,500				3,800		
RD 2/-Construction, IEC, salaries	13,216				21,536				23,008		
NFPA 2/-training, education, salaries	3,062				2,247				6,817		

PERSONNEL WORKYEARS (XX.X)	PERSONNEL INTENSITY			PARTICIPANTS PROGRAMMED		LIFE OF PROJECT
	BEYOND	HIGH	MEDIUM	A=NONCONTRACT	B=CONTRACT	
FUNDING	1978	1979	1980	1978	1979	1980
PROGRAM ACCOUNT	2.3	3.5	1.5	6	3	3
TOTY (ABB)				12	12	6
OPERATING EXPENSES	8.9	8.9	8.9			

AID 1330-8 (3-78)

FOOTNOTES
 1/ Centrally funded.
 2/ From actual and projected expenditures under respective 1st Population Projects.
 3/ Includes phasing in of IBRD and UNFPA 2nd Projects in 1979 and 1980.

TABLE IVB ACTIVITY BUDGET DATA		ACTIVITY TITLE		DECISION UNIT		DECISION PACKAGE		BUDGET YEAR	
Development Services and Training		USAID/Bangladesh		-		-		FY 1980	
PROJECT NUMBER 388-0002		APPROPRIATION FN		FY 1975		FY 1977		TOTAL COST \$1,800,000	
				DATE PP/REVISION 4/77		DATE LAST PAR 4/77		DATE NEXT PAR 5/78	

ACTIVITY INPUTS	CY: 1978				CY: 1979				CY: 1980							
	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (PR-TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (PR-TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (PR-TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	
	ESTIMATED U.S. DOLLAR COST (\$ 000)															
TOTAL-	-	709	196		-	196	-		-	-	-		-	-	-	
Participant Training	-	518	123		-	123	-		-	123	-		-	-	-	
Technical Assistance	-	191	73		-	73	-		-	73	-		-	-	-	
TOTAL-	35				-				-				-			
HC AND OTHER DONOR	35				-				-				-			
BDG (travel costs)	35				-				-				-			
LIFE OF PROJECT																
153																

FUNDING	PERSONNEL WORKYEARS (XX, X)				PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED				FOOTNOTES						
	FISCAL YEAR					FISCAL YEAR										
	1978	1979	1980	19		BEYOND	TYPE A=NONCONTRACT	TYPE B=CONTRACT	1978		1979	1980				
PROGRAM ACCOUNT	2.3	.8	-	-	<input checked="" type="checkbox"/> HIGH			2	-	-						
TOY (ADD- ON)	-	-	-	-	<input type="checkbox"/> MEDIUM			70	-	-						
OPERATING EXPENSES	3.7	1.3	-	-	<input type="checkbox"/> LOW			-	-	-						

Table IV. A.AGRICULTURAL RESEARCH (388-0003)

Purpose: To strengthen the roles of the Agricultural Research Council (ARC) and the Agricultural Research Institute (ARI) in conducting priority research on non-rice crops, small farm systems and vertebrate pest control.

Background: In Bangladesh, the ARC serves as coordinator of all agricultural research activities while the ARI conducts priority research. Both institutions play a significant role in the AID country development strategy of achieving foodgrain self sufficiency by 1985. The growth and expansion of ARC and ARI will provide the farmers in Bangladesh with the opportunity to increase crop production in non-rice crops by providing the necessary technological packages. ARI is now in the process of strengthening its capacity to offer improved varieties of other crops as the result of the BDG's concern to increase farm employment and farm income.

In addition, the BDG has placed new emphasis on reducing the estimated 10% loss in grain production attributed to rodents. To address this problem research on vertebrate pest control was introduced in FY 1978.

Progress To Date: In December, 1977 construction work began on 193 residential quarters and four major buildings of the farm building complex at ARI campus Joydevpur. To date approximately 50 percent of the buildings has been completed.

It is anticipated that the administration building and laboratory building will be completed by June. Laboratory furniture and equipment has been ordered and is scheduled for arrival by the end of June for installation in July.

During March, 1978 two contracts were awarded to local firms for the construction of 62 residential quarters at BARI Regional Station at Ishurdi.

Participant training activities began in December 1976. Seven participants under this project are presently in the U. S. five Ph. D. candidates and two M. Sc. candidates. One of the M. Sc. candidates will receive his degree in June 1978.

Under the ARC-IADS (International Agricultural Development Service) contract, four out of the eight advisors have been selected and are scheduled to arrive by June 1978. In December, the IADS signed a sub-contract with the Mennonite Central Committee to provide three Junior Technicians to the project.

Beneficiaries: Research results produced by the ARI will be disseminated through outreach programs specifically for use by small farmers. The ARI will eventually provide the Ministry of Agriculture with fully adapted seed and technology packages for increasing food production and containing vertebrate pest damage to crops. ARI will be assisted in these endeavors by the Bangladesh Rice Research Institute (BRRI).

FY 1979 Program: In FY 1979 the construction of the ARI building facilities, residential quarters and farm complexes will be completed and equipped. The research activities will be planned and implemented with the assistance of the technical advisors under the IADS contract. Short term participants in agricultural research will have returned to Bangladesh.

In FY 1979 the Vertebrate Pest Division of the ARI will be established and functioning.

FY 1980 Program: During the budget year all construction activities including the laboratory building for the Vertebrate Component at the main ARI station at Joydevpur and the residential quarters at the regional station at Ishurdi will be completed. A total of 15 field days will be held by BARI at its main station and four regional stations. At least 10 term candidates will complete training during the FY 80, two of which are designated for the Vertebrate Division.

Major Outputs: The Mission's medium term program goal is to achieve foodgrain self sufficiency by 1985. The major output of this project will be a functioning agricultural research system for non-rice food crops which will provide improved information and technology to the farmers of Bangladesh in order to increase crop production and obtain self sufficiency in foodgrains.

All Years

ARI laboratory facilities and
farmsite development completed

4 laboratories and
4 farm buildings

ARI research results
published by ARC

ARI staff trained

36

Establishment of Vertebrate
Pest Division

Completion of residential units

248

Procedures established in ARC
to plan research priorities

Farm machinery and
equipment in place at ARI

TABLE IVB ACTIVITY BUDGET DATA		ACTIVITY TITLE Bangladesh Agricultural Research		DECISION UNIT USAID/Bangladesh		DECISION PACKAGE Minimum		BUDGET YEAR FY 1980	
PROJECT NUMBER 388-0003		APPROPRIATION FN		INITIAL OBLIGATION FY 1976		FINAL OBLIGATION FY 1982		TOTAL COST 3,391,800	
				DATE PP/REVISION 9/77		DATE LAST PAR 2/78		DATE NEXT PAR 2/79	

ACTIVITY INPUTS	ESTIMATED U.S. DOLLAR COST (\$ 000)										
	FY 1978					FY 1979					FY 1980
	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE
AID-FINANCED											
TOTAL-	920	1122	961		900	1119	742		200	942	
BARI-BARC Agr. Research											
Technical Assistance	426	443	618	3/79-2/80	470	577	511	3/80-11/80	-	511	-
Local Support	51	51	55	11/79-11/80	47	51	51	12/80-12/81	-	51	-
Commodities	-	168	-	-	-	-	-	-	-	-	-
BARC Contract Research	122	100	122	-	-	72	50	-	-	50	-
Training	117	185	137	10/79-3/81	124	149	112	-	-	112	-
Vertebrate Pest											
Technical Assistance	76	60	16	10/78-9/79	113	129	-	10/79-9/80	100	100	-
Participant Training	6	6	-	" "	38	30	8	" "	27	35	-
Commodities	29	29	-	" "	16	16	-	" "	9	9	-
Other costs	93	80	13	" "	92	95	10	" "	64	74	-
<p>Evaluation - Mission will conduct a joint evaluation with BDG in February 1979. Since the evaluation will be large in scope, Program Support (PDS) funds will be requested for the evaluation.</p>											
HC AND OTHER DONOR											
TOTAL-	2383				2630						

FUNDING	PERSONNEL WORKYEARS (XX, X)					PARTICIPANTS PROGRAMMED					FOOTNOTES			
	FISCAL YEAR					FISCAL YEAR								
	1978	1979	1980	1981	1982	BEYOND	A=NON-CONTRACT	B=CONTRACT	TYPE	TYPE				
PROGRAM ACCOUNT	9	9	7	2	1	-			A	LONG-TERM	7	8	10	
TDY (ADD)	.2	.2	.2	.1	-	-			B	SHORT-TERM	10	8	9	
OPERATING EXPENSES	2.3	2.3	1.7	.7	.7									

Table IV. A.

PRIVATE VOLUNTARY ORGANIZATION CO-FINANCING (388-0010)

Purpose: To engage the expertise of US and Bangladeshi private voluntary organizations (PVOs) in small-scale, mutually funded projects to benefit primarily the rural poor.

Background: This project began in FY 1975 as a pilot effort to support PVOs' development activities which are of mutual interest and within the Mission's development strategy. Experience to date has proven this to be an effective means for channeling resources to the rural poor in such sectors as food production, nutrition, family planning and women's programs.

Progress to Date: A total of nine subgrants have been funded to date. IVS is working in one Thana (county) in twelve villages to establish agriculture, health and family planning, a women's program and cooperative development. In the past year the project has consolidated such efforts and produced various training materials. CARE is continuing with a second grant to strengthen the primary and secondary cooperative structure in six Thanas. Although USAID support ends for this subproject in June 1978, CARE intends to continue the work by diversifying efforts and focusing the program on productive activities for women, especially in endiculture. Save the Children/Community Development Foundation has established village development committees operating in three counties. The committees plan and help carry out productivity and infrastructure projects designed to benefit women, youth and landless families. MAP/HEED, through its second year grant, concentrates services in five model villages. Through village development councils and primary cooperatives the project provides agriculture extension services. Health services include training of paramedics, village health workers, and 70 Government Family Welfare Assistants; operating MCH and general clinics in two Unions; and developing a preventive health care program. Due to unforeseen circumstances outside the project control the Children's Nutrition Research Unit grant was prematurely terminated at the request of the sponsoring agency. Nevertheless, several technical papers were produced on baseline data related to general nutrition and child morbidity.

The YWCA and Association of Baptists successfully completed their projects and as a result are now able to continue efforts on their own.

Approximately three more grants totalling \$350,000 will be made in the present year to MAP, IVS and the Asia Foundation/Faridpur Academy designed to promote integrated rural development, strengthen Government rural development and agriculture extension training institutions, and experiment with commercial community farming. A rural social scheme project supported by the BDG and International Child Welfare Union may also receive a grant for program expansion and test of replicability.

Beneficiaries: All Co-financing projects are directed at improving the life and wellbeing of poor Bangladeshis, especially in rural areas. The subprojects are designed to benefit such diverse target groups as women, malnourished children, and landless farmers. Although each subproject varies in cost per family benefitted, an average estimate is \$21.40 annually.

FY 1979 program: \$400,000 has been requested to continue to support PVO projects in Bangladesh. Projects under review include: a Bangladesh Voluntary Services proposal to establish a training program for volunteers and youth to work in rural areas; Asia Foundation support to Nijera Kori, a local PVO, for training rural women in silk production, nutrition and family planning; and a YMCA youth program in literacy, vocational training and extending employment opportunities.

FY 1980 program: Experience to date has shown the desirability of co-financing as a means for strengthening PVOs' efforts in providing viable alternatives to local development problems. As a result this approach will be continued through a new project proposed for the budget year.

Major outputs: By utilizing the PVOs' abilities to reach the poor this project will contribute directly to all the Mission's goals, namely increased agriculture production, increased number of family planning acceptors and increased rural employment.

	<u>All Years</u>
Number of co-financing projects	18
Number of participating PVOs with co-financing projects	12

**TABLE IVB
ACTIVITY BUDGET
DATA**

ACTIVITY TITLE Private Voluntary Organization Co-Financing		DECISION UNIT USAID/Bangladesh		DECISION PACKAGE Proposed		BUDGET YEAR FY 1980	
PROJECT NUMBER 388-0010		APPROPRIATION DS		INITIAL OBLIGATION FY 1975		FINAL OBLIGATION FY 1979	
				DATE OF REVISION -		DATE LAST PAR 4/11/1977	
						TOTAL COST 2,500,000	
						DATE NEXT PAR 6/1978	

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	FY 1978			CY: 1979			FY: 1980				
	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE
TOTAL-	350	145	252		400	397	255		-	-	-
IVS	85	70	15	12/78-12/79	90	80	25		-	-	25
MAP/HEED	50	45	52	7/79-6/80	45	67	30		-	-	30
Asia Foundation/Faridpur Academy	100	10	90	10/79-12/80	40	50	80		-	-	80
IUCW	85	10	75	10/79-11/80	70	90	55		-	-	55
BVS	-	-	-	11/78-10/79	30	20	10		-	-	10
Asia Foundation/Nijera Kori	-	-	-	3/79-12/80	45	30	15		-	-	15
YMCA	-	-	-	2/79-1/80	50	30	20		-	-	20
Program Consultant	30	10	20	7/79-6/80	30	30	20		-	-	20
TOTAL-	150				200						
HC AND OTHER DONOR	15				20						
Host Country	135				180						
Other Donors											

FUNDING	PERSONNEL WORKYEARS (XX, X)			PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED			FOOTNOTES
	1978	1979	1980		TYPE A=NONCONTRACT B=CONTRACT	TYPE A LONG-TERM	TYPE B SHORT-TERM	
	1978	1979	1980		19	19		
PROGRAM ACCOUNT	0.2	1.0	-	HIGH				
TOTAL (NON- OBLIGATING EXPENSES)	2.5	1.4	0.6	MEDIUM				
				LOW				

Table IV.A.

RURAL IRRIGATION WORKS PROJECT (388-0012)

Purpose: To extend irrigation crop area by assisting labor intensive farm level irrigation construction programs.

Background: The major potential sources of increased crop production in Bangladesh are increased use of high yielding variety technologies and increased winter cropping, both of which are dependent upon irrigation. This project will support development of relatively small (100-200 acres) irrigation sub projects in six districts through the Rural Works Program of the Ministry of Rural Development. This type and scale of irrigation has proven very effective in Bangladesh as a means of increasing crop production and as a source of dry season employment, both important elements in USAID's development strategy. Such irrigation has also received primary emphasis in the Government's (BDG's) 100 Thana Program of intensive infrastructure development. The actual selection and design of irrigation sites is now being undertaken in Rural Irrigation Works Study to be completed prior to project initiation.

Progress to date: All local government councils are now putting forward irrigation proposals to be considered as candidate for selection under the project. During the Rural Irrigation Works Study, the Ministry of Rural Development will work hand-in-hand with the study consultant in developing selection criteria and site design methodology. User group manuals will also be prepared for all types of irrigation systems to be considered.

Beneficiaries: Approximately 54,000 tenants and small farmers will be assisted by construction of the project irrigation systems. These systems will be constructed at a cost per family of approximately \$110. In addition, construction will provide nearly 6 million work days of employment over the five year life of project. Landless laborers will also benefit from additional employment opportunities generated by operation of the irrigation systems.

FY 1979 program: This year the BDG is to establish a Rural Works Directorate and increase the staffing for both central and local administration of the Rural Works Program. Upon completion of site designs in January 1979, construction will commence in one of the six selected districts. The initial obligation of \$2.0 million originally planned for FY 1979 has been increased to \$3.0 million and the final project obligation is now scheduled for FY 1984. In addition the revised total project cost is \$28.0 million. The above changes reflect the Mission's best estimate of increased costs for including appurtenant structures and completion of earth work channels. The outputs have been adjusted to reflect an irrigation system concept rather than mileage of channels.

FY 1980 program:

- 1) Construction of approximately 60 irrigation systems.
- 2) Ministry of Rural Development assumption of greater responsibilities for complete selection, design and evaluation of project systems.
- 3) Initiation of maintenance program for systems constructed in the first year of the project.

Major Outputs: This project will provide the following outputs in relation to the expanded decision package objectives of providing rural employment in the near-term and the necessary infrastructure to sustain foodgrain self-sufficiency over the longer-term.

	<u>All Years</u>
Number of irrigation system	300
Acreage irrigation	36,000
Local user group established	300

TABLE IVB ACTIVITY SUMMARY DATA	ACTIVITY TITLE	DECISION UNIT	DECISION PACKAGE	BUDGET YEAR
	Rural Irrigation Works	USAID/B	Expanded	FY 80
PROJECT NUMBER	APPROPRIATION	INITIAL OBLIGATION	FINAL OBLIGATION	TOTAL COST
388-0012	FN	FY 79	FY 1984	28,000
		DATE PP/FEVISION	DATE LAST PAR	DATE NEXT PAR
		FY 79	-	8/80

ACTIVITY INFOS	CY: 1978		CY: 1979		CY: 1980		PIPE-LINE	EXPEN-DITURE	PIPE-LINE
	OBLI-GATION	EXPEN-DITURE	OBLI-GATION	EXPEN-DITURE	OBLI-GATION	EXPEN-DITURE			
AID AWARDED	-	-	3,000	750	3,000	750	2,250	2,250	3,000
FAR Construction Payments			1,980	-	1,980	-	1,980	1,490	2,990
Technical Assistance			1,000	750	1,000	750	250	750	-
Evaluation			20	-	20	-	20	10	10
TOTAL	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000

FUNDING	FISCAL YEAR			PERSONNEL	PERSONNEL	PERSONNEL	PERSONNEL	PARTICIPANTS PROGRAMMED			FOOTNOTES
	1978	1979	1980					TYPE A: NON-CONTRACT	TYPE B: CONTRACT	TYPE	
PROGRAM	3.0	6.0	3.0	BEYOND	HIGH	BEYOND	BEYOND	19	19	19	
ACCOUNT	3.0	6.0	3.0	8.0	MEDIUM	8.0	16.0				
TOTAL	3.5	3.5	3.5	3.5	LOW	3.5	7.0				

Table IV. A.

FOOD FOR WORK (388-0017)

Purpose: To provide employment for rural landless and under employed people through labor intensive rural earth work projects. The project supports the dollar costs of the technical assistance needed to administer the Food For Work Program (FFW) with PL-480 Title II commodities provided to the project laborers on a reimbursable basis.

Background: Bangladesh, with a total population of approximately 85 million people, is a densely populated, agriculturally oriented, rural country. It is estimated that the rural population, which accounts for 90% of the total population, has a labor force of approximately 22 million workers, with only 13 million gainfully employed in agricultural and non agricultural activities. Thus about 9 million people are "statistically" jobless.

The consequences of this underemployment is poverty and low purchasing power resulting in widespread malnutrition, a reduced capability to work, migration to slums and instability in both the rural and urban areas. To provide relief to this destitute portion of the population the BDG has implemented a food relief program using Title II donated wheat as payment to laborers.

Progress To Date: Through FY 1977 a total of 1,681 dry season FFW projects have been implemented resulting in a reimbursement by CARE of 109,000 MTs of wheat to approximately 1.2 million laborers. In addition CARE reimbursed approximately 206,000 laborers with 17,337 MTs of wheat for completion of 1,591 rainy season projects in FY 1977. In FY 1978 a total of 1,020 dry season projects will be implemented with a reimbursement by CARE of 100,000 MTs of wheat to approximately 1.0 million laborers.

To effectively administer such a large program, the BDG has hired 400 Project Implementation Offices to work with the local populace in implementing FFW projects. The BDG has also sought

to increase the participation of women in FFW projects, and has issued directions calling for this process to be accelerated. The project has also supported several studies which are providing interesting data on rural Bangladesh. One study, recently completed, has provided a socio-economic analysis of FFW laborers. Another study, just underway, will analyze food for work saturation levels and constraints to the program's expansion.

Beneficiaries: The FFW Program will provide direct relief food and employment to approximately 1 million participating laborers who are landless or near landless. Each laborer will work 30 person days over a period of 1 to 6 months for a total of 35.7 million person days. Thus each worker who has six family members will earn 6.15 pounds per day which is equivalent to 2,789 grams of wheat containing 9,203 calories and 343 grams of protein.

FY 1979 Program: It is estimated that approximately 1,200 earth-work projects will be implemented in FY 1979 with a planned Title II reimbursement of 100,000 MTs of wheat. The project will provide employment opportunities for approximately 1 million people. In FY 1978 CARE began a pilot pucca works project and in FY 1979 CARE will provide \$500,000 for an expanded program involving the construction of sluice gates, culverts, and other appurtenant structures for FFW projects. The USAID total obligation for FY 1979 will be \$500,000 to cover CARE's operational costs in administering the FFW program. The USAID funded pucca works component will begin in FY 1980 and the total project cost is now estimated at \$2,821,000.

