

PA-ABS-316

11/12/10

SESSION 2: HISTORY OF PUBLIC FOOD INTERVENTIONS

Background paper (2b):

HISTORY OF FOOD AID IN BANGLADESH

Monday, May 2, 2:00-3:30

Presenter: David A. Atwood, USAID

A SEMINAR ON EVOLVING FOOD MARKETS AND FOOD POLICY IN BANGLADESH

May 2-4, 1994

Jointly sponsored by:

MOF

IFPRI

USAID

PA-ABS-316

HISTORY OF FOOD AID IN BANGLADESH

David A. Atwood
A.S.M. Jahangir
Herbie Smith
Golam Kabir

International Food Policy Research Institute
Bangladesh Food Policy Project

Reproduction and Distribution funded under USAID Contract No.
DAN-4111-B-00-9112-00, Delivery Order No. 7

May 1994

May 17, 1994

HISTORY OF FOOD AID IN BANGLADESH

David A. Atwood, A.S.M. Jahangir, Herbie Smith, and Golam Kabir ^{1/}

I. Introduction

The purpose of this paper is to provide an overview of food aid trends, motivations, and impact in Bangladesh. Bangladesh has been the second most important recipient of food aid worldwide -- after Egypt -- for two decades, until an abrupt reduction of food aid tonnages in 1992/93. Providing more than half of Government food supplies, and often stipulating the distribution prices and channels for their donations, has made the food aid donors important actors in sustaining the Government food distribution system and in affecting the decisions that govern it.

Government and donor motivations, goals, and actions in the food sector have overlapped, but they have not been identical. Government actions and concerns -- described in a companion paper by Ahmed and Chowdhury -- find their genesis in the old Famine Codes, in the ration channels set up after the Great Bengal Famine of 1943, and especially in the lessons learned from the famine in 1974. Government actions and concerns have also been conditioned by public perceptions, fiscal and foreign exchange constraints, and the need to maintain the support of the middle class and military in a fragile political environment.

Donor motivations have been more straightforward. For much of the Pakistan period, the original surplus disposal and trade promotion goals of US Public Law 480 (PL 480) provided the rationale for food aid (Epstein, ITDEF). The US was the principal supplier of food aid during the Pakistan period because PL 480 was the main source of food aid worldwide. Pakistan's first food aid shipments were sent from the United States in 1955. With US amendments to the law in 1959 and again during the 1960's, humanitarian goals became increasingly important in PL 480, as did the concern about growing local currency accounts (ITDEF) in countries such as Pakistan, whose payments for PL 480 food were made in rupees. This broadening of PL 480 objectives permitted the initiation of the East Pakistan Rural Works Program in 1961, funded from PL 480 local currencies. (Sobhan, 1968)

Humanitarian concerns became the overwhelming motivator of food aid shipments to Bangladesh in the two years after Independence in 1971. Following the first few months after Independence, during which India was the chief food aid supplier (Sobhan, 1982), the world community responded with shipments from a number of different countries, while the new Government also began significant commercial imports. Despite war-related disruption in food production, infrastructure and marketing, the new nation of Bangladesh was able to avoid famine in the early post-war years, in part through generous food aid contributions and Government commercial imports.

However, during several critical months in 1974, food imports fell to a trickle. BDG ability to import foodgrain commercially was exhausted due to near depletion of foreign exchange reserves from prior year food imports, and the rising price of foodgrains on world markets. At the same time, donor food aid fell significantly.^{2/} Three factors accounted for reduced food aid levels. First, the US-Soviet grain deal and broader international market developments -- through the effects on prices and availability -- meant that there was less food aid available worldwide. Second, donor fatigue with what was increasingly perceived as a compromised post-Independence relief effort involving unacceptable levels of graft and corruption (McHenry and Bird; Gerin - Lajoic; "1974 famine...") accounted for some of the reduction. Third, food aid from the United States stopped abruptly as a result of a US policy dispute with the Government regarding exports of jute sacks to Cuba, at a time when certain observers and policy-makers saw food aid (and the threat of withholding it) as a worthy and direct instrument of US foreign policy in the Cold War era. (Rothschild)