FY 1980 Program: It is estimated that approximately 1,200 earth-work projects will be implemented utilizing 100,000 MTs of wheat. Approximately 1 million laborers will be provided employment. In addition, a new Pucca Works Component will be implemented in 1980. This Component will provide for the addition of culverts, bridges and sluice gates on completed FFW projects. It is anticipated that the Pucca Works Component will enhance the developmental aspects of the project.

Major Outputs: The Food For Work project, included in the Expanded Decision Package, addresses the Mission's goal of increasing rural employment by providing Title II wheat for labor performed.

	<u>All Years</u> (Cumulative as of end FY-80)
FFW Projects	
Implemented	5,101
Wheat reimbursed (MT)	400,000
Person days of work created (Million)	142,8

TABLE IVB ACTIVITY BUDGET DATA	ACTIVITY TITLE	DECISION UNIT	DECISION PACKAGE	BUDGET YEAR
	Food For Work	USAID/Bangladesh	Expanded	FY 80
	PROJECT NUMBER	DATE PP/REVISION	DATE LAST PAR	DATE NEXT PAR
388-0017	FN	10/2/75	8/77	8/78

ACTIVITY INPUTS	ESTIMATED U. S. DOLLAR COST (\$ 000)										OBLI- GATION	PIPE- LINE	EXPEN- DITURE	PIPE- LINE
	FYs 19 78		CY: 19 79		CY: 19 80		FY: 19 80		FY: 19 80					
	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE				
AID-FINANCED	425	470	124	10/79 3/81	500	520	104	4/81 9/82	1,000	980	124			
TOTAL	288	320	78	"	318	350	46	"	350	350	46			
1. CARE Technicians	107	110	32	"	107	130	9	"	50	50	9			
2. Commodities, office supplies furniture, equipment and vehicle parts.	30	40	14	"	75	40	49	"	50	80	19			
3. Others, CARE Overhead, Impact study, etc.	-	-	-	"	-	-	-	"	550	500	50			
4. Appurtenant Structure														
5. Evaluation (Mission will conduct annual joint evaluation with BDG)														
HC AND OTHER DONOR	5,906				5,933				28,407					
TOTAL	4,240				4,267				23,407					
1. HC \$300,000 to CARE for local costs	-				-				-					
2. Australia, Libya, and WFP- wheat for FFW Program	1,666				1,666				5,000					
3. Canada for appurtenant struc- ture														

FUNDING	PERSONNEL WORKYEARS (XX, X)			PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED		
	FISCAL YEAR				FISCAL YEAR		
	1978	1979	1980		TYPE A	NONCONTRACT	TYPE B
PROGRAM ACCOUNT	11	11	11	<input checked="" type="checkbox"/> HIGH			19
TDY (NON- OPERATING EXPENSES	5.6	5.6	5.6	<input type="checkbox"/> MEDIUM			
				<input type="checkbox"/> LOW			

AID 1330-8 (3-78)

TABLE IVB ACTIVITY BUDGET DATA	ACTIVITY TITLE	DECISION UNIT	DECISION PACKAGE	BUDGET YEAR
	Small Scale Irrigation I	USAID/Bangladesh	FINAL OBLIGATION	TOTAL COST
	PROJECT NUMBER 388-0019	APPROPRIATION FN	DATE PP/REVISION March 17, 1978	DATE NEXT PAR July 1978

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	FY 1978		CY: 1979		FY: 1980		PIPE-LINE	EXPEN-DITURE	OBLI-GATION	PIPE-LINE	EXPEN-DITURE	OBLI-GATION	PIPE-LINE
	OBLI-GATION	EXPEN-DITURE	PIPE-LINE	FUNDING PERIOD (FR-TO)	OBLI-GATION	EXPEN-DITURE							
AID-FINANCED		5,466	8,534										
TOTAL-													
Commodities	-	5,000	5,210	5/78-9/79	-								
Pump Manufacture	-	316	2,024	5/78-9/80	-								
Storage Construction	-	-	-	7/78-9/79	-								
U.S. Consultant	-	150	250	5/78-9/79	-								
HC AND OTHER DONOR	1,170												
TOTAL-													
BDG: Port handling commodities													
International Transport		60											
U.S Consultant Costs		20											
Local Costs		90											
UNICEF:		1000											

PERSONNEL WORKYEARS (XX, X)	FISCAL YEAR			PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED			FOOTNOTES
	1978	1979	1980		TYPE A	TYPE B	TYPE C	
FUNDING	1.0	2.0	1.0	HIGH				
PROGRAM ACCOUNT				MEDIUM				
TDY (ADD)				LOW				
OPERATING EXPENSES	3.2	3.2	1.0					

Table IV.A.

RURAL ELECTRIFICATION PROJECT (388-0021)

Purpose: To extend rural electrification at reasonable rates to selected rural areas to energize pumps for small scale irrigation, develop rural industries and provide power for community service facilities.

Background: The problem of rural unemployment and under-employment is acute in Bangladesh. It was estimated in 1975 that, out of 21.1 million people in the agricultural labor force, 40 percent, or 8.3 million, were unemployed. The majority of all Bangladeshis initially seek work in the agricultural labor force, but people are increasingly unable to find such unemployment. This project will support the Mission's development strategy by increasing employment opportunities and agricultural production, and stimulating agro-processing and related small industries in market town, and by improving the efficiency of rural education, health and family planning facilities. This assistance directly supports the Government of Bangladesh's program to include rural electrification as a major component of its rural development package.

Progress to date: The Rural Electrification Board (REB) has recently been established to assume responsibility for all rural electrification distribution plans and to coordinate the development of all local cooperative groups who will ultimately administer and operate the electrification system. Thirteen cooperative areas have been designated for electrification during this project, and institutional development is now underway for initiation of construction activities and for establishment of sound central government support through the Rural Electrification Board.

Beneficiaries: This project will affect 52 rural thanas or 4,373 square miles. It will provide connections to approximately 265,000 agricultural and small industrial consumers. Cost per connection is estimated at \$190 in AID financing over the life of the project.

FY 1979 program: The REB and project consultant are now preparing training programs to be initiated for REB and local cooperative staffs. The training program will comprise the bulk of first year project activities. In addition, procurement activities, preparation of final construction plans, logistics and storage planning, consumer sign-up, and legal preparation for cooperative institutions are scheduled for this year.

FY 1980 program:

- 1) Initiation of construction in all cooperative areas.
- 2) Legal establishment of all cooperatives and official staffing of such.
- 3) Construction of cooperative facilities in all project areas.
- 4) Establishment of all REB financial guidelines and initiation of lending activities to cooperatives.

Major Outputs: The Rural Electrification Project will provide the following outputs relating to the decision package strategy of rural employment creation and increased agricultural production through irrigation.

	<u>All Years</u>
User groups established	13
REB established/operating	-
REB staff trained (in-country)	150
Distribution lines installed (miles)	4,300

ACTIVITY TITLE		DECISION UNIT		DECISION PACKAGE		BUDGET YEAR	
Rural Electrification		USAID/B		-		FY 80	
PROJECT NUMBER		TOTAL OBLIGATION		FINAL OBLIGATION		TOTAL COST	
388-0021		FY 78		FY 79		\$50,000	
APPROPRIATION		DATE LAST PAR		DATE NEXT PAR			
FN		FY 77		-		5/79	

ESTIMATED U.S. DOLLAR COST (000) 9

ACTIVITY INFUITS	FY 79		FY 80		BY:	
	OBLIGATION	PIPE-LINE	OBLIGATION	PIPE-LINE	FUNDING PERIOD (FR-TO)	19 80
TOTAL	21,000	36,000	13,000	35,000	10/79-9/80	-
Construction Commodities	18,000	32,000	10,100	31,740	10,360	-
Consultant	2,500	900	900	2,000	2,500	-
Consultant Support	500	100	100	250	250	-
Program Loans	-	-	1,880	1,000	880	-
Evaluation	-	-	20	10	10	-
TOTAL	16,700	-	-	-	-	16,700
Commodities	8,200	-	-	-	-	8,200
Program Loans	5,000	-	-	-	-	5,000
Technical Assistance	3,500	-	-	-	-	3,500

FUNDING	PERSONNEL WORKYEARS (XX, X)					PERSONNEL INTENSITY	TYPE A CONTRACT			TYPE B CONTRACT		
	1978	1979	1980	1981	1982		TYPE	LONG-TERM	SHORT-TERM	TYPE	LONG-TERM	SHORT-TERM
PROGRAM ACCOUNT	10.0	15.0	15.0	12.0	12.0	-	<input checked="" type="checkbox"/>					
OPERATING EXPENSES	3.2	5.0	5.0	5.0	5.0							

Table IV. A.

SMALL SCALE IRRIGATION II (388-0023)

Purpose: To provide small farmers with handpumps for irrigation that can be privately owned.

Background: The project supports the common AID/BDG goal of foodgrain self sufficiency in Bangladesh by 1985, in that it will provide small farmers the means of irrigation and thus the opportunity to utilize HYV technology and to grow foodgrain crops during the dry season.

Bangladesh has nearly reached the limits of its land base for growing crops. Intensifying cultivation, therefore, remains the only significant means of increasing agricultural production. Irrigation represents one of the major intensifying components in the mix of resources available to Bangladesh to increase its production. Handpump irrigation is labor intensive and often utilizes some labor from outside the farmer's immediate household. Besides creating employment, handpump irrigation enhances the incomes of small farmers who, otherwise, have no access to irrigation systems.

Project Description: The objective of the project is to sell about 950,000 irrigation handpumps ^{1/} sets of which about half are to be on credit and half for cash. By their simplicity, handpumps provided by the project represent a resource that will be available to small farmers (both in terms of cost and organizational requirements) who currently do not have access to any means of irrigation. Thus, these farmers will be able to grow a crop during the dry season. The Bangladesh Agricultural Development Corporation (BADC) is the BDG implementing agency for the project. BADC's role includes arranging for the import of raw materials, ordering the manufacture of pump sets by the foundries and selling the finished products from strategically located wholesale outlets to private dealers and cooperatives. The Bangladesh Krishi Bank, the Integrated Rural Development Program and the commercial banks will provide credit for at least half of the sales.

Beneficiaries: The target group includes small farmers and sharecroppers who, through access to handpumps, will be able to expand HYV production under irrigation. Only the poorer people who do not

^{1/} For purposes of this project the term handpump is meant to include any type of pump that is relatively inexpensive and labor intensive in its operation.

have access to power pumps will be interested in labor-intensive hand pumping for irrigation. Project cost per family benefited by a handpump is estimated at \$60.00.

FY 1979 Program: During FY 1979 it is projected that there will be no obligation of funds for this project. This is a change from the original 1979 Congressional Presentation when seven million dollars was requested to finance the expansion of handpump production as a follow-on phase II to the Small Scale Irrigation I project. Delays in implementing phase I until FY 1978, however, eliminated the need for phase II funding in FY 1979.

Under the Small Scale Irrigation I project it is estimated that 30,000 and 100,000 pump sets will be sold in FY 1979 and FY 1980 respectively plus an additional 100,000 sets will be manufactured in FY 1980 and ready for sale during the FY 1981 irrigation season.

FY 1980 Program: During FY 1980 bids will be let for the import of raw materials (coke, pig iron, etc.) to manufacture about 210,000 pumpsets. Approximately one-half of the raw materials will arrive late during the fiscal year with the balance arriving six months later in FY 1981.

Major Outputs: This project will support Mission short-range program objectives by contributing, through irrigation, to annual increases in agricultural production, rural employment and rural incomes.

	<u>All Years</u>
Handpump sales	950,000

Table IV.A.

FERTILIZER DISTRIBUTION IMPROVEMENT (388-0024)

Purpose: To increase the use of fertilizer on an equitable basis.

Background: The increased use of fertilizer is essential in attaining foodgrain self-sufficiency by 1985. Moreover, fertilizer is a critical input for HYV technology to which small farmers and sharecroppers frequently do not have access. This project addresses the important constraints on the supply, i.e., assuring adequate fertilizer imports and internal distribution plus lifting restraints on private fertilizer retailers and creation of private fertilizer wholesalers. The one other constraint on the supply side, i.e., increased local production, is addressed by the Ashuganj Project (in which AID is participating) and by a number of other donor efforts at the existing factories.

On the demand side, the primary constraint is inadequate farmer incentives. This constraint will also have to be effectively dealt with if the benefits of removing the supply constraints are to be realized. This project does not directly deal with the demand constraints. However, the Mission's strategy seeks to improve the financial position of sharecroppers and small farmers in general so that they can afford investments in HYV inputs including fertilizer. The strategy includes providing farmers with assured output prices by means of the annual domestic procurement program and providing institutional credit to small farmers. The combination of these efforts will ensure sufficient profit incentives for fertilizer use.

Progress to Date: Agreement in principle has been reached with the BDG on all substantive project issues, e.g., entry of private sector at the wholesale level, pricing, bulk handling facilities and storage requirements.

Beneficiaries: The target group is small farmers and sharecroppers. The project, by making fertilizer abundantly available, will bring fertilizer purchases within the reach of the poorest farmers who otherwise are unable to compete for fertilizer. Project cost per family cultivating one acre of rice is estimated at \$40.

FY 1979 Program: For FY 1979, the objective is a 15 percent increase in fertilizer use. AID will provide about 250,000 tons of imported fertilizer, finance about 75,000 tons of storage capacity and provide several technical inputs to meet this objective.

Explanation for Changes from Original Congressional Presentation

a) The increase in fertilizer imports is required to meet the increasing level of fertilizer use.

b) Bulk Handling and Warehousing Capacity components have been combined under the new heading Storage. All technical assistance is now shown under Systems Improvement.

c) Transportation facilities will not be funded since the World Bank anticipates funding a project to address this problem.

FY 1980 Program: During FY 1980 an additional 15 percent increase in fertilizer use is projected, yielding an increase in foodgrain production of more than three percent. This project contributes to the minimum decision package objective of increasing foodgrain production by 4.9 percent per annum.

Major Outputs: The outputs of the project relate to the decision unit goals as follows. A 15 percent annual increase in fertilizer use is projected through the project period. Assuming this rate of annual increase in use can be sustained through 1985, foodgrain production should increase from 11.8 million tons to 17.0 million tons. This level of production, attributable to fertilizer alone, would represent 93% of the 18.2 million tons necessary for foodgrain self-sufficiency.

All Years

Warehouse Capacity	173,000 MT
Annual Bulk Handling Capacity	500,000 MT
Five Year Fertilizer Sales (Including U.S. and other donor financed imports, as well as domestic production)	5,148,000 MT

TABLE IVB ACTIVITY BUDGET DATA		ACTIVITY TITLE		DECISION UNIT		DECISION PACKAGE		BUDGET YEAR	
Fertilizer Distribution Improvement		USAID/Bangladesh		Minimum		FY 1980		TOTAL COST	
PROJECT NUMBER		APPROPRIATION		DATE OF REVISION		DATE LAST PAR		DATE NEXT PAR	
388-0024		FN		NA		NA		5/79	
ESTIMATED U.S. DOLLAR COST (\$ 000)									
		CY: 1978		CY: 1979		CY: 1980			

ACTIVITY INPUTS	FY 1978		FY 1979		FY 1980		PIPE-LINE	EXPEN-DITURE	PIPE-LINE		
	OBLI-GATION	EXPEN-DITURE	OBLI-GATION	EXPEN-DITURE	OBLI-GATION	EXPEN-DITURE					
TOTAL-	50,000	30,200	19,800	7,79-6/81	50,000	48,400	21,400	7,80-8/82	50,000	64,000	7,400
Systems Improvement	468	93	375	7/79-12/80	464	464	375	7/80-12/81	460	460	375
Training	32	7	25	7/79-12/80	36	36	25	7/80-12/81	40	40	25
Storage Construction	12,500	100	12,400	7/79-6/81	14,000	12,400	14,000	7/80-6/82	0	14,000	0
Fertilizer	37,000	30,000	7,000	7/78-12/80	35,500	35,500	7,000	7/79-12/81	49,500	49,500	7,000
Evaluation (To be done by Mission staff)											

HC AND OTHER DONOR	TOTAL-		PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED		LIFE OF PROJECT
	OBLI-GATION	EXPEN-DITURE		A=NONCONTRACT	B=CONTRACT	
	170,000	200,000				1,115,000
BDG	90,000	120,000				655,000
Other Donors	70,000	80,000				460,000

FUNDING	PERSONNEL WORKYEARS (XX.X)				FISCAL YEAR			
	1978		1979		1980		1981	
	1978	1979	1980	1981	1978	1979	1980	1981
PROGRAM ACCOUNT	8.0	8.0	4.0	3.0	2.0			
NON-OPERATING EXPENSES	7.1	7.4	7.4	3.7	2.8	1.7		

AID 1330-8 (3-78)

TABLE IVB ACTIVITY BUDGET DATA		ACTIVITY TITLE		DECISION UNIT		DECISION PACKAGE		BUDGET YEAR	
Rural Finance Experimental Project		USAID/Bangladesh		INITIAL OBLIGATION FY 1977		FINAL OBLIGATION FY 1977		FY 1980	
PROJECT NUMBER 388-0025		APPROPRIATION FN		DATE PP/REVISION 7/77		DATE LAST PAR		DATE NEXT PAR 3/79	
ESTIMATED U.S. DOLLAR COST (\$ 000)									
		CY: 1978		CY: 1979		CY: 1980			
		PY: 1978		PY: 1979		PY: 1980			

ACTIVITY INPUTS	PY: 1978		CY: 1979		CY: 1980		EXPEN- DITURE	PIPE- LINE	OBLI- GATION	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE
	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	FUNDING PERIOD (FR- TO)	OBLI- GATION	EXPEN- DITURE							
TOTAL-	-	130	6,870	-	2,660	4,210	-	-	-	-	-	3,425	785
1. Loan Capitalization	-	-	4,100	-	1,500	2,600	-	-	-	-	-	2,245	355
2, Technical Assistance (contractor costs)	-	80	2,350	-	950	1,400	-	-	-	-	-	970	430
3. Training	-	-	420	-	210	210	-	-	-	-	-	210	-
4. Commodities	-	50	-	-	-	-	-	-	-	-	-	-	-

HC AND OTHER DONOR	60	146	LIFE OF PROJECT 440
TOTAL-			
Operational Costs for Rural Branches includ- ing start up costs.			

FUNDING	PERSONNEL WORKYEARS (XX, X)			PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED		FOOTNOTES
	1978	1979	1980		A=NONCONTRACT B=CONTRACT	FISCAL YEAR	
PROGRAM ACCOUNT TDY (ADD- OPERATING EXPENSES)	1	1.1	1.2	HIGH MEDIUM LOW	1978	1979	1980
					6	6	-
	1.7	1.7	1.6				

Table IV. A.

TECHNICAL RESOURCES DEVELOPMENT (388-0027)

Purpose: The purpose of this project is to improve the Government of Bangladesh's (BDG) ability to plan, implement and evaluate high priority development activities.

Background: Two major objectives of A.I.D.'s development strategy are to increase foodgrain production by 4.9 percent per annum and to increase rural employment. In order to accomplish these objectives, the BDG must be able to effectively absorb and utilize the donor resources available to it. In turn this requires the ability to analyze development problems, particularly as they relate to target groups, develop programs and projects to address these problems, effectively manage the implementation of the projects and assess their impact. BDG performance in these areas has improved as a result of three prior A.I.D. grants, the Development Services and Training Grant, the Project Studies Grant and the Project Development Grant, as well as the efforts of other donors. There is, however, a continuing need for policy related research, project development, short-term technical assistance and training of program managers. This project will establish those capabilities in key BDG agencies by providing assistance in the aforementioned areas with emphasis focussed on the problems of the rural poor and women.

Progress to date: The initial obligation for Technical Resources Development is scheduled for the fourth quarter of FY 1978. The Mission intends to obligate \$200,000 for Phase III of the Land Occupancy Study and \$750,000 for participant training.

Beneficiaries: Small landholders, sharecroppers, landless laborers and women will be the beneficiaries of an improved government capability to design and implement projects leading to growth with equity and meeting basic human needs. Since the activities to be undertaken under this project will cover a wide spectrum and the ultimate benefits will depend on follow-on activities, it is impossible to determine, with any precision, the number of families which will benefit. Previous projects of this type, however, have resulted in projects benefitting approximately 1,000,000 families.

FY 1979 program: During FY 1979, the Mission anticipates completing Phase III of the Land Occupancy Study. This study provides the basis for planning development activities targetted on the rural poor. Also, a study of the social and economic impact of AID projects in Bangladesh will be initiated during FY 1979 but, in all likelihood, will not be completed until FY 1980. Two studies, one on rural household income and expenditure patterns and one related to nutrition, will likely be initiated in FY 1979. Twenty to twenty-five BDG program managers and key technical personnel in agriculture, rural development and women's development activities will have completed short-term training.

The revised FY 1979 obligation is considerably lower than the FY 1979 Congressional Presentation for three reasons. First, because of the late start of most of the studies under the Project Studies Grant (388-0031), most of these studies will be continuing into FY 1979. It is unlikely that the BDG could absorb additional project studies in FY 1979. Second, the BDG has requested A. I. D. to decrease the level of consultant services originally envisioned and provide additional participant training. Third, the planned sub-activity for disaster preparedness has been shifted to the proposed Flood and Cyclone Warning System (388-0046) project.

FY 1980 program: This activity is part of the expanded decision package and contributes primarily to the expansion of agricultural production and rural development over the long-term, i. e. 1986-2000, but will also focus on the creation of employment opportunities for women in the near term. In FY 1980, the social and economic impact study of A. I. D. projects and the two studies begun in FY 1979 will be completed. An additional 25 BDG personnel will have been trained for program management and technical positions. The Mission anticipates that two micro-research or evaluation studies and two technical consultancies, to be identified, will have been completed.

Major Outputs:

Project Studies	4
Research and Evaluation Studies	8
Key BDG personnel trained	150
Technical/Management Consultancies	5
Training Workshops for women	5

TABLE IVB ACTIVITY BUDGET DATA	ACTIVITY TITLE	DECISION UNIT	DECISION PACKAGE	BUDGET YEAR
	Technical Resources Development	USAID/Bangladesh	Expanded	FY 1980
	PROJECT NUMBER 388-0027	APPROPRIATION FN & EH	INITIAL OBLIGATION FY 1978	TOTAL COST \$ 5,000,000
		DATE PP/REVISION	DATE LAST PAR	DATE NEXT PAR
		-	-	9/79

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	FY 1978			CY: 1979			FY: 1980				
	OBLI-GATION	EXPEN-DITURE	PIPE-LINE	FUNDING PERIOD (FR-TO)	OBLI-GATION	EXPEN-DITURE	PIPE-LINE	FUNDING PERIOD (FR-TO)	OBLI-GATION	EXPEN-DITURE	PIPE-LINE
1. AID-FINANCED Consultants:											
TOTAL-	950	-	950		800	700	1,050		1,100	1,200	950
a. Project Studies	-	-	-	7/79-6/80	200	50	150	7/80-6/81	500	300	350
b. Research and Evaluation	150	-	150	3/79-2/80	200	200	150	3/80-2/81	50	150	50
c. Technical Assistance	-	-	-	7/79-6/80	200	75	125	7/80-6/81	50	125	50
2. Training	750	-	750	7/79-6/80	100	300	550	7/80-12/81	500	550	500
3. Equipment	50	-	50	7/79-6/80	100	75	75	-	-	75	-
4. Project Evaluation (to be performed by Mission staff with possible assistance of AID/W TDY for training component)	-	-	-	-	-	-	-	-	-	-	-
HC AND OTHER DONOR	-	-	-	-	80	-	-	-	500	-	-
TOTAL-	-	-	-	-	80	-	-	-	500	-	-

BDG (part. travel, local support)	PERSONNEL WORKYEARS (XX, X)		PERSONNEL INTENSITY		PARTICIPANTS PROGRAMMED			FOOTNOTES	
	FISCAL YEAR		INTENSITY		FISCAL YEAR				
FUNDING	1978	1979	1980	1981	1982	BEYOND	1978	1979	1980
PROGRAM ACCOUNT TDY (NON-)	1.0	6.0	5.0	5.0	5.0	0	5	10	8
OPERATING EXPENSES	0.6	4.7	4.7	4.7	4.7	4.7	25	50	42

1/ Vehicles for project studies consultants. No other contractor support planned.

TABLE IVB ACTIVITY BUDGET DATA	ACTIVITY TITLE		DECISION UNIT	DECISION PACKAGE	BUDGET YEAR
	Fertilizer Storage		USAID/Bangladesh	-	FY 1980
	PROJECT NUMBER	APPROPRIATION	INITIAL OBLIGATION	FINAL OBLIGATION	TOTAL COST
	388-0030	FN	FY 1976	FY 1976	5,250
			DATE PP/REVISION	DATE LAST PAR	DATE NEXT PAR
			N.A.	-	June 1978

ACTIVITY INPUTS	CY: 1978			CY: 1979			CY: 1980		
	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	OBLI- GATION	EXPEN- DITURE	PIPE- LINE	OBLI- GATION	EXPEN- DITURE	PIPE- LINE
	ESTIMATED U. S. DOLLAR COST (\$ 000)								
<u>AID-FINANCED</u>		488	4,653	-	4,653	-	-	-	-
TOTAL-		100	4,350	-	4,350	-	-	-	-
Warehouse construction		360	303	-	303	-	-	-	-
Consultants		28	-	-	-	-	-	-	-
Vehicles									

HC AND OTHER DONOR	TOTAL-			LIFE OF PROJECT		

FUNDING	PERSONNEL WORKYEARS (XX, X)			PERSONNEL INTENSITY			PARTICIPANTS PROGRAMMED			FOOTNOTES
	FISCAL YEAR			TYPE			TYPE			
	1978	1979	1980	A	B	BEYOND	A	B	BEYOND	
PROGRAM ACCOUNT	2	2								
TDY (NON-OPERATING EXPENSES)	2.0	2.0		<input checked="" type="checkbox"/>	<input type="checkbox"/>		LONG-TERM	SHORT-TERM	LONG-TERM	SHORT-TERM

Table IV.A.

RURAL ROADS PROJECT (388-0032)

Purpose: To construct and improve rural roads which link small farms to markets and to Government and private services in selected project areas.

Background: The Bangladesh Government (BDG) has selected 100 Thanas (counties) for inclusion in an extensive rural works program. This program will use labor intensive methods to create the infrastructure necessary to increase the production and marketing of agricultural commodities. The BDG believes that rural roads are an urgent infrastructure priority since Bangladesh has only 4,200 miles of road. The rural roads being considered are a functional sector of the Rural Works Program implemented by the Ministry of Rural Development. The Rural Roads Project will provide substantial employment and will focus on districts lacking an adequate small farm infrastructure. This infrastructure is considered of priority concern to the BDG and vital to increasing food production. The project will also increase planning, evaluation and maintenance expertise at both the local and central administrative levels.

Progress to date: A Rural Roads Study is now underway in the four districts selected for intensive rural construction during the life of the project. The Study includes an in-depth analysis of institutional, engineering and socio-economic requirements in the four districts and should be concluded in time to initiate road construction during the 1979 dry season.

Beneficiaries: Road sites will be selected on the basis of (1) criteria which favor areas having a high concentration of small producers; and (2) the projected socio-economic impact on the poor population of the area. The 400 miles of road constructed in FY 1979/80 will benefit approximately 400,000 farm household at a cost of \$50 per household in AID financing.

FY 1979 program: Establishment of Rural Works Directorate and increased staffing for central and local Rural Works operations. Construction of 200 miles of feeder roads. The initial obligation of \$5.0 million planned for FY 1978 has been rescheduled in FY 1979 due to a delay in the signing of the contract for the Rural Roads feasibility study. A \$10.0 million obligation is still planned in FY 1979 with a final obligation in FY 1984 for a total life of project cost of \$81.0 million. The increased project costs and output reflect the Mission's intention to comply with the priority attention the BDG is placing on road construction.

FY 1980 program:

- 1) Implementation of rural roads maintenance program.
- 2) Construction of 200 additional miles of roads in priority districts.
- 3) Evaluation of local planning and implementation participation in rural roads construction and of off-farm employment impact.

Major Outputs: The following outputs impact directly on the decision package strategy of increasing rural employment and in providing infrastructure for increased food production.

	<u>All Years</u>
Road Construction* (miles)	1000

* Recommendations as to surface vs. unsurfaced roads to follow completion of Rural Roads Study.

**TABLE IVB
ACTIVITY BUDGET
DATA**

ACTIVITY TITLE	DECISION UNIT	DECISION PACKAGE	BUDGET YEAR
Rural Roads	USAID/Bangladesh	Expanded	FY 80
PROJECT NUMBER 388-0032	INITIAL OBLIGATION FY 79	FINAL OBLIGATION FY 1984	TOTAL COST \$81,000
APPROPRIATION FN	DATE PP/REVISION	DATE LAST PAR	DATE NEXT PAR 8/80

ACTIVITY LINE	FY 1978		FY 1979		FY 1980		TOTAL
	OBLI-GATION	EXPEN-DITURE	OBLI-GATION	EXPEN-DITURE	OBLI-GATION	EXPEN-DITURE	
FAR Construction Payments	-	-	10,000	500	9,500	11,000	14,840
Bridge & Jetty Construction	-	-	8,330	-	8,330	10,000	13,830
Consultant	-	-	500	-	500	-	-
Evaluation	-	-	1,150	500	650	1,000	1,000
	-	-	20	-	20	-	10
Host Country Construction Costs	-	-	10,000	-	-	10,000	-

FUNDING	FISCAL YEAR				PERSONNEL INTENSITY	TYPE	CONTRACT		FISCAL YEAR	FOOTNOTES
	1978	1979	1980	1981			A	B		
PROGRAM ACCOUNTY (NON-)	6.0	4.0	5.0	8.0	HIGH	A	LONG-TERM			
OPERATING EXPENSES	-	4.1	4.1	4.1	MEDIUM	B	LONG-TERM			
	-	-	-	-	LOW		SHORT-TERM			

Table IV.A.

FY 1980 RURAL CREDIT (388-0037)

Purpose: To establish a rural credit system which meets the credit needs of small farmers and other rural producers. The subpurpose for the advance project component to be funded in FY 1980 is to provide credit to landless laborers and marginal farmer societies.

Background: The provision of reasonable cost credit to small farmers, sharecroppers and landless laborers is essential for the achievement of national foodgrain self sufficiency and for equity. Under present conditions, without reasonable cost credit, small rural producers cannot afford the farm investments required to procure and apply HYV technologies. A comprehensive Rural Credit project is tentatively programmed for FY 1981, depending on the results of an on-going FY 1977 Rural Finance Experimental Project (388-0025). The Experimental Project seeks solutions to credit policy, financial and administrative constraints which have thus far prevented rural credit programs from reaching more than 10-15 percent of the rural producers.

In the meantime, a small program to provide credit to landless laborers and marginal farmer societies will be ready for FY 1980. Second year results from a UNFAO landless laborer and marginal farmer credit project have been very favorable, both with respect to repayment and income generation.

Project Description: The main problems of rural credit delivery relate to (a) rural capital mobilization, (b) financial viability of rural credit institutions, (c) credit administration, (d) the need to relate credit delivery to development opportunities.

The Rural Credit project will address these constraints thru (a) higher interest rates on loans, (b) savings mobilization, (c) simplified loan processing procedures and loan collateral requirements, (d) creation of rural bank branches.

For the FY 1980 credit program, credit will be provided to landless laborers and very marginal farmers to finance group activities which increase production and supplement income, e.g. paddy processing, animal raising, rickshaw business, net making, fisheries, etc. Funds will be disbursed by the nationalized commercial banks and/or other government institutions, e.g., the Integrated Rural Development Program and the Cooperative Bank.

Feasibility issues for the landless laborers and marginal farmers credit program are: (1) What are the benefits/costs of the individual societies' activities? (2) What credit terms and interest rates are best? (3) How much credit is needed? (4) How much technical assistance will the societies require?

Beneficiaries: The target group directly benefitted by the landless laborers/marginal farmers credit program is comprised of the very poorest elements of the rural society. Recent surveys indicate that approximately 50 percent of the rural population are landless, or "functionally" landless, i.e., owning less than 1/2 acre of agricultural land. Approximately 45,000 families would be directly benefitted (approximately 20,000 during the first 3 years) at an average AID financed cost of roughly \$23 per family.

FY 1979 Program: NA.

FY 1980 Program: Since project obligation is expected in the fourth quarter of FY 1980, no results will be generated in FY 1980.

Major Outputs: The program objectives of the decision unit are to increase foodgrain self sufficiency, increase employment and provide equitable benefits. The major outputs contribute to these objectives by providing rural credit to roughly 2,800,000 rural poor families to increase their investment in farming and other productive activities which will increase rural employment and productivity. Under the advance \$1 million program in FY 1980, roughly 25,000 marginal farmers and landless laborer families will receive production loans.

<u>Major Outputs</u>	<u>All Years</u>
1. Lending program	
a. No. of loans <u>1/</u>	2,800,000
b. Value of loans <u>1/</u>	\$170,000,000
2. Rural credit program self-financed	x

1/ Defined as new loans to first time borrowers. Does not include the roll over of revolving funds, i.e. does not include relending to a family of funds lent to and recovered from that family the previous season.

TABLE IVB		ACTIVITY BUDGET DATA		ACTIVITY TITLE		DECISION UNIT		DECISION PACKAGE		BUDGET YEAR	
Rural Credit		USAID/Bangladesh		Minimum		FY 1980		FY 1980		FY 1980	
PROJECT NUMBER		APPROPRIATION		INITIAL OBLIGATION		FINAL OBLIGATION		TOTAL COST		DATE NEXT PAR	
388-0037		FN		FY 1980		FY 1984		\$ 111,000		Jan. 1981	
DATE PP/REVISION		DATE LAST PAR		DATE PP/REVISION		DATE LAST PAR		DATE NEXT PAR		DATE NEXT PAR	
July 1980		July 1980		July 1980		July 1980		July 1980		Jan. 1981	

ACTIVITY INPUTS	PY: 19		CY: 19		CY: 19 80		OBLI-GATION	EXPEN-DITURE	PIPE-LINE	OBLI-GATION	EXPEN-DITURE	PIPE-LINE
	OBLI-GATION	EXPEN-DITURE	FUNDING PERIOD (FY-TO)	PIPE-LINE	FUNDING PERIOD (FY-TO)	PIPE-LINE						
1. Loan Capitalization												
2. Technical Assistance (Contractor support cost)												
1. Bank branch staffing												
2. Loan capitalization												

FUNDING	PERSONNEL WORKYEARS (XX, X)				PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED				FOOTNOTES
	FISCAL YEAR					FISCAL YEAR				
	1980	1981	1982	1983	1984	BEYOND	TYPE A: NONCONTRACT		TYPE B: CONTRACT	
							LONG-TERM	SHORT-TERM	LONG-TERM	SHORT-TERM
PROGRAM ACCOUNT TOY (ADD -)	1	2	2	2	2	2			2	
OPERATING EXPENSES			1.4	1.4	1.4	1.4			20	

Table IV. A.

FAMILY WELFARE CENTRES (388-0038)

Purpose: The purpose of the Family Welfare Centres project is to bring health services within reach of rural people not now having access to such services due largely to circumstances of residence, poverty and sex. These are the rural people who comprise approximately 90% of the population of Bangladesh.

Background: The Bangladesh Government and AID's foremost development objective is to achieve food self-sufficiency. This assumes sustaining a balance between food resources and population. The linkages between population size, family planning programs and health are clear. The Bangladesh government has organized its Ministry of Health and Population so as to recognize these important linkages, and it places Maternal Child Health responsibilities with its Population Division. To reach the 90% of the population at the Union (township) and village levels, a minimal infrastructure is being built. The Government's program, covering approximately eight years, provides for more than 4000 new Union sub-centres (Family Welfare Centres - day care poly-clinics). The paramedical health and family planning workers in these sub-centres will provide comprehensive services at the clinics, through outreach programs from the clinics, and through linkages with village health volunteers who receive training, commodities and nominal supervision from the personnel in the sub-centres.

It is to this national program that AID will be contributing. The other donors are the World Bank (IBRD/IDA consortium including Australia, Canada, Federal Republic of Germany, Norway, Sweden, and the United Kingdom), and the Netherlands. The Bank's program will be the largest, providing assistance for approximately one thousand centres. AID's planning is for up to five hundred centres. The Netherlands will assist with approximately one hundred centres as well as with other rural facilities of the Health Ministry.

Progress to date: Project planning began in late FY 77 and continued through FY 1978. In this period, AID, with other donors, has, or will have, completed:

- a) Designs and specifications for the Union FWC centre and adjacent living quarters.
- b) Agreements with the Bangladesh Government on the scope of each donor's project and on shares and details of project costs.

AID will have completed all negotiations with the Bangladesh Government which lead to the Project Agreement, expected in the first quarter of FY 1979. The Mission's Project Paper will have been completed and cleared through AID/Washington.

Beneficiaries: The target group is all the rural people. In the joint AID/Bangladesh project, this is a total of approximately 1.5 million families in 500 Unions. Over a seven year period, extended as may be necessary to complete the work, the Government of Bangladesh intends to make minimal services available, through Union centres, to all its people. On an average, 3,000 families* living in 15 villages within 5 Wards will be the direct beneficiaries of each operational Union health centre. The cost of each Union centre (construction, land, etc.) is approximately \$30,000. Necessary, non-expendable furnishings and equipment costs are \$6,700 per centre. The annual recurring expenditures (staff, supplies, maintenance) are estimated to be \$3,740 per centre. On the assumption that each centre may serve 3000 families, then the initial cost is \$12.24 per family and the annual recurring cost would be \$1.25 per family.

FY 1979 program: In FY 1979 all necessary project documentation will be completed between AID and the Bangladesh Government. Project Implementation will begin in the first quarter, and under construction schedules as planned, approximately fifty new Union FWCs will be completed in FY 1979. Furnishings,

* BDG estimates average family size = 6 people

equipment, supplies and staff will be in place. 50 Medical Assistants (health paramedics), 50 Family Welfare Visitors (MCH/FP paramedics), and 300 health and MCH/FP field workers will complete training or retraining. Basic health and FP services will be available for the approximately 3,000 families living near each centre. (Total population in the new services area by end of FY 1979 should be approximately 170,000). Using the Fixed Amount Reimbursement (FAR) procedures for transferring funds from AID to the Bangladesh Government, we would expect to expend about \$1 million during FY 1979.

Parallel with this joint AID/Bangladesh project are the similar projects of other donors - the Netherlands and IBRD/IDA consortium. Through the combined programs, a total of 245 new Union FWCs will be completed and will be providing services to 935,000 families by the end of FY 1979.

FY 1980 program: In FY 1980, an additional 90 new Union Centres will be constructed and opened to the public for services under the AID/BDG project. Services will be available for an additional 270,000 families living in these Unions. Through the FAR procedure, payment to the Bangladesh government of the AID agreed share of costs will be processed for not fewer than 80 of these centres.

Major Outputs: This project contributes to the Mission's major objective of increasing the number of family planning acceptors from approximately 10 percent of eligible couples in the base year 1976/77 to approximately 35 percent in 1985/86, by significantly increasing the availability of health and family planning services to rural families.

	<u>Cumulative Outputs</u>
Fully staffed and functioning union family welfare centres	500
Families served by union centres	1.5 million

TABLE IVB ACTIVITY BUDGET DATA		ACTIVITY TITLE		DECISION UNIT		DECISION PACKAGE		BUDGET YEAR	
FAMILY WELFARE CENTRES		USAID/B'desh		Minimum		FY 80		TOTAL COST 14.5 million	
PROJECT NUMBER 388-0038		APPROPRIATION HE		DATE PP/REVISION FY 78		DATE LAST PAR NA		DATE NEXT PAR 1/80	

ACTIVITY INPUTS	FY1 1978		CY: 1979		BY: 1980		PIPE-LINE	EXPEN-DITURE	OBLI-GATION	PIPE-LINE	EXPEN-DITURE	OBLI-GATION	PIPE-LINE	EXPEN-DITURE	OBLI-GATION
	OBLI-GATION	EXPEN-DITURE	FUNDING PERIOD (FR-TO)	PIPE-LINE	EXPEN-DITURE	OBLI-GATION									
TOTAL:	0	0		0	2,500	1,490	1,010		3,000		2,790	1,220			
Construction			10/78-3/80	1,040	1,040	1,010		2,550	2,340		1,220				
Engineering Contract			10/78-3/80	450	450	0		450	450		0				
Consultant Services			10/78-3/80	390	390	0		390	390		0				
Contractor Support			10/78-3/80	60	60	0		60	60		0				
TOTAL:	1,245	470		200	669	1,245		12,349							

PERSONNEL WORKYEARS (XX, X)	PERSONNEL INTENSITY			PARTICIPANTS PROGRAMMED		
	TYPE	TYPE	TYPE	A=NONCONTRACT	B=CONTRACT	FISCAL YEAR
1978	5	5	5	19	19	19
1979	5	5	5			
1980	5	5	5			
BEYOND 1982	8	8	8			
PROGRAM ACCOUNT	0	5	5			
TOTY/ADD	-	-	-			
OPERATING EXPENSES	2.0	7.2	7.2			
	7.2	7.2	7.2			
	7.2	7.2	7.2			
	8.0	8.0	8.0			

FDG (Land, salaries, supplies)
 BRD/IDA (training, salaries)
 UNICEF (Equipment, training)
 UNFPA (Equipment, salaries)
 Netherlands (training school for MAS)

AI: 1330-5 (9-78)

Table IV. A.