This reduction in food imports and food aid was followed by flood and famine, events which would affect donor and Government food aid and food policy actions for the next twenty years. The remainder of this paper discusses the 1974 famine, its aftermath, and the lessons donors drew from it; the application of those lessons to targeted food aid programs and to donor policy dialogue with the Government on food market liberalization; the uses of local currencies from food aid sales; major changes in the food sector which have become manifest in the past two years; and the implications of those changes for donor and Government food aid decisions in the future.

II. The Aftermath of the 1974 Famine

The causes of the 1974 famine are well documented. Prices tripled while wages were falling, making it impossible for very poor people to purchase adequate food. Estimates of famine-related deaths range between 26,000 and 1.5 million. (Sen, Quddus and Becker) Both the price rise and the fall in wages were triggered by the negative impact of severe flooding on the monsoon rice crop. Traders' overreaction to news of the upcoming bad monsoon crop, together with the failure of Government stocks to effect a credible market intervention to moderate prices, are widely seen as the cause of the price hike.^{3/} (Sen, Ravallion; 1990 Quddus and Becker; "1974 Famine;" Crow, n.d.; Crow, 1990.)

Donors, Government, and outside observers drew a number of lessons from the famine. Three of these affected future food aid programs. First, it became clear (several years before AK Sen's work on food entitlement earned global academic currency for the notion) that the famine resulted from poor people being priced out of the market by high food prices. Second, inadequate Government stock levels were seen as a critical element in the famine. Third, the "food ration channels" were seen at best as ineffective and at worst as contributing factors in famine

mortality.

Understanding how donors came to draw these lessons, and the impact they had on subsequent food aid programs, requires some understanding of the Bangladesh Public Food Distribution System at the time of the famine. The PFDS was composed of several food distribution channels, some of them established in the wake of the Great Bengal Famine of 1943 with the intent of preventing future famines. The bulk of Government food distribution was through the "ration channels," subsidized sales channels for urban dwellers, the uniformed services, and some rural people. Figure 6 illustrates the relative importance of these channels over time. The ration channel for rural people was called "Modified Rationing." In addition, some "relief channels" existed which provided food at no cost to destitute people.

Political uncertainty and instability following Independence led to a shift in the focus of the PFDS. Prior to Independence most PFDS offtake was directed towards relatively poorer urban and rural people, as reflected both in the relative weight of different ration channels and in the predominance of wheat, considered an inferior good by middle class consumers. Expanding the ration channels 3/ for urban dwellers was one way the new Government tried to reestablish stability and consolidate its political base in the years immediately following Independence. (Clay, 1978)

The result, however, was that the ration and relief channels which were not directed at middle class urban people and the police and military became residual channels. In a supply crisis, the "priority" ration channels for politically important groups maintained normal distribution levels at the expense of those channels directed more at poor people. (Clay, 1978; Eureka; Ravailon, 1990; Sobhan, 1982) This is precisely what happened when Government food stocks were constrained by inadequate supplies of food aid and imports in 1974. While prices, crop loss, and declining wages were making more and more poor people, especially in rural areas, dependent for their well-being on Government action, distribution through the channels directed at rural areas was declining because of the overall Government supply shortage, and the Government's maintaining past levels of offtake in the other, "priority" ration channels. (Clay, 1978; Ravailon, 1990)

Had Modified Rationing and the relief channels been more than a residual, Government in late 1974 could have shifted some supplies from the "priority" channels to meet the needs of the most vulnerable rural groups and thereby averted some of the deaths that occurred. (Sen; Ravailon, 1990; Clay, 1978; Stepanek) The priority of the ration channels for the urban middle class was widely seen by food aid donors as one key reason for famine deaths. Joe Stepanek. It was disproportionately the rural poor who were victims of the famine (Sen).