INTEGRATED LAND AND WATER USE (388-0040)

Purpose: To introduce in one hydrologic region of Bangladesh the optimum combination of water use, agricultural inputs and cultivation practices and designs to promote efficient irrigation for small scale farming.

Background: During 1978/79, AID will finance an Integrated Land and Water Use Study to select one hydrologic unit (approximately 300 square miles) in Bangladesh ideally suited to irrigation development for the benefit of small farmers. Recommendations will be provided for a general plan to coordinate all the necessary inputs relevant to irrigation, these inputs possibly including irrigation, drainage and flood control structures, extension services, land consolidation and changes in crops and cropping patterns in the selected hydrologic area. In relation to USAID's development strategy, this effort should be a major step toward a replicable model for nationwide equitable agricultural growth. This project is also in keeping with the Government of Bangladesh's stated shift in priorities from large scale flood control and irrigation projects towards more economical, medium and small scale irrigation systems.

Project Description: This five year project will begin with efforts to recondition and provide technical assistance for the improvement of major existing irrigation facilities in the selected Project Area. At the same time work will commence on construction of new irrigation, drainage and flood control facilities as may be recommended, and on development of water extension services necessary for adoption of new crops, cropping patterns, on-farm water use, land changes, or other actions as may be recommended in the Study. It is expected that there will be many individual irrigation systems required within the Project Area, so it is intended that the Project should progress as quickly as possible to the important technical assistance and management components for systems which can be completed early in the Project, rather than awaiting for termination of a large construction phase.

Beneficiaries: Approximately 100,000 small farm families will benefit from addition of second and third annual crops as a result of land brought under irrigation in the project area. These families will also be able to obtain increased yields due to the expansion of irrigation and crop technology. AID financed cost per family for this project will be approximately \$375.

FY 1979 program: The proposed \$500 thousand obligation requested in the FY 1979 CP has been shifted to FY 1980, when the initial technical assistance for the project will now begin. This change was brought about by delays in contracting for the Integrated Land and Water Use Study.

FY 1980 program:

- 1) Initiation of irrigation and related input sub projects throughout the targeted hydrologic area.
- 2) Initial assistance to water use extension activities.

Major Outputs: Integrated land and water use systems in the project area will contribute to the increased agricultural production goal of the decision package unit through the following outputs:

	<u>All Years</u>
Acres irrigated or with changed crop or crop patterns	100,000

**TABLE IVB
ACTIVITY BUDGET
DATA**

ACTIVITY TITLE
Integrated Land and Water Use

DECISION UNIT
USAID/B

DECISION PACKAGE
Proposed

BUDGET YEAR
FY 80

PROJECT NUMBER
388-0040

APPROPRIATION
FN

FINAL OBLIGATION
FY 1982

TOTAL COST
\$40,000

DATE OF REVISION
-

DATE LAST PAR
-

DATE NEXT PAR
10/81

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	FY: 1978			FY: 1979			FY: 1980				
	OBLI-GATION	EXPEN-DITURE	PIPE-LINE	FUNDING PERIOD (FR-TO)	OBLI-GATION	EXPEN-DITURE	PIPE-LINE	FUNDING PERIOD (FR-TO)	OBLI-GATION	EXPEN-DITURE	PIPE-LINE
Irrigation Inputs*	-	-	-	-	-	-	-	10/79-9/80	14,000	2,500	11,500
Consultant	-	-	-	-	-	-	-	"	12,450	2,000	10,450
Evaluation	-	-	-	-	-	-	-	"	1,500	500	1,000
TOTAL	-	-	-	-	-	-	-	"	50	-	50
Host Country	-	-	-	-	-	-	-	-	20,000	-	-
Irrigation Inputs	-	-	-	-	-	-	-	-	20,000	-	-

PERSONNEL WORKYEARS (XX, X)

FUNDING	FISCAL YEAR				
	1978	1979	1980	1981	1982
PROGRAM ACCOUNT	8.0	10.0	7.0	7.0	7.0
OPERATING EXPENSES	-	-	-	-	-
TOTAL	8.0	10.0	7.0	7.0	7.0

PERSONNEL INTENSITY

TYPE	CONTRACT	LONG-TERM	SHORT-TERM
A	-	-	-
B	-	-	-

PERSONNEL BEYOND

TYPE	CONTRACT	LONG-TERM	SHORT-TERM
A	-	-	-
B	-	-	-

PERSONNEL WORKYEARS (XX, X)

FISCAL YEAR	1978	1979	1980	1981	1982
PROGRAM ACCOUNT	8.0	10.0	7.0	7.0	7.0
OPERATING EXPENSES	-	-	-	-	-
TOTAL	8.0	10.0	7.0	7.0	7.0

PERSONNEL INTENSITY

TYPE	CONTRACT	LONG-TERM	SHORT-TERM
A	-	-	-
B	-	-	-

PERSONNEL BEYOND

TYPE	CONTRACT	LONG-TERM	SHORT-TERM
A	-	-	-
B	-	-	-

FOOTNOTES
*Activity inputs to be defined upon completion of study, 10/79!

Table IV. A.

RURAL INDUSTRIES (388-0042)

Purpose: Increased non-farm rural employment opportunities in Bangladesh through the support of selected rural industries.

Background: The project conforms to the AID country development strategy in three ways: First, the project will promote off farm employment for the surplus agricultural labor force. Second, the output of the supported rural industries will provide increased wage goods incentives to agricultural producers, and third, a portion of the project will be aimed specifically at rural industries which supply production inputs to small farmers, (i. e., farm tools). Currently, the BDG is conducting a 20-month comprehensive study of rural industries to determine the nature and magnitude of the constraints to rural industry expansion. This study, which is financed by AID will identify the specific industries to be promoted by the project and type and mix of inputs necessary within the funding limits of the project.

Project Description: While each industrial trade in Bangladesh is faced with unique problems, preliminary study has identified problems which are common to all. These common problems are limited access to credit, undependable supply of specialized raw material inputs (e. g., good thread and dye for the textile industry) and a low level of activity in the development and dissemination of new product ideas and production techniques. To assist in meeting these problems, the project will support the Ministry of Industries and the Bangladesh Bank in their programs of rural industrial promotion by supporting the development of new product design centers and the expansion of credit. In addition, the project will finance the import of selected non-available inputs to industries which have an export potential.

Beneficiaries: The project is expected to provide 400,000 families with additional employment opportunities in the rural area at an average wage rate of \$200 per family. The cost of the project will be approximately \$275/family.

FY 1979 Program: N. A.

FY 1980 Program: The program in 1980 will finance the development of three New Product Development Centers and initiate a production and intermediate credit program for those trades served by the centers. The project will finance consultants who will conduct investigations into marketing and industrial promotion policy, six one-year training programs for Ministry of Industries and Bangladesh Bank staff and 25 short term training/visitation courses to neighboring countries which are conducting rural industries promotion programs. In addition, selected inputs will be financed during the first year of the project.

Major Outputs: The major outputs in the budget year relate specifically to the mission's objective of increasing rural employment. The long term outputs continue this emphasis and add the objective of increasing rural production of wage goods and equipment for the agriculture sector.

	<u>All Years</u>
New Product Development Centers	18
New employment in rural areas	800,000 jobs
Participants trained:	
long term	25
short term	100

TABLE IVB ACTIVITY BUDGET DATA		ACTIVITY TITLE Rural Industries		DECISION UNIT USAID/B		DECISION PACKAGE Proposed		BUDGET YEAR 1980	
PROJECT NUMBER 388-0042		APPROPRIATION FN		INITIAL OBLIGATION 1980		FINAL OBLIGATION 1984		TOTAL COST 120,000	
DATE PP/REVISION May 1980		DATE PP/REVISION May 1980		DATE LAST PAR		DATE LAST PAR		DATE NEXT PAR FY 81	

ESTIMATED U. S. DOLLAR COST (\$ 000)										
ACTIVITY INPUTS	PY 1978		CY: 1979		CY: 1980		PIPE-LINE	EXPEN-DITURE	OBLI-GATION	LIFE OF PROJECT
	OBLI-GATION	EXPEN-DITURE	FUNDING PERIOD (FR-TO)	PIPE-LINE	EXPEN-DITURE	FUNDING PERIOD (FR-TO)				
TOTAL-										
AID-FINANCED										
New Product Development Centers										
Credit										
Imports										
Consultants										
Participants										
Evaluation										
HC AND OTHER DONOR Host Country										30,000

FUNDING	PERSONNEL WORKYEARS (XX, X)				PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED		FOOTNOTES
	FISCAL YEAR					TYPE		
	19	1980	1981	1982		A=NONCONTRACT	B=CONTRACT	
PROGRAM ACCOUNT								
TOT (NON-)								
OPERATING EXPENSES								

Table IV. A.

CROP RESEARCH PILOT OUTREACH (388-0043)

Purpose: To deliver agricultural research results to small farmers and sharecroppers.

Background: In order to attain foodgrain self-sufficiency by 1985, HYV technology must be delivered effectively to farmers. Equity considerations dictate that special efforts be made to reach small farmers and sharecroppers directly. Under the Agricultural Research project (388-0003), AID has financed the development of the Agricultural Research Institute's (ARI) main campus at Joydevpur and a research sub-station at Ishurdi. ARI's mandate is to conduct research and to develop non-rice food crops and cropping systems. Normally, research results emanating from ARI would be provided to agricultural extension service for further dissemination to the farmers. In the past, however, new technologies have been delivered first to the large farmer and only reached the small farmer later. This project will test whether research results can be effectively delivered directly to small farmers by having research and extension personnel work directly with them and by conducting demonstration trials in small farmer fields.

Project Description: Using the Ishurdi research sub-station as a base, production agronomists will establish working relationships with the agricultural extension workers in Rajshahi and Pabna Districts. Small farmers will be selected to work directly with the research and extension personnel. From among the plots of the small farmers chosen, some will be selected for trial demonstrations. In this manner, crops and cropping systems already proven feasible at ARI's own facilities will be demonstrated on small farmer plots. In these demonstration trials, emphasis will be given to crops of higher nutritional value.

To direct activities within the pilot area, a Technical Advisory Committee will be established under the Chairmanship of the Deputy Director for Agriculture (Extension Management) in Rajshahi. The Committee will consist of key crop research and extension personnel assigned within the area. The Committee will develop an annual plan for an adaptive research outreach program for the project area.

The Committee will direct the program to the small farmer. As the small farmer begins to adopt the use of higher yielding varieties and improved practices, he will begin to put his small holding entirely into intensified production and substantially increase his production. Once this is accomplished, then the role of the production agronomist will include assisting the farmer with technical advice through the thana and village extension workers to prevent crop losses.

At the end of the Project there will be a corps of adequately trained and supported technical cadre who will be able to provide the technical expertise to the village based extension workers and farmers.

Beneficiaries: The direct beneficiaries will be the small owner and cultivator of land and those that are employed as a result of technologies that increase labor requirements by increased crop production. Technical and economic analysis of research results will lead to eventual development of practices and input packages economically viable to benefit the small farmer.

FY 1979 program: Not applicable.

FY 1980 program: During FY 1980 a contract will be signed which will provide for a 4-5 man team of expatriate personnel to work at the ARI Research Station located at Ishurdi in Pabna District. The advisors will assist the Ministry of Agriculture through the ARI and the Directorate of Agriculture (Extension Management) in developing an effective research/outreach program.

In FY 1980 construction will begin to adequately develop the Research Station to include buildings, fencing, an irrigation system, farm site electrification and land leveling and shaping. Machinery equipment and supplies will also be provided to the Station.

Funds will also be used to support Production Agronomists of the Extension Directorate in their field work. Short term training will also be included for the research and support staff located at the Station.

By the end of the FY 80 it is anticipated that a solid foundation will have been established to begin an adaptive research/outreach program in farmers' fields.

Major Outputs: Within the Pilot Project area (Pabna-Rajshahi) an outreach program for adaptive agricultural research which is capable of disseminating research information to small farmers will be in place by the end of 1983. The designated project area will be fully covered by a large number of field trials on a continuing basis by 1983. By the end of the project the system of combining research and outreach as an integrated system within the Ministry of Agriculture will be in place for replication in other areas of Bangladesh. A well established and supported outreach program will assist farmers in increasing crop production with the ultimate goal of foodgrain self sufficiency.

	<u>All Years</u>
Field Trials	100
Training	15
Field Days	12
Additional acres under production in pilot area	20,000

Table IV.A.

NATIONAL WOMEN'S DEVELOPMENT ACADEMY II (388-0044)

Purpose: The purpose of this project is to enable the National Women's Development Academy (NWDA) to continue the training of personnel and the collection and dissemination of information needed for a rural outreach network, and to provide development grants to Union Women's Development Centers to enable them to carry out their rural programs.

Background: Two major objectives of AID's development programs are to increase rural employment and lower the rate of population growth. Given the correlation between increased education of women and lower fertility, a technical education project for rural women addresses both these objectives. In FY 1977 the Mission provided funding for the National Women's Development Academy, a new educational institution established primarily to develop leadership and technical skills among rural women so that they would be able to return to their villages and organize viable economic activities. The Academy recruits trainees from selected Unions with assistance from local community leaders and the local branches of the National Women's Organization. When the present project terminates at the end of FY 1979, it is expected that the Academy will be fully operational, offering a wide range of community development and technical courses. There will then be a need to ensure that this training reaches the ultimate beneficiaries -- the illiterate, unskilled rural women. Thus, this project will be primarily concerned with developing outreach programs at the union levels, working with women already trained at the Academy to help them plan and carry out meaningful programs for women in their areas. This project will also continue to pay stipends for some trainees at the Academy and provide some of the Academy's recurring expenses. The BDG, however, will assume an increasing amount of the recurring expenses in an effort to contribute to their own goal of improving the status of Bangladeshi women.

Project Description: Very few rural Bangladeshi women receive formal education or the direct benefits thereof. Because tradition dictates that women remain secluded, village women have few opportunities for exposure to new skills, ideas, procedures, and practices for improving traditional home-based skills or for training in innovative activities. The Bangladesh Government is responding to these problems and special needs of women through its support of the National Women's Development Academy (NWDA) and the Rural Outreach Project (ROP) of the Bangladesh Jatiyo Mahila Sangstha (National Women's Organization - NWO).

In the second (proposed) National Women's Development Academy project, USAID has been requested to provide some of the same inputs to the NWDA but more importantly, to directly fund some of the ROP activities through development grants to the Union Women's Development Centers. It is projected that these grants will lead to eventual self-sufficiency in Union Center activities. The grants may be utilized for a variety of purposes such as the purchase of equipment and/or raw materials for training and production at the Center; loans for the establishment of village women's cooperatives; revolving funds for the purchase of women's products which will be marketed in bulk by the Center, etc. Major issues to be addressed during project development will depend on progress and evaluation of the first NWDA project, including such matters as the response of rural women and their ability to absorb training and to participate in the village and union-based activities of the ROP.

Beneficiaries: Poor and rural women and their families will be beneficiaries of continued training at the NWDA, Union Women's Centers and villages. It is estimated that approximately 400,000 families will be directly reached by this project through the direct training of one of their female family members. This means a total project cost of \$4.00 per family directly benefitted.

FY 1980 program: This project, as part of the proposed decision package, will contribute directly to the improved status of women in Bangladesh. This will occur through the training of about 700 women at the NWDA, about 40,000 women in their own villages and in 72 Union Women's Development Centers, the provision of about 15 person months of participant training outside Bangladesh, and through the role models all these trainees will present to other Bangladeshi women in the areas in which they are working and living. The project will contribute to increased rural employment and income through the training and support of rural women in income-generating activities. The project will directly increase the number of family planning acceptors among all levels of trainees by the inclusion of a family planning curriculum in the training activities at the NWDA, union and village level programs and by the establishment of a collaborative working arrangement between union and village level family planning and ROP workers.

Major Outputs: The major outputs which will contribute to increased rural employment of women and also to increased family planning acceptance are as follows:

- | | | |
|----|--|---------|
| 1) | Total trainees over life of project | 400,000 |
| | a. NWDA Trainees -- | |
| | Village Field Workers | 1,500 |
| | Trade instructors | 2,000 |
| | b. Union Center trainees -- | |
| | Trade skills | 63,000 |
| | Adult literacy | 42,000 |
| 2) | c. Village trainees | 291,500 |
| 2) | Development grants provided to a total of 200 Union Women's Development Centers | |
| 3) | Twenty key project personnel trained in short-term specialized training programs | |
| 4) | Four Technical/Management Consultancies | |

**TABLE IVB
ACTIVITY BUDGET
DATA**

ACTIVITY TITLE National Women's Development Academy - II	DECISION UNIT USAID/Bangladesh	DECISION PACKAGE Proposed	BUDGET YEAR FY 80
PROJECT NUMBER 388-0044	APPROPRIATION EH	INITIAL OBLIGATION FY 80	TOTAL COST \$ 1,600,000
		DATE PP/REVISION FY79	DATE NEXT PAR 10/80
		DATE LAST PAR NA	

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	CY: 1978		CY: 1979		CY: 1980				
	OBLI- GATION	EXPEN- DITURE	FUNDING PERIOD (FR-TO)	OBLI- GATION	EXPEN- DITURE	FUNDING PERIOD (FR-TO)	OBLI- GATION	EXPEN- DITURE	PIPE- LINE
Technical assistance									
Participants									
Recurring Costs									
(Union Center Grants)									
(NWDA trainees Stipends)									
(Teaching aids & materials)									
Research & Evaluation									
Contingencies									
TOTAL:									

* BDG & OTHER DONORS (NWDA - operating expenses and staff salaries; Union Women's Centers - establishment and support costs.)	TOTAL		LIFE OF PROJECT
	OBLI- GATION	EXPEN- DITURE	
			\$ 8,500.0
			1,100.

PERSONNEL INTENSITY	PERSONNEL WORKYEARS (XX, X)				PARTICIPANTS PROGRAMMED				FOOTNOTES
	FISCAL YEAR				FISCAL YEAR				
	1978	1979	1980	1981	1980	1981	1982	1983	
FUNDING									* Life of project and FY80 obligation represents total required. BDG will probably request other donor support for certain activities, but amounts are not known at present.
PERSONNEL									
TYPE A									
TYPE B									
SHORT-TERM									

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Table IV. A.

PRIVATE VOLUNTARY ORGANIZATION CO-FINANCING (388-0045)

Purpose: To engage the expertise of US and Bangladeshi private voluntary organizations (PVOs) in small-scale, mutually funded projects to benefit primarily the rural poor.

Background: This project, designed to continue the Agency's policy of channeling resources through the private sector, will build on the experience of a previous similar project. Co-financing is an effective and useful means whereby USAID can respond and provide support to private initiatives in a manner suitable to and flexible with individual organizational capabilities. The criteria applied for subproject approval will continue to be the Mission's DAP and the need to find ways of further strengthening BDG programs in the same priority areas.

Project Description: Although the purpose of this project remains the same as its predecessor the emphasis will be changed somewhat to permit greater support for indigenous private efforts, especially those oriented at self-sufficiency for the rural poor. The problem to be addressed is the virtual absence of effective social services and income opportunities at the village level. It is becoming increasingly apparent that public means will not be sufficient to reach this level and in particular the poor of these communities. BDG efforts therefore have begun to stress and encourage community self-help and self-sufficiency actions and to take up whenever possible the responsibility of village development. Of the different approaches being tried throughout the country, the PVO activities provide some of the most imaginative, low cost and feasible solutions. The question remains how to replicate means proven effective in one or several villages on a wider scale while still preserving community autonomy and self-sufficiency.

This project will attempt to find solutions to this complex problem by identifying PVOs engaged in small, experimental efforts and assisting them by way of small grants to try different methodologies to expand those program aspects which foster community action, employment, food self-sufficiency, etc.

Another thrust of the project will be to explore ways and develop means to strengthen PVO institutional capabilities, interchange and coordination. Several service agencies exist or are being established to provide services, backstopping, information, and program review to the estimated 139 registered PVOs in Bangladesh. BDG efforts also are beginning to involve private institutions in the national planning and implementation process. This question will need substantial study in order that assistance may improve the institutional capacities of this very heterogenous group.