As a result of the 1974 famine, donors for the next two decades would veer on the side of too much rather than too little food aid when faced with uncertain food needs in Bangladesh. They would push for improvements in targeting of food aid, and in policies affecting the PFDS, but with only rare exceptions would they push so hard as to slow down or jeopardize continuing food aid shipments to keep PFDS stocks at adequate levels. For the first several years following the famine, donors were willing to provide substantial stocks to Government ration channels, even knowing that these stocks would in large measure be sold to middle class people during non-crisis years. US provision of quantities of monetized rice -- resulting from the relative availability of rice in worldwide PL 480 programs in some years -- only increased the likelihood that the direct beneficiaries of PL 480 would be the middle class. Donors also encouraged, and in some cases funded, Government doubling of public storage space for foodgrains over the next decade.

Donor willingness to provide foodgrains to middle class ration channels -- even in normal production years -- and to fund the construction of more public storage was based primarily on a concern that adequate public stock levels be maintained to respond to future food crises, and to ensure that the "residual" channels aimed at poor people would have enough food during a crisis. By the mid-1970's food aid budgets worldwide remained tight, relative to needs; Bangladesh continued to receive major food aid tonnages not based on surplus disposal motivations, but rather on donor concern about avoiding a repeat of the 1974 famine.

In addition, donors likely supported public stock levels in the knowledge that inadequate stocks for the ration channels would lead to discontent in the middle class and military, and provoke further political instability (McHenry and Bird; Hartman and Bryce, 1979). While most donors slowly shifted their food aid programs away from the ration channels and into targeted programs, or began to attach conditions to their ration channel programs which they hoped would support growing foodgrain production and sounder distribution, these changes took years to effect.

The 1974 famine also had an aftermath which further affected donor and Government thinking. The monsoon harvest in 1975 was a good one. In addition, monetary changes, and the substantial food aid imports which arrived too late for the 1974 famine led the price of rice to decline substantially. Government maintaining PFDS offtake in the ration channels kept prices at low levels. (Stapanek; Clay, 1978; Clay, 1981). The reduction and stagnation of grain prices led to growing donor concern that increasing foodgrain production would be difficult in a climate of low prices. Donor and Government concerns about security stocks, ration channels, and getting food to poor people, were thus complemented by a growing concern that Government food supply decisions needed to be implemented in ways that did not undermine production incentives.

A dialogue on these issues was begun, initially by USAID and then the World Bank, and ultimately involving -- formally or informally -- most of the food aid donors. Each side has been constrained by its own institutional and -- especially for the Government -- political concerns. The Bangladesh Government has been constrained by the political requirement of meeting the food needs of the uniformed services and urban middle class, and -- until the mid-1980's -- of not increasing rice producer prices so much as to undercut jute production. Donors have been constrained by the availability of certain commodities, and the difficulties of getting food aid to arrive in time to respond to a crisis. Both sets of actors, however, have tried within the constraints they face, to effect changes in the food system to prevent a recurrence of the 1974 famine while creating an environment for greater foodgrain production. Changes to promote a more conducive agricultural environment -- whether rural infrastructure or better pricing policies -- have been slow, however, because the stocks and supply concern dating from 1974 has been predominant.

As a result of the 1974 famine, donors initiated three sets of long term food aid activities. First, new "relief" programs targeted on poor rural people were initiated and became major undertakings, in particular Food for Work (FFW) and Vulnerable Groups Feeding (VGF), later Vulnerable Groups Development (VGD), and -- in the 1980's -- the Rural Maintenance Program (RMP). Second, some donors used food aid commodities and conditionalities to initiate policy discussions with the Government. The focus of these policy discussions was to reduce ration channels for the middle class, create and then expand an "Open Market Sales" mechanism capable of dampening unacceptable price increases, increase public sector storage capacity, and procure adequate stocks to safeguard OMS and provide incentives to farmers, and liberalize private foodgrain trade and import. Third, donors and Government agreed on the use local currencies from sales of food aid for a variety of activities intended to increase food production.

III. Targeted Food Aid Programs

The three noteworthy relief or "targeted" programs since Independence have been Food for Work (FFW), Vulnerable Groups Feeding (VGF, later Vulnerable Groups Development (VGD), and the Rural Maintenance Program (RMP).

III.a) Food for Work

In the place of the gratuitous relief channel of the first post independence years, the BDG in 1974 launched the national Food for Work program with 32,000 MT of wheat from its own resources. The FFW program was to provide direct food relief and employment to rural landless and near landless people in return for their labor in the construction of rural earthwork projects such as irrigation canals, flood control and land reclamation embankments, roads and water reservoirs that could ultimately

lead to increased economic opportunity. This redirection in policy came, in part, as a reaction to donor concern that the GOB's ration system provided little help to the rural poor and that more emphasis must be placed on directing food to the poorest segments of society.

Lending assistance to the BDG effort, the World Food Program (WFP) pledged 56,000 MT of wheat under project 2197Q "Relief Works Program for Land and Water Development". Shortly after the WFP program began, in October 1975, CARE with USAID dollar assistance and PL 480 Title II wheat initiated its FFW program. These early FFW projects also used wheat from other donors, Australia, Canada, (West) Germany, Canada, and Libya.

By 1976 FFW projects nation-wide programmed over 200,000 MT of wheat to 2.5 million laborers for constructing 2,166 miles of canal, 2,164 miles of embankment and 900 miles of road. Food for Work has continued uninterrupted till the present, the total annual tonnage growing to nearly 600,000 MT in 1991-92. Since its beginning over seven million MT of food commodities have been imported to support FFW programs. (INFS, 1978; Chowdhury, 1983)

Although mass labor has been used in the construction of rural infrastructure since the times of the Zamindars, the origin of Food for Work in Bangladesh is found in the decade prior to Independence. In 1961, in an attempt to redress the imbalance of resources that existed between East and West Pakistan, the Harvard Advisory Group attached to the Pakistan Planning Commission conceived the idea of a Rural Public Works Program for East Pakistan to put the underutilized manpower of Pakistan to work on nation-building projects. The program used PL 480 counterpart funds generated from a four year Title I Agreement with Pakistan valued at 620 million in food commodities, to build infrastructure in partnership with the local councils. It was an American conceived and financed program. (Sobhan, 1968) Because past efforts to mobilize volunteer labor for public works had failed, the new program would use cash to pay laborers for their work.

In 1962, the Academy for Rural Development in Comilla (now known as Bangladesh Academy for Rural Development-BARD) was asked by the Government to undertake pilots to assist in the design of the Rural Works Program (RWP). In the words of the then Director of the Academy for Rural Development, Akhter Hameed Khan, "the Academy's research helped in designing a Rural Works Program to build essential infrastructure. It laid the foundation for rural progress. It brought gainful employment to large numbers of landless laborers during the dry winter months, the slack season for farming. It resolved the tragic paradox of thousands of sturdy men sitting idle. There was on the one hand in our overcrowded villages an army of unemployed and on the other a crying need for earthwork. Here was a program to put them together as a key is put in a lock. It grappled simultaneously with two great problems". (Khan, 1983)

Interestingly the objectives of the Rural Works Program designed in 1961 were very similar to those of fourth phase of the CARE FFW program, Integrated Food for Development, that has recently been approved for the 1994-1999 period. The objectives of the RWP were:

- A. To relieve unemployment in rural areas
- B. To build a network of roads and drainage
- C. To make local councils vital institutions
- D. To secure popular participation

The Rural Works Program was implemented throughout East Pakistan in 1962, and continued until 1968. During that period rural infrastructure projects (rural roads, bridges, culverts, canals, embankments) valued at nearly 872 million rupees were constructed. During the 1961-68 period the RWP generated 208 million person days of labor.