Among the major issues which will need to be resolved are how can the poorest villagers be guaranteed opportunities in community decision-making, what mechanisms need to be created within villages to allow future disadvantaged groups access to benefits resulting from community action, how can skills be best transferred to villagers while avoiding the formation of dependencies - economic, organizational, technological - on outside assistance and at what operational scale can community resources be optimized to help the rural poor. These issues will require not only the further application of proven approaches in new rural areas but also action research to identify additional ways and means.

In this manner it is assumed the private sector can best make a contribution to solving rural problems in Bangladesh.

Beneficiaries: As in the previous project co-financing funds will be directed at improving the life and wellbeing of the poor in Bangladesh. The largest group within the poor majority will continue to be women, children, youth and landless farmers. As resources will be channeled more through indigenous PVOs the costs per family benefitted are anticipated to be somewhat lower than the \$21.40 annual average of the previous project.

FY 1980 Program: An initial amount of \$400,000 is requested to begin this new activity to assist PVO projects in Bangladesh. Given the large number of PVOs in Bangladesh and the frequent turn over of PVO personnel, particularly expatriates, it is impossible to forecast specific project activities at this time. At present four to five subprojects are expected to be funded under co-financing. The total life of project will be \$2.1 million extended over five years.

Major Outputs: By utilizing the PVOs' abilities to reach the poor this project will contribute directly to all the Mission goals, namely increased agriculture production, increased number of family planning acceptors and increased rural employment.

	<u>All Years</u>
Number of co-financing projects	15
Number of participating PVOs with co-financing projects	10

TABLE IVB ACTIVITY BUDGET DATA		ACTIVITY TITLE		DECISION UNIT		DECISION PACKAGE		BUDGET YEAR	
Private Voluntary Organization Co-Financing		USAID/Bangladesh		Proposed		FY 1980		FY 1980	
PROJECT NUMBER 388-0045		APPROPRIATION DS		INITIAL OBLIGATION FY 1980		FINAL OBLIGATION FY 1984		TOTAL COST 2,100,000	
				DATE PP/REVISION FY 1979		DATE LAST PAR		DATE NEXT PAR 6/1981	

ESTIMATED U.S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	FY 1978		CY: 1979		BY: 1980		PIPE-LINE	EXPEN-DITURE	PIPE-LINE
	OBLI-GATION	EXPEN-DITURE	FUNDING PERIOD (FR-TO)	PIPE-LINE	OBLI-GATION	FUNDING PERIOD (FR-TO)			
TOTAL-									
4-5 OPGs								332	68
Program Consultant								300	68
								32	-

AND STAFF CONCERN		TOTAL-		LIFE OF PROJECT	
BDG and PVOs*				1,800	

FUNDING	PERSONNEL WORKYEARS (XX, X)					PERSONNEL INTENSITY	PARTICIPANTS PROGRAMMED				FOOTNOTES	
	FISCAL YEAR						TYPE A=NONCONTRACT B=CONTRACT					
	1978	1979	1980	1981	1982	BEYOND	TYPE	LONG-TERM	SHORT-TERM	LONG-TERM	SHORT-TERM	
PROGRAM ACCOUNT	-	-	1.0	1.0	1.0	3.0	A					
NON-PROGRAM ACCOUNT	-	-	-	-	-	-	B					
OPERATING EXPENSES	-	0.5	0.8	0.8	0.8	2.4						

* Tentative estimates

Table IV.A.

FLOOD AND CYCLONE WARNING SYSTEM (388-0046)

Purpose: Improve the Bangladesh flood and cyclone warning system.

Background: Almost annually, the Bangladesh coastline is hit by cyclones of varying intensity and the interior is flooded by rivers swollen from the monsoon rains. After the catastrophic cyclone of November, 1970 in which at least 300,000 people were killed the government strengthened its cyclone warning system with the effect that few lives have been lost since 1970. The success of this endeavour stems from proper advance warning via Automatic Picture Transmission Satellite (APT) imagery of impending cyclones. In March 1978, however, the NASA APT satellite was turned off and Bangladesh has had to rely on older satellites which give a picture of substantially reduced quality and usefulness. NASA's new satellite, to be launched in June 1978 will not provide data compatible with the Bangladesh ground station receiving equipment. The development of river flood warning has been less successful because of the very poor communications system which results in late collection of river level and flow information.

Project Description: The project proposes to re-equip, test and train personnel for the present Bangladesh APT ground station so that it will be capable of fully utilizing the data output of the Tyros 'N' meteorological satellite for cyclone warning. In addition the project will establish a river flood warning system through the use of river monitors transmitting daily level and flow data via an existing communication satellite to the APT ground station. The APT ground station will analyze the river monitoring data in coordination with the meteorological satellite's rainfall prediction data so that comprehensive river flooding information can be broadcast to the people in a timely way.

Beneficiaries: The beneficiaries are those who live along the coastline and in the flood areas along the rivers. The BDG estimates that flood and cyclone damage causes over \$40 million in damage to 2 million families annually. We estimate 20% of this damage can be reduced by an adequate warning system. The cost per benefitting family will be \$1.00.

FY 1979 program: In 1979 a project design team will study and prepare the detailed training and equipment plan.

FY 1980 program: The FY 1980 program will install and test the necessary equipment and train the Bangladeshi operators.

Major Outputs: The project will assist in reaching the mission's goal of increased agricultural production by providing timely and accurate warning to flood and cyclone effected areas so that property including agricultural equipment and livestock can be protected.

Cyclone warning system in place 1980

River flood warning system in place

TABLE IVB ACTIVITY BUDGET DATA	ACTIVITY TITLE	DECISION UNIT	DECISION PACKAGE	BUDGET YEAR
	Flood and Cyclone Warning System	USAID/Bangladesh	Proposed	FY 1980
	PROJECT NUMBER 388-0046	INITIAL OBLIGATION 1980	FINAL OBLIGATION 1980	TOTAL COST 2,000
	APPROPRIATION SD	DATE PP/REVISION 10/79	DATE LAST PAR N/A	DATE NEXT PAR Nov. 1980

ACTIVITY INPUTS	CY: 19			CY: 1980			PIPE-LINE	EXPEN-DITURE	PIPE-LINE
	PY: 19	FUNDING PERIOD (FR-TO)	PIPE-LINE	PY: 1980	FUNDING PERIOD (FR-TO)	PIPE-LINE			
-FINANCED									
TOTAL-									
Commodities									
Trains									
Consultants (Support)									
Testing of systems									
TOTAL-									
AND OTHER (NON-Host Country)									
TOTAL-									

FUNDING	PERSONNEL WORKYEARS (XX, X)			PERSONNEL INTENSITY		PARTICIPANTS PROGRAMMED		FOOTNOTES
	1978	1979	1980	TYPE A	TYPE B	TYPE A	TYPE B	
PROGRAM ACCOUNT TOY (NON-)								
OPERATING EXPENSES								
TOTAL								

TABLE IVB ACTIVITY BUDGET DATA	ACTIVITY TITLE Regional Project Development Support		DECISION UNIT USAID/Bangladesh	DECISION PACKAGE Minimum	BUDGET YEAR FY 1980
	PROJECT NUMBER 498-0249		INITIAL OBLIGATION FY 1974	FINAL OBLIGATION UND	TOTAL COST UND
	APPROPRIATION All Categories		DATE PP/REVISION	DATE LAST PAR	DATE NEXT PAR

ESTIMATED U. S. DOLLAR COST (\$ 000)

ACTIVITY INPUTS	PY: 19 78		CY: 19 79		BY: 19 80					
	OBLI - GATION	EXPEN - DITURE	PIPE - LINE	FUNDING PERIOD (FR - TO)	OBLI - GATION	EXPEN - DITURE	PIPE - LINE	OBLI - GATION	EXPEN - DITURE	PIPE - LINE
TOTAL-										
AID - FINANCED										
HC AND OTHER DONOR										
NA										
TOTAL-										

PERSONNEL WORKYEARS (XX, X)	PERSONNEL INTENSITY			PARTICIPANTS PROGRAMMED		
	19	19	19	TYPE A	TYPE B	FISCAL YEAR
FUNDING						
PROGRAM ACCOUNT TOY (NON - EXPENSES)	0.6	0.6	0.6	LONG - TERM	SHORT - TERM	19
	0.6	0.6	0.6	LONG - TERM	SHORT - TERM	19
	0.6	0.6	0.6	LONG - TERM	SHORT - TERM	19

AID 1330-8 (3-78)

COMMENTARY ON OPERATING EXPENSE AND WORKFORCE

Comments on workforces/activities are covered in Annex A to the decision-unit overview.

QUALITY AND AVAILABILITY OF BANGLADESHI PERSONNEL

Prior to the Bangladesh-liberation, there were four positions filled by American direct-hire staff which have since been replaced by foreign national personnel. During the reconstruction and rehabilitation phase following independence, the FSL staffing levels remained static. Since 1974, however, the USAID has increased the use of university-trained staff at the professional and semi-professional levels. On program development and project management they have been indispensable for collecting data and information in the countryside and in ferreting out data from within the BDG. They have fallen short, however, of the full range of capabilities required to exercise program development and project management responsibilities; further, they are, in the Bangladesh cultural milieu, incapable of representing AID in dialogues with the BDG on policy or on BDG performance in project implementation.

Cultural constraints aside, the increasingly non-competitive salary scale in the US Mission places severe restraints on the recruitment of talented, professional persons--a problem exacerbated by the competition with Middle-East oil countries who increasingly recruit skilled and semi-skilled Bangladeshi professionals, in addition to the common-labor force.

ALTERNATIVE MIXES OF PERSONNEL

The Mission has not attempted to define an appropriate "mix" or ratio of USDH to FNDH to contract personnel. Rather decisions have been based on an assessment of which of the three types of personnel could best perform each individual task. We believe, on that basis, that the current mix of personnel is the most appropriate.

In examining alternatives, we conclude that a substantially larger, e.g. 10 to 15 additional positions, would be impractical in the near term. This is primarily due to difficulties in recruiting USDH for Bangladesh and for technical positions. Also, in the near-term it would be difficult to provide the housing and office support for a larger USDH staff. Greater utilization of FNDH is not feasible due to a lack of the prerequisite skills, particularly at the salary levels offered by the Mission, and to the role limitations imposed by the culture. PSCs have and will be continued to be used by the Mission to provide and expanded range of specialist skills not immediately available through USDH sources. Recruitment of PSCs, however, is difficult and thus far has been limited to personnel resident in Bangladesh.

IMPACT OF MODE RESTRICTIONS

USAID was advised late in this ABS exercise that the MODE ceiling was established at 39. This contradicted our previous understanding that the MODE ceiling was 42. Since two AID USDH are assigned to the Embassy's Joint Administrative Service (and budgeted under FAAS), we will have 38 personnel counted against the MODE ceiling at the end of FY 1978. The proposed FY 1979 program will require an increase of one position, to 40. No increases in the MODE ceiling would be required for either the FY 1980 minimum or expanded levels but the ceiling would have to be increased to 42 at the proposed (mark) levels.

NON-PROGRAM RELATED PERSONNEL REQUIREMENTS AT THE VARIOUS ZBB LEVELS.

The Regional Legal Advisor (and Secretary), Director, Deputy Director (and their Secretaries), plus appropriately 10% of the Division Chiefs time is spent on Policy Direction and Management. Additionally, the Controllers staff is attributable to Financial Management and the Executive Officer staff is devoted to Management Support.

At the minimum level there would be slightly less time devoted to the non-project related activities. With a reduced program, the Program Officer and the line division chiefs would spend more of their time directly dealing with project implementation than at higher levels. As the program expands these personnel would spend slightly more time on Policy Direction and Management, at the rate of about .5 workyears each at the expanded and proposed levels. Similarly, additional Bangladeshi personnel would have to be added for Financial Management and Management Support at the expanded and proposed levels. While this is difficult to forecast, we project one additional FSL in each category in the expanded package and again in the proposed package.

EXPENSES

Inflation has been minimal and for budgetary purposes we have assumed constant prices, e.g., acquisition costs for object classes 310, 311 and 312 are the same in FY 79 as in FY 78.

There are no quarters allowances provided as all personnel are assigned to furnished quarters.

The most significant changes, FY 78 to FY 80 are in the requirements for additional vehicles, equipment and furnishings, travel and housing all of which are related to additional staff. In FY 79 there is an even more significant increase resulting from the pressures for office space. Under a Section 636(C) request, there is shown an increase of \$500,000 for acquisition of land and construction of an office building, and \$300,000 for land and construction of three CORE residences.

In FY 79 we have assumed the allotment for the 636(C) requirements would take place in the 1st Quarter, even though the A&E plans, contract for land and construction, etc., have only recently been considered.

Thus, for FY 80 we have assumed we would still need our present leased quarters while the new construction is being finished and may have to add temporary, short-term accommodations.

The factors included in line 23, Personnel Benefits, for local employees include only an annual bonus payment which consists of one-months salary.

There are no operating expenses used to support program funded personnel.

USAID/Bangladesh follows the policy of maintaining a minimum acceptable living standard for all personnel; continuous scrutiny of requisitions for equipment and supplies; review of sources of supply with increasing reliance on local procurement; and, reorientation of the motor-pool composition to find the cheapest-to-buy and cheapest-to-operate vehicles commensurate with our needs.

WORKFORCE REQUIREMENTS - SCHEDULE 1 - EXISTING POSITIONS 001 USAID BANGLADESH

MODE LEVEL: AUTHORIZED: BUDGETED: REQUESTED: IDI NON-CEILING: TOTAL FILLED: TOTAL VACANT

CEILING: POSITIONS: POSITIONS: POSITIONS: POSITIONS: POSITIONS

FY 78: 004: 005: 006: 007: 008: 009: 010: 011: 012

POS NO: POSITION TITLE: P: P: P: G: I: G: STATUS: DATE POS: INCUMBENT: REPLACE: VACANT: FY 78 OR (AUSC(S)) REMARKS

013: 014: A: L: O: R: N: R: OF: TO: (C): TO: COM: MENT: POSITION: FY 79 IDI: APPLICABL: I: N: S: A: C: A: POSIT: (D) (E): IN POS: NEEDED: REQUIRES: GRADUATE: TO: E: N: I: D: U: O: END OF: STATUS: THRU FY: BY DATE: INCUMBENT: TO FILL: VACANT: N: I: E: M: E: FY 78: P=PLAN: BY DATE: VACANT: POSITIONS: O: I: B: OR: A=ACTUAL: FOR FY: POSITION: (4 DIGIT): 023: YES: NO: 024: 025: 026

012: 5: 6: 7: (E) 8: 019: 020: 021: 022: 023: YES: NO: 024: 025: 026

31: 273686023: DEP POP OFF: IFR: 03: 03: D: 02/79: 01/79: 012: 5: 6: 7: (E) 8: 019: 020: 021: 022: 023: YES: NO: 024: 025: 026

32: 273686030: POP ASST: IFR: 05: 05: D: 02/79: 01/79: 012: 5: 6: 7: (E) 8: 019: 020: 021: 022: 023: YES: NO: 024: 025: 026

33: 273687013: CTR: IFR: 02: 03: D: 05/79: 01/79: 012: 5: 6: 7: (E) 8: 019: 020: 021: 022: 023: YES: NO: 024: 025: 026

34: 273687023: BUD ACCTG OFF: IFR: 04: 05: D: 07/79: 01/79: 012: 5: 6: 7: (E) 8: 019: 020: 021: 022: 023: YES: NO: 024: 025: 026

35: 273688012: EXEC OFF: IFR: 02: 02: D: 06/78: 01/79: 012: 5: 6: 7: (E) 8: 019: 020: 021: 022: 023: YES: NO: 024: 025: 026

36: 273688017: EXEC ASST: IFR: 06: 07: D: 08/79: 01/79: 012: 5: 6: 7: (E) 8: 019: 020: 021: 022: 023: YES: NO: 024: 025: 026

37: 273688022: GSO: IFR: 04: 04: D: 07/78: 01/79: 012: 5: 6: 7: (E) 8: 019: 020: 021: 022: 023: YES: NO: 024: 025: 026

38: 273688033: ASSY GSO: IFR: 06: 05: D: 08/79: 01/79: 012: 5: 6: 7: (E) 8: 019: 020: 021: 022: 023: YES: NO: 024: 025: 026

OPERATING EXPENSE BUDGET

EXPENSE CATEGORY	LINE NO.	OBJECT CLASS	EXPENSE RELATED TO	FY 1978		FY 1979		FY 1980		EXPANDED UNITS		
				UNITS	\$	UNITS	\$	UNITS	\$			
PERSONNEL	01				1,787.5		2,155.9		2,110.2	1,388.1	1,829.2	
U.S. Direct Hire	02		USDH Workyears	33.5	1,632.1	38.0	1,949.4	41.0	1,926.0	26.0	1,271.5	1,675.3
U.S. Citizens Basic Pay	03	110	USDH Workyears	33.5	1,044.7	38.0	1,136.2	41.0	1,230.1			
Part-time, Temp. U.S. Basic Pay	04	112	USDH Workyears									
Differential Pay	05	116	USDH Workyears	25.5	185.1	31.0	203.0	34.0	226.6			
Living Allowances	06	118	USDH Workyears									
Other Pay	07	119	-		2.0		1.0		1.0			
Education Allowances	08	126	No. of Dependents	26	85.3	26	150.5	27	96.0			
Retirement	09	120	USDH Workyears	33.5	73.1	38.0	79.5	41.0	86.1			
Transportation/Travel	10				218.8		353.1		257.2			
Post Assignment - Travel	11	212	No. of Movements	8	18.6	12	42.2	8	29.9			
Home Leave	12	212	No. of Movements	15	54.3	21	112.8	13	77.7			
Post Assignment/Home Leave Freight	13	22			92.5		140.7		79.9			
R & R	14	215	No. of Movements	17	31.1	15	28.8	16	37.2			
Education Travel	15	215	No. of Movements	2	4.3	4	8.6	5	12.5			
Medical Travel	16	215			15.0		15.0		15.0			
Other Travel	17	215			3.0		5.0		5.0			
Other Personnel Benefits	18	Includes	122 & 123		23.1		26.1		29.0			
Local Employees	19		FNDH Workyears	71.0	155.4	79.0	177.5	83.0	184.2	116.6		153.9
Basic Pay	20	114	FNDH Workyears	71.0	114.6	79.0	130.0	83.0	134.2			
Overtime, Holiday Pay	21	115	FNDH Workyears	3.9	15.0	4.2	19.0	4.5	20.0			
Other Pay	22	119 & 120 (Incl. Retirement)			9.2		12.3		13.0			
Personnel Benefits (Annual Bonus Payment)	23	129	FNDH Workyears	71.0	11.6	79.0	11.2	83.0	12.0			
Benefits for Former Personnel	24	13			5.0		5.0		5.0			
Contract Personnel	25		Workyears			1.0	28.1					
PASA Technicians	26	258	Workyears									
Other Reimbursable Details	27	111	Workyears									
Experts and Consultants	28	113	Workyears			1.0	28.1					
Other Technicians	29	255	Workyears									
HOUSING	30				303.9		650.9		371.2	219.1		322.7
Acquisition of Land and Structures	31	320	No. of Residential Units			3	300.0					

OPERATING EXPENSE BUDGET

EXPENSE CATEGORY	LINE NO.	OBJECT CLASS	EXPENSE RELATED TO	FY 1978		FY 1979		PROPOSED		FY 1980	
				UNITS	\$	UNITS	\$	UNITS	\$	UNITS	\$
<u>HOUSING Continued</u>											
Rent	32	235	Nb. of Residential Units	34	180.2	38	216.7	41	229.9		
Utilities	33	235	Nb. of Residential Units	34	27.0	38	31.2	41	32.8		
Renovation	34	259	Nb. of Residential Units								
Maintenance (Including Security guard & supplies)	35	259	No. of Res. Units	34	57.1	38	59.0	41	54.0		
Residential Furnishings and Equipment	36				27.0	2	31.2		41.5		
Additions to Inventory	37	311	Nb. of Residential Units					3	28.4		
Replacement	38	311			22.0		6.8		6.0		
Transportation	39	22			5.0		4.6		7.1		
Quarters Allowance (Temp. Lodging Allowance)	40	172	No. of Residential Units		2.0		2.0		2.0		
Mission Director	41				10.6		10.8		11.0		
Rent	42	235			6.0		6.0		6.0		
Utilities	43	235			.8		.8		.8		
Renovation of Residence	44	259			.2		.4		.4		
Maintenance of Residence	45	259			.4		.4		.4		
Supplies and Materials	46	26									
Furniture Procurement	47	311			.8		.8		.9		
Official Residence Allowance	48	254			2.4		2.4		2.5		
Representation Allowance	49	252									
Vehicles	50										
Acquisition	51	312									
Operation/Maintenance (Included in FAAS)	52	259									
Portion of Lines 31-52 for Program Funded People	53										
OFFICE OPERATIONS	54				621.4		1,246.7		844.0		736.4
Acquisition of Land and Structures	55	320					500.0				
Rent	56	234			26.0		38.0		38.7		
Utilities	57	234			3.0		3.0		3.0		
Renovations	58	259			1.5		1.5		1.5		
Building Maintenance	59	259			9.0		12.0		15.0		
Office Furnishings and Equipment	60				15.0		14.4		11.7		
Additions to Inventory	61	310			15.0		9.5		8.3		
Replacement	62	310					4.9		3.4		