The RWP was totally funded from PL 480 generations from 1961 through 1969. After independence the BDG attempted to continue the program in order to provide rural communities with seasonal employment but inflation during the 1970s seriously eroded the program. This was in sharp contrast to the growth in the FFW programs fueled by donated food aid and, as such, FFW essentially replaced RWP. (Brundin, 1978)

In many respects the FFW program follows the RWP model. The participation of local government in the identification, management and implementation of projects or schemes (known as local initiatives or LI schemes in FFW today) was an important component of RWP. As a result of its RWP pilots, the Academy For Rural Development found that rural people were quite capable of undertaking a works program, but only after that intensive training of officers and local officials this was essential to avoid problems generated by less than rigorous supervision. This include faulty planning, the intervention of special interests, the tendency to misappropriate, carelessness with accounts, and short payments to laborers. Over the years, these same problems have been also been major constraints to FFW having greater developmental impact. The RWP experience could have yielded many lessons that, perhaps, would have shortened FFW's evolution to a developmental program.

A Targeted Intervention:

The Food for Work Program provided a food wage to workers engaged in the construction and rehabilitation of rural infrastructure. Wheat was channeled to the Ministry of Relief and Rehabilitation, the BDG institution responsible for the implementation of FFW projects. It was to serve principally a relief function, and was targeted on certain categories of people whose need for relief was most urgent. One way to reach the poor is to build incentives into the project to encourage their participation and discourage that of the non-poor. Moving earth for in-kind payment in wheat, considered an inferior consumption good, was

the targeting mechanism. The program was also implemented during the slack agricultural work season (the dry season from mid-December to mid-March) when harvesting was over, and cultivation had yet to begin, rural unemployment was most acute.

Early studies conducted by the Institute of Nutrition and Food Science (INFS) for USAID in 1978 and the Bangladesh Institute of Development Studies (BIDS) in 1983 tested the assumption that the FFW projects were in fact reaching the landless or near landless (by definition in the rural agrarian society the landless have fewer assets). By conducting a social, economic and nutritional survey of the FFW laborers the INFS study found 84% of the FFW workers to be day laborers and 57% without farmland. The families of FFW recipients had a food intake lower than non FFW recipient families (except for wheat). The INFS study documented that the program was in fact getting wheat and directing employment to the right people. However, this early study candidly noted that the effect of the FFW wheat on the laborer's consumption is very difficult to establish. (INFS, 1978)

In the BIDS study, Osmani and Chowdhury divided FFW impacts into short and long run impacts. The short term effects were those felt during the execution of the project: employment and food distribution. The long term effects are generated from completion of the project and emanate from the impact of the physical infrastructure. The study focused, quite appropriately for the early days of FFW, on the short run impacts:

- 1) Who benefits from the employment opportunities?
- 2) What is the magnitude of employment and the effect on incomes?
- 3) Does the program help improve food consumption and nutritional status of the participant households?
- 4) Does the system of payment in-kind yield any additional benefits that can not be ensured by payment in cash?

They also found that FFW did in fact reach the target group, with 48% of participants drawn from the landless and 69% from the functionally landless (holding less than 1/2 acre of land). The per capita income of the laborers was less than half the national average. The study found that employment in FFW meant a net income gain of 10-11 percent of participants' annual wage income, but food consumption was not significantly impacted. The distribution of wheat (in-kind) did mean a higher share of the food basket was filled by wheat, and, in turn, other income could be used for other non-food consumption. (Chowdhury, 1983)

These and other early studies (Alwang) validated that the FFW was effective in targeting the landless and that FFW did in fact have a significant employment and income benefit for the participants. Because of its ability to target the poor better than the ration channels, FFW gained the support and interest of other donors in the late 1970's and early 1980's. Most other donors began to progressively reduce their food going into PFDS ration channels, and provide increasing amounts of food to the FFW program managed by WFP. Figure 7 shows the flows of donor food aid into FFW.