OPERATING EXPENSE BUDGET

EXPENSE CATEGORY	LINE NO.	F. Y. 1 9 8 0			
		FY 1978	FY 1979	PROPOSED	MINIMUM
TOTAL OPERATING EXPENSE BUDGET	82	2,712.8	4,052.6	3,325.4	2,167.9
Reconciliation					
Deduct from item 82 items not funded from Mission's allotment:					
Object Class 11	83	1/ 1,231.8	1,340.2	1,457.7	
Object Class 12	84	1/ 94.1	104.6	114.1	
Object Class 13	85				
Net FAAS (from line 78)	86	386.6	444.5	511.2	
Other - Explain on Attachment	87	196.0	231.0	254.0	
Net Allotment Requirements	88	804.3	1,932.3	988.4	
Operational Year Allotment Requirement by Quarter					
First Quarter	89		1,145.0		
Second Quarter	90		292.3		
Third Quarter	91		200.0		
Fourth Quarter	92		300.0		

1/

ADDITIONAL SCHEDULES AND ANALYSES Attachment No.	Attached	
	Yes	No
Use of Trust Funds 1	X	
ADP Equipment		X
Budget Line 31 Detail 2	X	
Budget Line 55 Detail 3	X	
Budget Line 80 Detail 4	X	
Budget Line 18 Detail 5	X	
Budget Line 87 Detail 6	X	
Budget Line 22 Detail 7	X	
Budget Line 35 Detail 8	X	
Budget Line 8 Detail 9	X	

Object Class	FY-1978	FY-1979	FY-1980
110	1,044.7	1,136.2	1,230.1
115	2.0	1.0	1.0
116	185.1	203.0	226.6
	<u>1,231.8</u>	<u>1,340.2</u>	<u>1,457.7</u>
120	73.1	79.5	86.1
122	5.0	7.1	8.0
123	16.0	18.0	20.0
	<u>94.1</u>	<u>104.6</u>	<u>114.1</u>

Use of Trust Funds
USAID/Bangladesh

<u>Object Class</u>	<u>Particulars</u>	<u>FY-1978</u>	<u>FY-1979</u>	<u>FY-1980</u>
210	Domestic Travel	\$ 38.0	\$ 50.0	\$ 55.0
234	Rent & Utilities Office	27.0	26.4	29.0
235	Rent & Utilities Residential	131.0	138.6	152.5
	Total :	<u>\$196.0</u>	<u>\$215.0</u>	<u>\$236.5</u>

USAID/Bangladesh
Budget Line 31 - Detatil

Subj: Sec. 636 (C) Requirements.

In Dacca - 1472 dated 03-08-78, Mission requested \$300,000 for acquisition of land and construction of three CORE residences (Director, Program Officer and Secretary). The following is the requirement for the construction and installation of utilities for CORE residences including garage, servants quarters and storage.

1.	<u>Director</u> 5,500 to 6,000 sq. ft.	\$99,000.00
2.	<u>Program Officer</u> 4,000 to 4,500 sq. ft.	74,250.00
3.	<u>Secretary</u> 3,000 sq. ft.	49,500.00
4.	<u>Land</u>	77,250.00
	Total:	<u><u>\$300,000.00</u></u>

USAID/Bangladesh
Budget Line 55 - Detail

Subject: Section 636 (C) Requirements.

We have included in this submission \$500,000 for the acquisition of land and the construction of a 25,000 sq. ft. office building. The total of line 55 is therefore as follows:

1. 15,000 sq. ft. of Land	\$100,000
2. Construction - 25,000 sq. ft. Office Building	<u>400,000</u>
Total :	<u>\$500,000</u>

Budget Line 80 Detatil
USAID/Bangladesh

<u>Object Class</u>	<u>Particulars</u>	<u>FY-1978</u>	<u>FY-1979</u>	<u>FY-1980</u>
259	FADPC Services	1.0	1.0	1.0
259	Medical Treatment Costs	<u>7.1</u>	<u>10.0</u>	<u>14.0</u>
	Totals:	<u>8.1</u>	<u>11.0</u>	<u>15.0</u>

Other Personnel Benefits
Budget Line 18 - Details
USAID/Bangladesh

<u>Object Class</u>	<u>Particulars</u>	<u>FY-1978</u>	<u>FY-1979</u>	<u>FY-1980</u>
122	Life Insurance - USDH	7.1	8.1	9.1
123	Health Insurance - USDH	16.0	18.0	20.0
	Totals :	<u>23.1</u>	<u>26.1</u>	<u>29.0</u>

Other Budget Line 87 Detail
USAID/Bangladesh

	<u>Particulars</u>	<u>FY-1978</u>	<u>FY-1979</u>	<u>FY-1980</u>
1.	Trust Funds	196.0	215.0	236.5
2.	Storage of HHE	-	16.0	17.5
	Per State - 097896			
	Dated April 17, 1978			
	Totals:	<u>\$196.0</u>	<u>\$231.0</u>	<u>\$254.0</u>

Attachment - 7

Other Pay
Budget Line 22 - Details
USAID/Bangladesh

<u>Object Class</u>	<u>Particulars</u>	<u>FY-1978</u>	<u>FY-1979</u>	<u>FY-1980</u>
117	Terminal Leave	1.2	1.5	1.5
120	Retirement	8.0	10.8	11.5
	Totals:	<u>\$9.2</u>	<u>\$12.3</u>	<u>\$13.0</u>

Attachment - 8

Maintenance
Budget Line 35 - Details
USAID/Bangladesh

<u>Object Class</u>	<u>Particulars</u>	<u>FY-1978</u>	<u>FY-1979</u>	<u>FY-1980</u>
259	Misc.Contractual Services (Guard Contract)	40.2	43.9	46.0
260	Supplies & Materials	16.9	15.1	8.0
	Totals :	<u>\$57.1</u>	<u>\$59.0</u>	<u>\$54.0</u>

USAID/Bangladesh
Budget Line 8 Detail

Beginning with the School Year 1979 the American School will require purchase of a \$3,000 Capital Levy Certificate for each student that is enrolled. The certificates will be transferable and or refundable. The certificate will depreciate at the rate of \$300 per year. Thus, we have included \$60,000 for the purchase of 20 certificates in FY-79. In addition to CLC requirement, the tuition is to be increased from \$2,000 per year to \$2,500 per year. In FY-80 we have included funds to purchase one additional certificate.

	<u>No. of Grants</u>			<u>Capital Levy Cert.</u>			<u>Tuition</u>		
	<u>FY-78</u>	<u>FY-79</u>	<u>FY-80</u>	<u>FY-78</u>	<u>FY-79</u>	<u>FY-80</u>	<u>FY-78</u>	<u>FY-79</u>	<u>FY-80</u>
School at post	19	20	21	-0-	60.0	3.0	38.0	50.0	52.5
School away from post	<u>7</u>	<u>6</u>	<u>6</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>47.3</u>	<u>40.5</u>	<u>40.5</u>
Total :	<u>26</u>	<u>26</u>	<u>27</u>	<u>-0-</u>	<u>60.0</u>	<u>3.0</u>	<u>85.3</u>	<u>90.5</u>	<u>93.0</u>

TABLE VI - FUNDING FOR SPECIAL CONCERNS

PROJECT NUMBER AND TITLE	APPROP CODE	SPECIAL CONCERN CODE	OBLIGATIONS (\$ 000)						DECISION UNIT	
			FY: 78		FY: 79		FY: 80		USAID/Bangladesh	
			PROJECT TOTAL	SPECIAL CONCERN	PROJECT TOTAL	SPECIAL CONCERN	PROJECT TOTAL	SPECIAL CONCERN	PROJECT TOTAL	SPECIAL CONCERN
Rural Electrification (0021) (G)	F&N	CODC COUS	37,000	37,000	13,000	13,000	-	-	-	-
Flood And Cyclone Warning System (0045) (G)	SD	ENVR	-	-	-	-	2,000	2,000	-	-
Technical Resources Development (0027) (G)	FN/EHR	WID	950	-	800	-	1,100	-	-	-
Private Voluntary Organizations (0010) (OPG)	SD	PVOU PVOL	350	350	400	400	-	-	-	-
Integrated Land & Water Use I (388-0040) (G)	SD	PVOU PVOL	-	-	-	-	400	400	-	-
National Women's Dev. Academy (388-0044) (G)	FN	ENVR	-	-	-	-	14,000	14,000	-	-
Small Scale Irrigation II (388-0023) (G)	EH	WID LTRG	-	-	-	-	200	200	-	-
	FN	ATNL	-	-	-	-	14,400	14,400	-	-

EVALUATION NARRATIVE:

Since July 1977, the Mission has used the Project Evaluation Summary to report its evaluations but has continued to use the Project Evaluation Workbook as the basis for data gathering and developing issues papers for evaluations. We find this a useful tool in providing a concise picture of project progress and/or problems, even though it does not mesh as conveniently with the new PES format as it did with the PAR.

After limited experience with PES, it appears to provide adequate scope for fully communicating the results of evaluations.

In April 1978, a special evaluation was conducted on the Food For Work Project. The evaluation team consisted of two people from AID/W, one from CARE/New York, and one on contract. The team did an acceptable job, but of the week most of them were in Bangladesh, they spent two days being briefed, two days on field trips and gathering information, and one day writing the report. In considering this experience, the Mission was left with the impression that too much time was wasted on familiarizing the team with the project and that, even so, the evaluation lacked depth. In the Mission's judgment a much more valuable evaluation could have been obtained by contracting with Bangladeshi and expatriate experts who are already in the country and who have a basic knowledge of the project and the milieu in which it operates. Besides these advantages, the same amount of funding could have provided a much longer working period which would have resulted in a more in-depth evaluation. In considering the composition of future special evaluation teams, the Mission will attempt to recruit in-country experts for some of these positions.

While the Mission recognizes the value of evaluation, and places a high priority on conducting rigorous and useful evaluations, they are generally not an activity which must be accomplished by a certain time. Therefore, they often slip past the evaluation schedule timing as more urgent actions, such as, ABS and CP exercises, project documentation preparation to meet budget and funding deadlines, and project implementation actions, are taken first. Also, implementation almost always proceeds at a different

place from that predicted in the PPT Network or annual evaluation plans and evaluation timing must be adjusted accordingly. As a result, the evaluation schedule is seen more as a general guide than as an immutable timetable that must be strictly followed.

The Mission considers BDG participation in evaluations essential for a full perspective on project activities and problems. We invite the relevant ministries to assist us in data gathering, analysis and preparation of issues papers. Generally, however, these tasks are seen as a USAID requirement and therefore, a USAID responsibility. While BDG personnel will gladly participate in, and even chair, evaluation meetings, preparation for the evaluation is normally left to USAID. The extent of BDG participation in the preparations is usually limited to suggesting an issue or two to be discussed at the review meeting.

COIP /PROGRAM BANGLADESH

PERIOD COVERED: FY 1978 - FY 1980

DATE: May 3, 1978

Mission Evaluation Schedule for Operational Year and Budget Year ^{1/}

(1) Project Title and Number/Subject	(2) Number and Date of last PAR/PES Submitted	(3) Proposed date of next PES	(4) Period to be Covered	(5) Identification of Special Evaluations and Purpose for them	(6) ^{2/} Remarks
<u>Food & Nutrition</u>					
Development Services and Training - 0002 G	April, 1977 77-3	May, 1978	May 77-May 78		
Agricultural Research 0003 G/L	Feb, 1978 78-1	Feb, 1979 ³	Feb 78-Feb 79		In-depth evalua- tion will require 2 or 3 TDYers, funded by PDS.
Rural Irrigation 0012 G	N.A	Aug, 1980 ⁴	Feb 79-Aug 80		
Ashuganj Fertilizer 0016 L	Mar, 1976 (not numbered)	May, 1978	Mar 76-May 78		
Food for Relief Work 0017 G	April, 1978 [*]	Aug, 1978	Aug 77-Aug 78		
Small Scale Irrigation 0019 L	July, 1977 77-7	July, 1978	July 77-July 78		
Rural Electrification 0021 G	N.A	May, 1979 ⁵	Dec 77-May 79		

* This was a special evaluation, not numbered in regular Mission series.

^{1/} Supplementary information may be provided either as footnotes or in the accompanying narrative.
^{2/} Include indication of help needed from AID/W - for information and planning only; action requests to be submitted in accordance with normal procedures.

PERIOD COVERED: FY 1978 - FY 1980

DATE: May 3, 1978

Mission Evaluation Schedule for Operational Year and Budget Year 1/

(1) Project Title and Number/Subject	(2) Number and Date of last PAR/PES Submitted	(3) Proposed date of next PES	(4) Period to be Covered	(5) Identification of Special Evaluations and Purpose for them	(6) 2/ Remarks
Fertilizer Distribution Improvement 0024 G	N.A.	May, 1979	July 78-May 79		
Rural Credit 0025 G	N.A.	Mar, 1979 ⁶	Sep 77-Mar 79		
Tech. Resources Dev. 0027 G	N.A.	Sep, 1979	Aug 78-Sep 79		
Fertilizer Storage 0030 L	N.A.	June, 1978 ⁷	Sep 76-June 78		
Project Development I 0031 G	N.A.	Sep, 1978	Sep 76-Sep 78		
Rural Roads - 0032 G	N.A.	Aug, 1980 ⁸	Mar 79-Aug 80		
Ag. Inputs III - 0035 G	N.A.	Jan, 1979 ⁹	Aug 77-Jan 79		
<u>Health & Population</u> Pop/Family Planning 0001 G	February, 1978 78-2	Feb, 1979	Feb 78-Feb 79		
Family Welfare Centers - 0038 G	N.A.	Jan, 1980	Oct 78-Jan 80		

1/ Supplementary information may be provided either as footnotes or in the accompanying narrative.

2/ Include indication of help needed from AID/M - for information and planning only; action requests to be submitted in accordance with normal procedures.

COMP /PROGRAM BANGLADESH

PERIOD COVERED: FY 1978 - FY 1980

DATE: May 3, 1978

Mission Evaluation Schedule for Operational Year and Budget Year ^{1/}

(1) Project Title and Number/Subject	(2) Number and Date of last PAR/PES Submitted	(3) Proposed date of next PES	(4) Period to be Covered	(5) Identification of Special Evaluations and Purpose for them	(6) ^{2/} Remarks
<u>Education/Human Resources</u> National Women's Dev Academy - 0028 G	N.A.	Oct, 1978 ¹⁰	Sep 77 - Oct 78		
<u>Section 106</u> Project Studies Grant 0008 G	March, 1976 (not numbered)	May, 1978	Mar 76-May 78		Ex post facto evaluation
PVO Co-Financing 0010 G	April, 1977 77-2	June, 1978	Apr 77-Jun 78		
Karnaphuli Third Unit 0018 L	December, 1977 77-8	Dec, 1978 ¹¹	Dec 77-Dec 78		

^{1/} Supplementary information may be provided either as footnotes or in the accompanying narrative.
^{2/} Include indication of help needed from AID/W - for information and planning only; action requests to be submitted in accordance with normal procedures.

Mission Evaluation Schedule for Operational Year and Budget Year

(1) Project Title and Number/Subject	(2) Number and Date of last PAR/PES Submitted	(3) Proposed date of next PES	(4) Period to be Covered	(5) Identification of Special Evaluations and Purpose for them	(6) 2/ Remarks
<u>Other Evaluations</u>					
OPGs under PVO Co-Financing Project (388-0010)					
IVS	June, 1977 77-6	Oct, 1978 ¹²	Jun 77-Oct 78		
MAP/HEED	June, 1977 77-5	May, 1978	Jun 77-May 78		
CDF	N.A.	May, 1978	May 77-May 78		
IUCW	N.A.	Feb, 1979	July 78-Feb 79 ¹³		
Faridpur Academy	N.A.	Feb, 1979	July 78-Feb 79 ¹³		

1/ Supplementary information may be provided either as footnotes or in the accompanying narrative.
 2/ Include indication of help needed from AID/W - for information and planning only; action requests to be submitted in accordance with normal procedures.

Footnotes for Evaluation Schedule

3. Scheduled for Nov, 1978 in FY 79 ABS. The previous evaluation was delayed three months due to slow implementation of the project and the FY 1979 evaluation was adjusted accordingly.
4. July, 1979 in FY 1979 ABS. Project was scheduled to start in FY 1978 but will now start in FY 1979.
5. Sept. 1978 in FY 1979 ABS. Project was scheduled to start in FY 1977 but started in Dec. 1977.
6. Dec. 1978 in FY 1979 ABS. Project was slow getting underway. Consultants will arrive only in June or July, 1978.
7. Dec. 1977 in FY 1979 ABS. It was Project Manager's judgement that evaluation in Dec. would serve little purpose. Evaluation has been re-scheduled to follow construction season.
8. June, 1979 in FY 1979 ABS. Project was scheduled to start in FY 1978 but will now start in FY 1979.
9. June, 1978 in FY 1979 ABS. Project started later than expected.
10. July, 1978 in FY 1979 ABS. Project started three months later than expected.
11. Aug, 1978 in FY 1979 ABS. The previous evaluation was delayed five months while basic revisions were being made in the project design and this evaluation has been adjusted accordingly.
12. June, 1978 in FY 1979 ABS. There was a long hiatus in this project as IVS debated best way to conduct follow-on project.
13. Evaluation after about 6 months because Mission has not dealt with these PVOs before and wishes to have an early assessment of their capabilities.

P.L. 480 Title I

The Mission's FY 1975 Development Assistance Program (DAP) included a thorough discussion of the relationship of the Government's public sector food policies and its agricultural production strategy. This analysis was subsequently revised in Food for Development proposals which were contained in the Annual Budget Submissions for both FY 1978 and FY 1979. With the advent of Title III, the Mission proposes to finance the importation of foodgrain for agreed development purposes under a new Food for Development program. This program is discussed separately in a following section.

Mission Recommendations:

Assuming the shift of financing foodgrain imports from Title I to Title III the Mission recommends a program to import vegetable oil and raw cotton in FY 1979 and FY 1980 under PL 480 Title I. The Mission's recommendations are as follows:

<u>Year</u>	<u>Commodity</u>	<u>Amount</u>	<u>Estimated Value</u>
FY 1979	Vegetable Oil	35,000 tons	\$ 14.3 million
	Cotton	60,000 bales	19.0 million
		sub total	\$ 33.3 million
FY 1980	Vegetable Oil	35,000 tons	\$ 16.0 million
	Cotton	60,000 bales	19.6 million
		sub total	\$ 35.6 million

These recommendations are justified on five grounds: Bangladesh's balance of payments position; the use of commodity aid sales proceeds to help finance the country's Two-Year Plan (TYP -- 1978/79 and 1979/80); the supply and demand situation for both commodities; and

the special equity considerations associated with vegetable oil; and the use of raw cotton to generate employment in the rural handloom industry. Each of these elements is discussed below.

Balance of Payments Position

The case for concessionally financed Title I commodities for Bangladesh rests on the country's inability to finance its import bill out of its own foreign exchange earnings. In general terms the maintenance and development requirements of the economy far surpass the foreign exchange generated by the country's export earnings of which jute accounts for about 80 percent. In absolute terms the balance of trade will worsen over the period 1977/78 - 1979/80. The following table summarizes the Government's estimates as most recently recorded in the TYP (and converted to millions of US dollars):

	<u>1977/78</u> <u>Estimate</u>	<u>1978/79</u> <u>Projections</u>	<u>1979/80</u> <u>Projections</u>
Merchandise Imports	- 1,325	- 1,390	- 1,539
Exports	484	535	593
	<hr/>	<hr/>	<hr/>
Trade Gap	- 841	- 855	- 946

Even the projected trade gap may prove to be optimistic for the reasons that the Government has projected substantial export growth in raw jute and jute goods which may not obtain and has perhaps understated its fertilizer import requirements, for example, on the optimistic assumption that the Ashuganj fertilizer plant will come on stream on or ahead of schedule.

Bangladesh's debt on foreign loans disbursed and outstanding stood at \$2,079 million as of June 30, 1977. Repayment obligations under this debt together with payments due on miscellaneous short-term borrowings total some \$37 to 41 million annually during the TYP period. There are, in addition, substantial repurchase obligations to the I.M.F. falling due during this period.

Debt Service Obligations, 1978 - 80
(U.S. \$ Millions)

	<u>1977-78</u>	<u>1978-79</u>	<u>1979-80</u>
Long and medium Term	17.36	16.48	17.89
Short-term	<u>6.44</u>	<u>24.66</u>	<u>19.19</u>
Total Debt Service	23.80	41.14	37.08
I.M.F. (net of prospective drawings)	29.39	37.32	68.39

The Mission anticipates that all significant donors will continue to provide assistance on concessional terms at a minimum and that the trend to all grant financing will continue. However, the country's balance of payments situation will remain extremely strained. Both its balance of payments situation and its extremely low level of per capita income - an estimated \$80 in 1976/77 - qualify Bangladesh as "relatively least developed" for purposes of Section 110 (a) of the Foreign Assistance Act, and warrant the financing of cotton and vegetable oil on Title I terms.

Financing Development

Since Independence Bangladesh's annual development plans have been heavily dependent upon external resources for the required financing. Typically, at the beginning of a planning period the Government projects that domestic resources will assume an increasing share of development expenditure but as the development plan unfolds during implementation, domestic resource mobilization lags. In the Government's new Two Year Plan the estimates of the shares of domestic and external resource mobilization are more realistic in this respect. The record of the First Five Year Plan (FFYP, 1972/73 to 1977/78) is compared below with the TYP projections (in millions of US dollars).

<u>Public Sector Financing</u>	Original	FFYP <u>Estimate</u>	TYP Resources	
	FFYP <u>Projection</u>		<u>1978/79</u>	<u>1979/80</u>
Domestic Resources:	1,497 (57%)	613 (23%)	236 (26%)	321 (29%)
External Resources:	<u>1,138 (43%)</u>	<u>2,007 (77%)</u>	<u>664 (74%)</u>	<u>779 (71%)</u>
Project aid	n.a.	647	283	321
Commodity aid	n.a.	978	305	364
Food aid	n.a.	382	76	94
Total Resources	2,635	2,620	900	1,100

Projected financial availabilities total \$ 2.0 billion during the TYP as compared to a total TYP expenditure target in the public sector of \$ 2.17 billion, a difference which will have to be made up by additional taxes or more foreign aid. Of the three forms of aid, project assistance is the most difficult to use and, as a consequence the pipeline of undisbursed commitments is projected to grow year to year. Food and commodity aid, on the other hand, disburse relatively quickly and the sales proceeds may be allocated by the Government to TYP priorities. However, given the Government's objective to achieve foodgrain self sufficiency it is important for the Government and the donors to gradually shift the composition of aid away from food and to dramatically increase the Government's absorptive capacity for project assistance.

Supply and Demand

In the TYP the Government has established targets for the production of oilseeds and cotton. For both crops substantial increases are projected by 1979/80 as compared to 1976/77.

	<u>Crop Production Targets</u>		
	<u>1976/77</u> Actual	<u>1977/78</u> Estimate	<u>1979/80</u> Target
Oilseeds (thousands of tons)	163	180	249
Cotton Lint (thousands of bales)	15	20	60

While the Government may achieve the oilseed production target it is highly unlikely that the cotton production targets can be met. In the case of edible oil the Government computes its requirements on the basis of six pounds per capita, per annum. However, due to foreign exchange constraints and the inability of the donors to supply the needed amount of edible oil to fill the supply - demand gap, the Government's projection of per capita availability during the TYP is considerably less than this amount. The edible oil situation is summarized below in thousands of tons.

	<u>1976/77</u>	<u>1977/78</u>	<u>1978/79</u>	<u>1979/80</u>
1. Edible oil requirement @ six lbs per capita*	225	231	238	244
2. Edible oil from domestic production	54	59	70*	82
3. USAID estimate of import requirement (1 - 2)	171	172	168	162
4. BDG estimate of import requirement		90	90	90
a. oil seeds in edible oil equivalent		(20)	(20)	(20)
b. edible oil		(70)	(70)	(70)
5. Net availability (2.+4.)		149	160	172
6. Per Capita Availability*		3.86 lbs.	4.03 lbs.	4.23 lbs.

It may be seen from the above table that the per capita availability of edible oil, on the Government's somewhat optimistic assumption of growth in domestic production, remains well below the minimum per capita requirement of six pounds per annum.

Currently the Ministry of Food distributes about 3,000 tons of edible oil per month to urban consumers in the Statutory Ration areas. Beginning in FY 1978 the Government initiated distribution of edible oil to the poorest rural consumers -- the card "A" recipients who have incomes so low that they pay no tax -- in the Modified Ration

* USAID estimates.

system. The estimated requirement for this purpose is about 2,000 tons per month. Thus, total distribution of edible oil by the Ministry of Food is estimated to be about 60,000 tons per year. The remaining supplies are handled by the Bangladesh Sugar and Food Industries Corporation which refines crude vegetable oil in its five factories and sells the refined product and vegetable ghee (shortening) through its own network of wholesale dealers. Beginning in 1978/79 six private refineries will be allowed to import up to 5,000 MT of crude oil for processing and sale.

Donor commitments to supplying vegetable oil are more erratic than for foodgrain. In a typical year, the Bangladesh Government can expect to receive between 2,000 and 5,000 tons of butter oil from the EEC, about 10,000 tons of rape seed oil from Canada and small quantities of soyabean oil from Sweden and the Netherlands.

For cotton, the Government estimates import requirements of 233,000 bales of raw cotton in 1978/79 and 254,000 bales of raw cotton in 1979/80. These figures compare with estimated imports in 1977/78 of 205,000 bales of raw cotton. According to TYP projections these import quantities will be adequate to assure full utilization of the existing looms and spindles.

Special Considerations: Equity and Employment

The figures presented thus far reveal a serious shortfall in the availability of edible oil. This fact is reflected in the spread between the open market price of edible oils and the ration system price, wherein the former is 70 to 80 percent higher than the latter. The provision of edible oil through the ration system to poor consumers, especially those in rural areas who have access to the Modified Ration system, helps to satisfy consumer demand for this essential commodity at prices which are within reach of the poor. Under prospective Title I agreements in FY 1979 and FY 1980 the Mission would endeavor to allocate a significant proportion of the 35,000 tons of edible oil recommended each year to these poor consumers.

The Mission proposes to allocate the 60,000 bales of raw cotton recommended for each of FY 1979 and FY 1980 to the handloom industry. According to the Government, there are now approximately 350,000 looms with each loom employing, on the average, two persons who earn a wage slightly higher than the prevailing agricultural wage over most of the year (e.g. Taka 7 to 8 per day or about 50 US cents). The Government estimates that the village handloom industry is the largest single employer of the rural poor outside of the agricultural sector. The Government also notes that the production of cheap woven cloth (lungis for men and sarees for women) is the single most important cloth consumption item for perhaps 70 to 80 percent of the total population. Cloth is thus an important item in the cost of living index and adequate supplies of imported cotton provide some protection against inflation. In this context, the raw cotton proposed for Title I financing would provide a significant benefit to poor people by sustaining rural, non-agricultural employment and making available cheap cloth to the rural poor.

Granting the Government's ambitious plans for the expansion of domestic production, imports and production, the per capita availability of cloth will increase to only 7.4 yards in 1979/80 as compared to an estimated 6.03 yards per capita in 1977/78.

Usual Marketing Requirements

It may be seen from the above discussion that the Government's annual edible oil import requirements will not be met by a combination of usual donor commitments and the provision of 35,000 tons of edible oil under Title I. While it may be the case that the Government will have to import edible oil with its own foreign exchange resources, no usual marketing requirement should be imposed given Bangladesh's RLDC and MSA status.

It appears that the Government will have to import about 173,000 bales of raw cotton in 1978/79 and 194,000 bales in 1979/80 over and above the 60,000 bales recommended each year under Title I. Bangladesh usually purchases a large proportion of its cotton requirements from the United States. It would be appropriate to establish an untied usual marketing requirement of 130,000 bales for each year. A UMR tied to U.S. purchases is not recommended since the Bangladesh Government purchases large quantities under credits from IDA and other donors via international tenders. U.S. suppliers have been awarded contracts under a majority of these tenders in the past.

Country: Bangladesh

PL 480 Title I Agreements and Shipments

Commodity	FY 1978 Estimate			FY 1979 Request		
	Agreements (000)	Shipments (000)	Carryover (000)	Agreements \$ (000)	Shipments \$ (000)	Carryover \$ (000)
Wheat (MT)	200	200	-	*	*	-
Edible Oil (MT)	30	30		14.3	14.3	35
Cotton (bales)	35	35		19.0	19.0	60
<u>FY 1980 Request</u>						
Commodity	Agreements \$ (000)	Shipments \$ (000)	Carryover \$ (000)			
Wheat (MT)	*	*				
Edible Oil (MT)	16.0	16.0	-			
Cotton (bales)	19.6	19.6	-			

*The Mission's request for wheat is under PL 480 Title III

Note: dollar figures are in millions

PL 480 Title IICARE Food for Work Program

There are approximately 22 million people in the agricultural labor force but only about 13 million person-years of labor are required to do all of the agricultural tasks. This leaves about 9 million unemployed. Many of these are poor itinerant laborers whose normal tasks of planting, irrigating, and harvesting offer only seasonal employment. When these jobs are complete there are few, if any, alternative means of support for these laborers and their families. It appears that even with the most optimistic assumptions, during the next decade there will be a rise in the rate, as well as the absolute level of unemployment and underemployment in rural Bangladesh.

To provide relief to this destitute portion of the population and to utilize this slack economic resource the Bangladesh Government (BDG) has implemented a food relief program in Bangladesh using Title II donated wheat as payment to laborers. The overall goal of this Food for Work (FFW) program is to provide direct relief food and employment to rural landless and near landless people. The Title II resources are used both as an incentive and a wage to laborers for the construction of labor intensive, rural earthwork projects such as irrigation canals, flood control and land reclamation, embankments, roads, and water reservoirs. A more complete description of this integrated Title II Program is provided in the approved Project Paper and related documents.

In FY 1976, the first year of the five-year program, 531 earthwork projects were undertaken, involving payment by the BDG of approximately 51,000 MT of wheat to landless and near landless laborers. CARE reimbursed the BDG with 42,811 MT of Title II wheat representing in-kind payments to approximately 500,000 laborers for 15 million person-days of work to move one billion cubic feet of earth.

In FY 1977, 1,150 FFW projects representing 100,000 MT were approved for implementation. These projects included 510 irrigation canals, 328 flood control and land reclamation

embankments, 143 rural roads, 169 water reservoirs. CARE reimbursed the BDG with 66,200 MT of Title II wheat representing in-kind payments to approximately 700,000 laborers for 23.7 million persondays of work to move 1.5 billion cubic feet of earth.

In FY 1978, 1,020 FFRW projects representing 100,000 MT were approved for implementation. These projects included 355 irrigation canals, 362 flood control and land reclamation embankments, 204 rural roads and 99 water reservoirs. For FY 1978 thru FY 1980 it is estimated that approximately 1,000 - 1,400 earthwork projects will be implemented annually involving payments of 100,000 MT each year to the participant laborers.

The program is an integrated one in the sense that CARE, in addition to programming wheat as a PL 480 Title II Cooperating Sponsor, is also an AID grantee and thus complies with grant documentation and evaluation procedures as well as with normal Title II regulations. This grant is used to finance the dollar costs of operating 2 Regional Field Offices which approve and monitor the FFRW projects as submitted by the local government. Based on CARE's field monitoring, which consists of a certain percentage of field surveying, CARE reimburses the BDG for a percentage of the wheat the BDG utilized in implementing the projects. In FY 1976, for example, CARE reimbursed 42,911 MT of Title II wheat after the government expended 51,000 MT of its own wheat for the projects. The 16% "docking" was the result of projects not completed according to specifications. In FY 1977, CARE reimbursed 66,200 MT of Title II wheat after the government expended 77,472 MTs of its own wheat for the projects. The 15% "docking" was again the result of projects not completed according to specifications. The reimbursement aspect of this unique Title II program reduces losses of Title II wheat and serves as an incentive to the BDG to improve the quality of the projects.

Ration Rate

The ration rate will remain 6.15 lbs. of whole wheat per person, per day for 70 cubic feet of earthwork moved. This rate is adjusted according to soil conditions and the distance the

laborer must move the earth. Thus the program is designed so that the average worker, who has a family of six, will earn 6.15 pounds per day which is equivalent to 2,700 grams of wheat containing 9,203 calories and 340 grams of protein.

Enhancing the Development Potential of FFW Projects

Although the program is oriented toward relief and employment generation at the macro-level, it is evident that at the local level where the projects are designed, approved and implemented, the development potential of the earthwork structures is the primary consideration of the Project Implementation Committee and approving authorities. At times there are unfortunate departures from this norm, but, generally speaking the local leaders are familiar enough with their immediate geographic areas to adequately plan relatively small earthwork projects without the benefit of a large centrally planned master plan for irrigation and road development. The program places faith in this local initiative capability and in doing so strengthens it. It assumes that the local people have the knowledge, the competence and the integrity to undertake the work and that the civil administration can mobilize the people without contractors and with a minimum of advice from engineers.

However, it is still felt that more development impact can be gained by providing more technical assistance to the local leaders during project design and construction. Improved design of the selected project begins with the Project Committees which submit the detailed project proposals and supervise construction. The BDG and CARE have developed a technical manual and distributed it among the Sub-divisional Officers, Project Implementation Officers, Circle Officers, and the COs' technical staff.

The BDG has hired 400 Project Implementation Officers (PIO), 65% of whom are technically trained. Their prime responsibility is to motivate and provide guidance to the FFW Project Committees and to supervise and monitor the implementation of the FFW projects. Each PIO is responsible for an average of 3 CARE FFW projects. This body of civil servants represents the single most influential element in the success of the program. The BDG and CARE are preparing a technical training program

for these civil servants, and throughout the life of the project PIO motivation and competence will remain a continuing concern.

The construction of appurtenant structures such as culverts, sluice gates, small bridges, etc. is considered an important input which could enhance the development aspects of the project. To this end CARE has used its own financial resources in FY 1978 to build 18 structures on a pilot basis. In FY 1979, after gaining experience in their initial construction pilot effort, CARE will undertake 80 FFW pucca work construction projects, again with financial support from CARE/NY. In the process the PIOs and other local engineering staff at Thana level are gathering experience needed to effectively administer a larger pucca works program which USAID is planning to support FY 1980.

Multi Year Program Planning

The Project Paper and the USAID/CARE grant agreement stipulate a five year Title II program from FY 1976 through FY 1980 involving approximately 450,000 MT of wheat and \$2 million to CARE. However, CARE and the USAID prefer not to develop at this time a multi-year plan since each Annual Program Plan contains grant budget figures for the upcoming fiscal year. In addition, CARE and USAID find the annual exercise helpful as a management tool to set priorities and make operational adjustments. The FY 1979 Program Plan will be submitted at the same time as the ABS, and contains a detailed description of the operational aspects of the program. No substantive changes are anticipated for FY 1980.

EVALUATION

Since this is an integrated program a Project Evaluation Summary (PES) report is completed as a part of the regular evaluation each year. This was done in FY 1976 and FY 1977. An AAG audit was also conducted in FY 1976. As part of the AID/CARE grant agreement a special in-depth evaluation was to take place after the second year of project implementation. The Special Evaluation was conducted by a five member team during March and April, 1978. Difficult issues were raised and the final report provided broad guidance for the years ahead. USAID and CARE have also had the benefit of two UN Interagency Special Evaluation Team reports on WFP's parallel Relief Works for Land and Water Development Project.

These reports have provided valuable assistance to BDC, CARE and USAID management in their efforts to maximize program benefits.

There is still much that is unknown about the participating laborers, their families, and the program's nutritional and economic impact on them. To help answer some of these questions in 1977 USAID contacted the Institute of Nutrition and Food Science, University of Dacca to conduct a study entitled the "Economic and Nutritional Effects of the Food for Relief Works Program". Some of the major findings are listed below:

- 1) 57% of the FFW families, which average 6.2 members, have no farm land, and 10% have no homestead. Of those FFW families which have farms the average farm size is 0.33 acres. The FFW farming families show a general preference for share cropping over renting land for a fixed price.
- 2) The average annual cash income of the FFW families is \$ 135.
- 3) 65% of the FFW families are indebted.
- 4) 1% of the FFW laborers are female.
- 5) 75% of the FFW workers have no other job opportunities during the period they are working on FFW projects.
- 6) 97% of the FFW laborers live in houses made of bamboo or straw.
- 7) FFW laborers work an average of 33 days per year on FFW projects and this time represents 13% of their annual full employment.
- 8) Roughly 33% of the FFW laborers sell some wheat earnings. Those who do sell their wheat for cash sell an average of 17% to purchase primarily other food items and some consumer goods.
- 9) The FFW families food intake and nutrient intake is lower than non-FFW families and lower than the national average. This is a function of the overall lower economic status of the FFW families and is not outweighed by the relatively modest increase in wheat intake from FFW.

10) The nutritional status of the landed FFV families is best and that of the landless families the worst.

11) The analysis of food grain price and wage data indicates that FFV wheat has no perceptible food grain price depressing and wage increasing effect in the rural areas.

P.L. 480 TITLE II
(FY) 1980

Country BANGLADESH

Sponsor's Name CAKE/GOVERNMENT OF BANGLADISH

A. MATERNAL AND CHILD HEALTH TOTAL RECIPIENTS _____

No. of Recipients by Commodity	Name of Commodity	(Thousands)	
		KGS	Dollars
_____	_____	_____	_____
_____	_____	_____	_____
TOTAL MCH -		_____	_____

B. SCHOOL FEEDING TOTAL RECIPIENTS _____

No. of Recipients by Commodity	Name of Commodity	(Thousands)	
		KGS	Dollars
_____	_____	_____	_____
_____	_____	_____	_____
TOTAL SCHOOL FEEDING -		_____	_____

C. OTHER CHILD FEEDING TOTAL RECIPIENTS _____

No. of Recipients by Commodity	Name of Commodity	(Thousands)	
		KGS	Dollars
_____	_____	_____	_____
_____	_____	_____	_____
TOTAL OTHER CHILD FEEDING -		_____	_____

D. FOOD FOR WORK TOTAL RECIPIENTS 1,000

No. of Recipients by Commodity	Name of Commodity	(Thousands)	
		KGS	Dollars
<u>1,000</u>	<u>Bulk Wheat</u>	<u>100,000 MT</u>	<u>11,300</u>
TOTAL OF FOOD FOR WORK -		<u>100,000 MT</u>	<u>11,300</u>

E. OTHER (SPECIFY) TOTAL RECIPIENTS _____

No. of Recipients by Commodity	Name of Commodity	(Thousands)	
		KGS	Dollars
_____	_____	_____	_____
_____	_____	_____	_____
TOTAL OTHER -		_____	_____

P.L. 480 TITLE IIIFOOD FOR DEVELOPMENT PROPOSAL*Country: BangladeshDuration: FY 1979 - FY 1980Proposed Annual Input:

<u>Year</u>	<u>Commodity</u>	<u>Amount (tons)</u>	<u>Dollar Level (millions)</u>
FY 1979	wheat	400,000	46.4
FY 1980	wheat	400,000	48.4

Overall Development Effort to be Addressed:

The Bangladesh Government's goal is to achieve foodgrain self sufficiency by 1985/86. This goal can be achieved only by concerted and simultaneous actions to dramatically increase agricultural production and to decrease the rate of population growth. The Mission's Development Assistance program supports major Government projects in these two major sectors.

While the Government's programs may be successful in overcoming the technical constraints to the growth of High Yielding Varieties (HYVs), e.g. increasing the supply of critical inputs and the financing for same, the goal will not be achieved in the absence of a suitable foodgrain price policy environment. Specifically, if the

* Proposal format based upon AIDTO CIRC A-434, Nov. 28, 1977

majority of farmers are to participate in the HYV production program, they must be able to obtain an incentive price for their produce at harvest time. While a critical variable in the achievement of food-grain self sufficiency is improving the terms of trade for rural producers, this cannot be done without careful consideration of the well-being of those people who are very poor or destitute. Therefore, the purpose of the Mission's Food for Development proposal is to stabilize grain prices during the agricultural year. As discussed below, the program will entail the maintenance of incentive prices during the harvest periods, constraining prices during the months when foodgrain supplies are low and the distribution of subsidized foodgrain to the poorest people in the society.