Despite strong documentation of good targeting, FFW nevertheless posed several problems. The assumed positive nutritional impact of the wheat was less certain than its impact on income. Leakage rates due in part to mismanagement and graft were documented (Alwang). And the development impact was questioned.

Gathering Clouds over FFW:

By the end of 1979 over 1 million tons of wheat had been allocated to FFW projects by CARE, WFP and the BDG. Nearly 800 thousand work years had been created and thousands of miles of roads, embankments constructed and canals re-excavated. The CARE program alone had created 77.6 million days of employment and moved 5.4 billion cubic feet of earth. However, the primary goal of FFW remained essentially relief, providing direct employment. The potential developmental impacts of the constructed works remained secondary. As explained in the USAID Project Paper that presented the rationale for the second five year phase of the CARE FFW program (1980-85), it takes two or three years for developmental impacts to manifest and unfortunately, the earthen structures began to deteriorate after two or three years because of a lack of maintenance. The same USAID project paper also noted that though FFW technical engineering aspects were uncomplicated, the design and construction of the individual projects required careful and painstaking surveys. The project paper also pointed out that in the first five years the CARE FFW program had suffered from an absence of well trained and motivated personnel at the local level and an absence of minimum design standards and criteria for project scheme approval, and that diversions of wheat had persistently plagued the program since 1975 and should be attributed to inaccurate scheme design, inefficient management, poor accountability, and outright misappropriation. (USAID FFW II Project Paper, p16)

In a 1981 audit of the USAID supported CARE FFW program, the AID Inspector General's Office found that USAID, the BDG (MOR) and CARE's program emphasis on relief resulted in undesirable commodity distribution, starting more projects than could be effectively managed. Overall the project selection priorities were seen as giving limited emphasis to choosing projects for developmental purpose. "This program will have gone on for ten years by the end of FY 1985. It is our view that some method must be found to substantially increase the permanence of the program's impact on the poorest of the poor. The FFW program is a neverending process with a primary focus on relief and much too diffused to be properly managed." The auditors recommended that the program be redirected to selection and completion of projects that contribute most to development and alleviating the need for assistance. The same report also cited a long history of poor management and misappropriation, waste and inefficiency, including the falsification of records, bribes, lost wheat, failure to compensate landowners for land, and under-compensated workers. (USAID Audit 1981)

The problems pointed out by the FFW II project paper in 1979 and AID auditors in 1981, continue to plague the FFW program today. Program sponsors (WFP and CARE) have dealt with the issue in the sense that effective monitoring systems are now in place to ensure and protect donor wheat, but these systems shift the losses ultimately to the BDG. If losses occur in the WFP programs the next year's commitment is reduced. If CARE experiences losses the BDG bears the burden from its own resources. The losses and leakage still occur. In recent years CARE has "reimbursed" the BDG for less than half of the wheat that was released from BDG godowns during project implementation. CARE estimates that 26% of unreimbursed wheat represents unauthorized use including graft. Because of the leakage issue, inadequate planning, lack of funding for structures, and the staff requirements for "process" monitoring the WFP actually stopped implementation of Local Initiative (LI) schemes after the 1991 FFW season and focused its efforts on centrally programmed and managed Growth Center Connecting Roads implemented by the Local Government Engineering Department (LGED) of the Ministry of Local Government. An evaluation of Australia's Food Aid Program (Australia has contributed nearly 275,000 MT of wheat to WFP's FFW program since 1981) applauded World Food Program's move to GCCR. The evaluation cited the litany of technical, social, economic, human rights, and environmental problems associated with (LI) earthworks. The fact is that many small decentralized schemes within a large program are difficult and labor intensive to monitor.

The wheat allocation process itself for FFW may have contributed to the leakage problem. The process has relief connotations, i.e., a little for everyone. It certainly defeated a redirection toward more developmental objectives. Schemes with more developmental potential have at times not received sufficient resources. In the early years, allocations of wheat for the FFW were made to thanas largely to fill gaps created by the shrinking RWP. As the program progressed the allocations were based on previous years' levels adjusted according to resource availability. Concern from donors that FFW should concentrate on rural areas most affected by unemployment, underemployment and poverty led to an adjusted allocation system based upon population, area, and distress factors including level of poverty, unemployment, susceptibility of an area to flooding. (DANGER, 19XX (EEC) This relief-based allocation system assumes, rather than assures, that resources for construction of infrastructure can be effectively absorbed. This has not only had negative effects on FFW earthwork but also on associated appurtenant structures. A review of the WFP Bangladesh Water Development Board (BWDB) projects noted the scattering of structures resulted in reduced benefits and an inadequate number of structures for adequate water control in many areas. (Northwest, 1978)

On the Roads :

Although the WFP undertook major water control activities (coastal and river embankments as well as irrigation and drainage canals) under the BWDB, rural roads were to become the major activity in FFW. About 85% of FFW (LI) schemes have been road schemes. As learned in the RWP in 1962, roads are easier to implement, and able to absorb more resources than small water control projects. There existed some concern that rural roads quickly became the predominant activity under the RWP because wealthy farmers, administrators and politicians favored quickly implemented and resource absorbing road projects to the more needed water control projects. In spite of these early criticisms, numerous studies have shown that FFW roads can have positive developmental impact if certain conditions apply.

In 1983, Abt Associates reviewed the CARE/USAID supported FFW program and found evidence of improved communication, reduced travel time and costs, increased commercial activity, increased primary school attendance and increased use of family planning services when rural roads are improved. In 1985 IFPRI/BIDS studied the developmental impacts of FFW and found "if properly selected, designed and implemented, rural roads generate a very substantial productive impact on village economies. Therefore, the program should not be considered only as a vehicle for short run relief to distressed and under-employed sectors of the rural population, but as a means for construction of productive long-term rural infrastructure." Agricultural production and per capita household income were increased as a result of FFW projects. Seasonal employment fluctuations were leveled out. The study also found that FFW project constructed infrastructure contributed to the increased use of modern agricultural inputs and exerted increased demand for non-agricultural products and services among the rural households. However, the study noted that the positive impacts are found only in well-implemented projects, and that only one-third of FFW projects would meet that criteria. The study recommended long run structural changes, technical support for project selection and design, funding for maintenance and mechanisms for funds generation at the local level to ensure sustainability are needed. (Abt 1984)

As a result of a successful USAID pilot study, by 1984, in an attempt to improve the developmental impact of the FFW roads, small bridges and culverts were included on CARE FFW roads (monetized PL-480 Title II/III resources were used to fund the structures) (Hallett 1983). WFP also began to include bridges on its rural roads. For WFP, coordinating funding for the needed structures from sales proceeds of multi-donor wheat sales (Australia, Germany, and EEC and others) was difficult. Nonetheless, the decision to build these bridges and culverts was validated by the 1989 Abt study which found that the inclusion of bridges/culverts on road alignments yielded the most significant economic benefits. Transportation costs were reduced, farmgate prices were higher and school attendance increased on fully bridged alignments. However, there continued to be doubts about

the true developmental impact of FFW roads, concern that Bangladesh was already "saturated" with rural roads, suggestions that diversification away from rural roads (changing the focus of activities away from roads to the construction of fish ponds, tree planting, cyclone shelters, etc.) would be developmentally more beneficial. There was also a growing criticism that the roads were cause for major environmental concern. (Abt 1989)