Background and Setting

In the past, the Mission's PL 480 Title I Self Help measures have related to improving the terms of trade for agricultural producers. The Mission has emphasized improving the input cost - output price relationship in such a manner that all farmers, especially sharecroppers, would have an incentive to adopt HYV technology. More specifically, the Mission has emphasized the following: shifting urban purchasing power from the Statutory Ration system, supplied by aid financed foodgrain imports, to the open market supplied by Bangladeshi farmers; increasing the domestic procurement effort to maintain agricultural prices at harvest times; and using free or concessionally financed imported foodgrains to meet the needs of the poor.

These Title I Self Help measures have been partially successful. In 1977/78 the Government mounted a large scale domestic procurement program which effectively maintained open market prices during the major Aman harvest. In this manner one part of the agricultural policy objective was achieved. However, the Government continues to rely on the ration system to constrain prices during those months of the year when foodgrains are in short supply -- the so called lean seasons. The ration system is a large and unwieldy mechanism which has not proven to be completely effective either in constraining prices or supplying the needs of the very poor, who are predominantly rural.

In a typical year the price of coarse rice may fluctuate about 40 percent between the major Aman harvest in December and January and the height of the lean season which occurs in October. Low prices at harvest times are a profound disincentive to the adoption of HYVs. High prices during the lean season reduce the real incomes of everyone in the society but are especially onerous for the urban poor, the rural landless and small farmers who do not grow enough foodgrain for home consumption throughout the year. The vast majority of people would be better off if foodgrain prices were higher at harvest times and lower during the lean seasons. Domestic procurement operations combined with a reduction of foodgrains distributed through the public ration system are the most effective mechanisms for supporting floor prices during the Aman and Boro harvests. Open markets sales are the most effective mechanism for constraining foodgrain prices during the lean seasons (approximately March - April and August - October). The World Bank's recent report on the "Food Policy Review" (No. 1764a-BD) emphasizes that open market sales would be more effective in stabilizing prices during the lean seasons than the distribution of foodgrains through the ration system. The World Bank estimates that the Bangladesh Government would need to sell only two thirds as much of a given volume of foodgrain in the open market as they would need to distribute through the ration system to achieve the same effect on market prices. The Bank's report recommends that the Government strive to constrain the annual price fluctuation within a range of 20 to 25 percent.

Program Description

The PL 480 Title III Food for Development program would have four distinct components: (a) maintenance of incentive prices to farmers; (b) open market sales to control prices during the lean seasons; (c) the distribution of subsidized foodgrain to poor rural consumers through the Modified Ration System; and (d) the utilization of the sales proceeds for agreed development purposes. Each of these components is discussed below. The two year program would be subject to an evaluation after the first year.

A. Incentive Prices to Farmers

The two year Title III agreement would include an explicit undertaking by the Bangladesh Government to maintain open market foodgrain prices during the harvest seasons through its domestic procurement program. This undertaking would be expressed as a target range within approximately Taka 5 to 10 per maund of the Govern-

ment's official domestic procurement prices for various crops.* The maintenance of a given price is preferable to the establishment of a finite procurement target, e. g. 500,000 tons, since it is impossible to forecast future agricultural production with any precision in Bangladesh. The existence of a procurement target could lead the Government to undesirable forced purchases at times when such purchases were not needed on price maintenance grounds. The Agreement would also provide for an annual review of the Government's official domestic procurement prices to ensure that the margin between output prices and input costs is adequate to promote the adoption of HYVs and locally improved varieties among small farmers and sharecroppers.

B. Open Market Sales

The two year Title III agreement would include an undertaking by the Bangladesh Government to initiate open market sales during the lean seasons. The lean seasons are March - April, immediately before the Boro rice harvest, and August - October, prior to the major Aman harvest. The sales program would include the following features:

1. Foodgrain sales would be confined to wheat only. To this end, the U. S. Government would provide 300,000 tons of wheat under the Title III agreement.

2. The points of sale would be all of the Ministry of Food's Central Supply Depots (CSDs) and Local Supply Depots (LSDs) outside the six urban Statutory Ration areas. These facilities are spread throughout the nineteen districts of Bangladesh and provide an adequate logistical base for open market sales.

3. The Ministry of Food would offer wheat for sale to any Licensed Dealer in any quantity above a minimum sized lot of 10 maunds** (823 pounds) from the CSD or LSD godowns. There are approximately 50,000 Licensed Dealers and their primary qualification is that they own a shop or stall in village bazaars and hats (weekly markets).

* \$ US 1.00 equals Taka 15.

** One maund equals 82.29 lbs or 37.33 Kg.

4. The sales price to the Licensed Dealers would be fixed each year and would remain valid throughout the lean seasons. Illustratively, the sales price for wheat would be fixed at between Taka 85 to 90 per maund (the approximate C & F price for wheat at Chittagong port). Such prices would compare with the Statutory Ration price of Taka 80 per maund and the official procurement price for wheat of Taka 84 per maund.

5. The Licensed Dealers would be free to sell the wheat at any price to consumers.

Some of these features require explanation. Wheat is proposed as the sole open market sales commodity since it is less costly and more nutritious than rice. More importantly, poor consumers can better afford to purchase wheat during the lean season. In addition, a significant level of wheat sales will depress coarse rice prices. The 1977 lean season was instructive on this point: high levels of wheat offtakes through both the Statutory Ration (urban) and Modified Ration (primarily rural) systems depressed the price of coarse rice even while other commodity prices continued to rise. The difference is that with open market sales, the effect on prices will be more substantial.

Another consideration is that if the Government's sale price of wheat is fixed for the entire season, the Ministry of Food would not be required to make technical judgments as to timing, quantity or pricing. Related to this, a sales system wherein the Government will sell to any or all of the 50,000 Licensed Dealers assures that the private trade will not be able to establish a localized monopoly position vis a vis consumers. Presumably, the difference between the Government's price at CSDs and LSDs to Licensed Dealers and the retail price to consumers would reflect, primarily, transportation differentials and a small profit margin. It should be noted, however, that a key to the success of open market sales will be the Government's public commitment to meet the wholesale demand, whatever it may turn out to be, at the fixed price throughout the lean season. Another check on potential hoarding is that the lean seasons precede major harvests and for this reason the private trade is aware that stocks cannot be held indefinitely.

C. Distribution of Subsidized Foodgrain to Poor Consumers

While open market sales during the lean season will increase the real incomes of all consumers by constraining prices, there are those in the society whose purchasing power is so weak that the program would have only limited impact on them. For the immediate future, the Government is convinced that it must continue to distribute foodgrain at subsidized prices to the poorest elements in the society. During the August - October lean season the most effective mechanism is the Modified Ration System; during the March - April lean season the best mechanism is Food For Work, which the U.S. is supporting with a grant to CARE and Title II wheat. Accordingly, the two year Title III agreement would provide 100,000 tons of wheat each year to be allocated to the Modified Ration system for distribution to those persons in the "A" category, i. e. whose incomes are so low that they pay no tax whatsoever to the Government. While income statistics are unreliable, the comparable standard in urban areas for "A" class is a family income of less than Taka 100 per month (i. e. less than \$ US 7). The ration price of wheat is Taka 80 per maund which would be approximately Taka 10 to 15 less than a prospective open market price of wheat or Taka 60 to 70 less than the usual coarse rice price during the lean season.

D. Use of Title III Sales Proceeds

Under the terms of a Title III agreement, the proceeds from the sale of Title III wheat would be segregated from general revenue receipts by the Bangladesh Government.

The Title III agreement would specify that the sales proceeds would be used to support the Government's development projects particularly in the priority areas of agriculture, rural development, population control and health. Projects would be listed by title and the estimated amount of Taka sales proceeds to be attributed to each. In the selection of suitable projects, special care would be taken to assure that the activities will directly benefit the poorest people in the society, and that the resources thus applied to the project are "additional".

Upon receipt of periodic reports from the Bangladesh Government that the sales proceeds have been utilized in the agreed manner, and upon an independent confirmation by the USAID, the Government's dollar repayment obligation under the Title III Agreement would be reduced by the equivalent amount.

Program Requirements

Since neither the price elasticity of demand for wheat nor the cross elasticity of demand of wheat for rice are known, it is not possible to estimate the total amount of wheat required for open market sales during the lean seasons. Moreover, it is impossible to estimate with any degree of accuracy the size of the three major rice harvests and the small wheat harvest. In particular, the Aus crop which is harvested in July and August at the beginning of the August - October lean period is very susceptible to flooding which can alter drastically the ultimate size of the harvest. In addition, we have very little reliable information on per capita consumption of foodgrain or the volume of foodgrain transactions in the private sector. For example, the World Bank has estimated that private sector grain transactions may be about equal to the volume of food distributed through the ration system in any given year, e. g. 1.5 to 1.9 million tons, but other observers estimate private sector transactions as being two to three times larger.

Given the many unknowns about the marketing of foodgrain in Bangladesh the Mission and Bangladesh Government agree that the best approach is to test open market sales and to evaluate the impact upon prices and the ration system. For the first year's effort it is believed that 300,000 tons of wheat may constitute a fair test of open market sales. Illustratively, perhaps 200 to 250,000 tons would be made available for sale in the August - October lean period and 50 to 100,000 tons for the March - April lean season. Based upon an evaluation of the first year program, discussed below, the volume of foodgrain made available for open market sales may be adjusted.

It is important to recognize that the private grain trade may react to the open market sales program in unexpected ways. For example, it is conceivable, but not anticipated, that private traders would purchase the entire available stock in the first few weeks of the sales

program for the purpose of hoarding until prices rise later in the lean season. Such a response would indicate that the possible scope of open market sales is much larger than we currently envisage. Presumably, a very high level of open market sales would be partially offset by some reduction in ration system offtakes; however, the possibility exists of a larger requirement for foodgrain imports than we are currently projecting.

The 100,000 tons allocated to the Modified Ration system represents about one quarter of the annual requirement for this category of the public distribution system. If the amount allocated to open market sales proves to be too large, the difference would be reallocated to the Modified Ration.

Evaluation

The two year Title III agreement would provide for an evaluation of the first year's experience prior to reaching a decision on the exact allocation in the second tranche during FY 1980. The ultimate test of the program is whether -- through a combination of domestic procurement during the harvest seasons and open market sales during lean seasons -- foodgrain prices can be contained within a range of 20 to 25 percent between the low and high points in the cycle.

The lower limits of this measurement are based upon the set of official domestic procurement prices for rice and wheat. These prices have been established with due regard for their relationship to input costs, credit costs and terms of sharecropping. The procurement prices are believed to offer an adequate incentive to promote the adoption of HYVs among small farmers and sharecroppers. Taking the example of coarse rice (which includes the most important HYVs and locally improved varieties), the procurement price is currently Taka 132 per maund. By the terms of the agreement the Government would endeavor to maintain this price through its procurement drive. However, it is unlikely that this price could be maintained precisely, especially during the major Aman harvest. Assuming that the Government's procurement drive is largely successful, the open market price might be maintained within five percent of the official price. Thus, the lower practical limit would be about Taka 126 per

maund. With this figure as the base, the upper limit would be 20 to 25 percent higher or about Taka 151 to 157 per maund respectively. Thus, during the lean seasons the Government would initiate open market sales in an attempt to contain the price of coarse rice within the Taka 157 per maund limit. Here we note that this example is merely illustrative since the actual finite limits will have to be established each year taking into account overall price levels and an annual re-evaluation of the input cost - output price relationships.

The Ministry of Food will provide detailed monthly reports of its procurement operations, ration system offtakes and open market sales. This data will be adequate for assessing the volume of these transactions. To assess open market prices, the Mission will use the daily price reports published by the Ministries of Food and Agriculture which together cover 67 significant markets around the country.

In addition, the Mission will use its own staff resources to monitor wholesale transactions between the Ministry of Food and Licensed Dealers and to assess retail sales in village markets. Information gathered in this manner may be used to improve the open market sales mechanism.

Finally, the Bangladesh Government has agreed to segregate projects which will be supported with Title III sales proceeds in its Annual Development Plan and to provide a separate accounting to the Mission of the actual utilization of these resources. The Mission will engage in limited monitoring of the work actually accomplished with the sales proceeds.

In summary, the Mission believes that there will be an adequate data base to perform a careful evaluation of the program.

Foodgrain Shipments and the Bellmon Amendment

The Bellmon amendment to PL 480 requires the Secretary of Agriculture to certify that shipments of foodgrain will not pose a significant disincentive to domestic agricultural production and that the Government has adequate storage capacity to handle the

shipments. In most circumstances, the Title III foodgrain shipments would occur well in advance of the lean season in which they would be used for open market sales. However, the Mission can envisage a situation wherein the Government's stock levels may be too high to permit a Bellmon Amendment certification before the lean season. Therefore, the Title III agreement should allow for this contingency by permitting the shipment of foodgrain after the Bangladesh Government has used its own stocks for open market sales. In this situation, the Government should be given credit for generating the Taka proceeds at the time of sale so that these resources may be utilized, in turn, for agreed development purposes.

TABLE I
 Program Analysis for the Oral and Condom Supplies Needed to Achieve Full Availability
 (THOUSANDS)

	1977	1978	1979	1980	1981	1982
A. Full Supply Analysis						
1. Married women of reproductive age $\angle 1$	13,409	13,771	14,129	14,492	14,857	15,262
2. 65% of line A1 (Contracepting women required to achieve replacement fertility)	8,716	8,951	9,184	9,420	9,657	9,920
3. 70% of line A2 (Contracepting women utilizing orals & condoms) $\angle 2$	6,101	6,266	6,429	6,594	6,760	6,944
4. Annual stock requirements for "full availability" $\angle 2$						
a. Orals 60% of line A3 x 13 monthly cycles	47,588	48,875	50,146	51,433	52,728	54,163
b. Condoms 40% of line A3 x 100 units	244,040	250,640	257,160	263,760	270,400	277,760
B. Annual New Supply From Non-AID Bilateral Sources						
1. Private Commercial Sector (PSI & Organon)						
a. Orals	1,318	1,624	1,848	2,074	2,302	2,532
b. Condoms	17,319	21,000	23,000	25,000	27,000	29,000
2. Other Donors (IPPF, DANIDA, FPIA, UNFPA)						
a. Orals	4,016	4,085	2,734	3,000	3,000	3,000
b. Condoms	33,744	39,208	47,589	50,000	50,000	50,000
3. Host Country Government Procurement						
a. Orals	0	0	0	0	0	0
b. Condoms	0	0	0	0	0	0
4. Total In-Country Stock						
a. Orals	5,334	5,709	4,582	5,074	5,302	5,532
b. Condoms	51,063	60,208	70,589	75,000	77,000	79,000
C. Gap to be filled to Achieve "Full Availability"						
1. Orals (line A4a less line B4a)	42,254	43,166	45,564	46,359	47,426	48,631
2. Condoms (line A4b less line B4b)	192,977	190,432	186,571	188,760	193,400	198,760
D. AID Bilateral Supply Objectives						
1. Orals	11,250	13,300	16,700	18,800	19,800	24,600
2. Condoms	58,224	66,254	81,648	102,082	119,074	141,365
E. Total New Supply						
1. Orals (line B4a plus line D1)	16,584	19,009	21,282	23,874	25,102	30,132
2. Condoms (line B4b plus line D2)	109,287	126,462	152,237	177,082	196,074	220,365
F. Remaining Supply Gap						
1. Orals (line A4a less line E1)	31,004	29,866	28,864	27,559	27,626	24,031
2. Condoms (line 4Ab less line E2)	134,753	124,178	104,923	86,678	74,326	57,395
G. People Gap						
1. Orals (line F1 divided by 13)	2,385	2,297	2,220	2,120	2,125	1,848
2. Condoms (line F2 divided by 100)	1,347	1,242	1,049	867	743	574
3. Total (line G1 plus line G2)	3,732	3,539	3,269	2,987	2,868	2,422

$\angle 1$ - Actually "eligible" women (16% of total population)

$\angle 2$ - Revised percentages reflect BDG program mix.

Table 2
AID Bilateral Logistic and Financial Analysis
of Orals
(Thousand M/C)

	C A L E N D A R					Y E A R
	1977 /4	1978	1979	1980	1981	
A. <u>AID Inventory Analysis</u>						
1. Beginning of year stock /1	7,663	12,358	15,453	19,938	23,666	
2. Add: Scheduled deliveries /2	11,250	13,300	16,700	18,800	19,800	
3. Less: Expected Use /3	6,555	10,205	12,215	15,072	17,768	
4. End of Year Stock /1	12,358	15,453	19,938	23,666	25,698	

To be completed AID/Washington

B. Financial Analysis(CY)

1. Calendar Year 19CY deliveries(line A2 above)
2. Estimated cost per unit in FY of purchase
3. Estimated total cost for FY 19CY (to be determined by AID/W)

C. Financial Analysis(BY)

1. Calendar Year 19BY deliveries(line A2 above)
2. Estimated cost per unit in FY of purchase (to be determined by AID/W)
3. Estimated total cost for FY 19BY (to be determined by AID/W)

/1 - Stock in BDG program only
 /2 - AID Bilateral only
 /3 - Projections based on use currently reported to USAID which includes BDG program, PSI and BFPA but does not include FPIA and other voluntary agency programs.
 /4 - Adjusted figure, 1976 Annual Report contained incomplete year-end supply data.

Table 3

AID Bilateral Logistic and Financial Analysis
of Condoms

(thousand pieces)

	C A L E N D A R Y E A R				
	1977	1978	1979	1980	1981
1. Beginning of year stock /1	61,902/4	73,819	71,903	71,951	87,073
2. Add: Scheduled deliveries /2	58,224	66,254	81,648	102,082	119,074
3. Less: Expected Use /3	46,307	68,170	81,600	86,960	102,510
4. End of Year Stock /1	73,819	71,903	71,951	87,073	103,637

To be completed by AID/Washington

A. AID Inventory Analysis

1. Beginning of year stock /1
2. Add: Scheduled deliveries /2
3. Less: Expected Use /3
4. End of Year Stock /1

B. Financial Analysis(CY)

1. Calendar Year 19CY deliveries(Line A2 above)
2. Estimated cost per unit in FY of purchase
3. Estimated total cost for FY 19CY(to be determined by AID/W)

C. Financial Analysis(BY)

1. Calendar Year 19BY deliveries(Line A2 above)
2. Estimated cost per unit in FY of purchase
(to be determined by AID/W)
3. Estimated total cost for FY 19BY (to be determined by AID/W)

/1 - Stock in BDG program only

/2 - AID Bilateral only

/3 - Projections based on use currently reported to USAID which includes BDG program, PSI and BFPA but does not include FPPIA and other voluntary agency programs.

/4 - Adjusted figure; 1976 Annual Report contained incomplete year-end supply data.

RESEARCH AND DEVELOPMENT

While USAID has an on-going grant-funded program of project and policy related research in support of its overall development objectives in Bangladesh, there exist some research areas which either are beyond the Mission's capabilities to address or which are not specific to Bangladesh alone and as a result may be appropriate for AID central bureau attention. These include the following:

Rural Energy Sources Assessment: There exists in Bangladesh a subtle competition among food, fuel and fertilizer that we do not fully understand. All three, however, represent sources of energy that justify policies and programs for their development and conservation. For example, when cow dung is used as fuel to parboil rice it is no longer available as an organic fertilizer to go back into the soil. Yet technologies apparently exist that can generate both methane gas for cooking as well as organic byproducts as fertilizer. An assessment of how other countries are generating and conserving fuel at the farm level could prove to be useful.

The Nutrition Effects of Health Delivery Systems: The Mission could benefit from a survey of other countries' experiences in linking nutrition and health programs in the field. We need to know what economies of operation can be achieved by introducing nutrition explicitly into health care extension.

International Professional and Technical Migration: The loss of trained Bangladeshis to the oil-exporting countries of the Middle East is greatly limiting the government's capacity to manage and implement development programs. Other developing countries in the region are, reportedly, experiencing a similar "brain drain." The World Bank presently has underway a study to assess the impact on BDG development programs of the outflow of managerial and technical talent. This follows on a similar study done in India.

The Mission has been advised that another study, looking at the demand for talent from developing nations by the Middle Eastern countries, is about to get underway. It may be appropriate for AID/W to explore, with the Bank, additional work in this field. One suggestion would be to assess the cost/benefit "trade-offs" of labor export promotion policies to earn foreign exchange and development programs in selected LDCs.

Tropical Forestry Development Research: In Bangladesh CARE is experimenting with a rapid-growth tree of the leucaena family, popularly known as Ipil - Ipil which could have broader potential in South Asia -- and other parts of the tropical developing world -- by contributing to the solution of fertilizer, animal food, fuel, erosion and shelter problems. Centrally funded research, comparing experiences on the growth and utilization of Ipil - Ipil could contribute to accelerating its introduction into USAID country programs.