In 1990, CARE commissioned the Bangladesh Road Saturation Study, which found that although there continues to be a need for rural roads, many FFW roads were not developmentally useful, and that more attention must be paid to selecting road alignments that are developmentally important. The study also highlighted the importance of maintenance as a still-neglected element in making the FFW program developmental. (Abt 1989) Environmental problems created by the FFW roads were noted in the Environmental Assessment prepared for the fourth phase of CARE's FFW project, Integrated Food For Development (IFFD). Specifically noted were the effects of roads in blocking natural drainage, creating flooding resulting in the loss of crops, land, and the disruption of fish migration. These environmental problems required improved site selection, environmental reviews and the inclusion of sufficient (which in most cases meant additional and well-sited) mitigating measures (bridges and culverts) along the FFW alignments. (KBN 1991)

The Developmental Thrust:4/

Since the early 1980s donor expectations that food aid could be better used to support the national development effort, rather than merely serve humanitarian relief objectives had grown. In addition there was increasing criticism of the poor capacity of the institutional framework (and the ability of the Ministry of Relief) to enhance the developmental impact of FFW. (WFP Seminar 1988) In 1983, an evaluation of FFW by CIDA left open some hope that the BDG's decentralization policy for local government (the establishment of the Upazila system) would have a positive impact on FFW planning and implementation, and through the Upazila Bloc Grants, would make cash resources available to complement the food aid. Unfortunately, the reorganization had little effect on the way food aid was programmed or used. In addition, in 1983 a BDG administrative reorganization commission (the Enam Committee) redesignated the Project Implementation Officer (PIO), the position food donors had insisted the BDG create in each thana (upazila) in 1975 to implement the FFW program, as Upazila Relief and Rehabilitation Officer. In making no reference to an increased development focus, this new name seemed to sum up the BDG perception of the position's function, and by inference of the limited importance the BDG attached to a more effective development role for FFW. (SIFAD)

Despite the absence of positive institutional change anticipated from the decentralization process, the planning for the third phase of the CARE FFW program (1985-90) went forward. Incorporating results from the BIDS study, the FFW project goal

was altered to include, along with the relief oriented lean season employment generation effect, improved access within and to rural areas. This revised goal actually combined relief and developmental objectives. The project also planned the establishment of a system of rigorous accountability and the development of local institutional capacity to effectively utilize the program resources. The intent of adding the third goal was that local governments would eventually, through association with the project build capacity to implement the FFW and other comparable programs themselves, without CARE (or other outside assistance). Unfortunately, a review of the program in 1987 found these three goals to be inconsistent and noted that if the goals were inconsistent the progress toward meeting them could be expected to be uneven. In particular, the study found achievement the third goal of institutional development to be constrained of because of the external systems (CARE's strict surveillance and monitoring) needed to minimize the misuse and abuse of program resources. (MSI 1987)

In 1985 and 1986 WFP evaluations of FFW found limited progress in the developmental objectives and a pervasive attitude in the BDG that the FFW (and VGD) programs were "dole" programs. The WFP evaluations identified the main constraint as the absence of BDG complementary resources commensurate with the input of donor food aid. On the planning side, the potential of the programs to contribute to social and economic development had been undermined by the persistent view that food was essentially a form of relief aid. In program management and administration, the problem was a severe imbalance between the role of the donors and the lack of BDG capacity. And in implementation the growth of food assisted programs had far outgrown the capacity of the existing institutional framework at all levels from the apex Ministry and the Directorate of Relief to the single officer PIO whose nominal duty is to assist the Parishad in using the food resource effectively. (WFP Seminar 1988) In January 1988, a joint WFP/BDG seminar, Food for Human and Infrastructure Development in Bangladesh, was convened to discuss and explore ways and means of overcoming the deficiencies in planning, administration, and implementation of food assisted programs. The practical outcome of the seminar was the commissioning of the joint BDG/Donor Task Force on Strengthening the Institutions for Food Assisted Development (SIFAD). A number of food aid donors, including the United States, WFP, Canada, the EC, Australia, and Britain provided financial support to the effort.

Strengthening Institutions of Food Assisted Development (SIFAD):

With a goal of incorporating food resources more closely into the mainstream of national development planning, the SIFAD Task Force completed its recommendations to the BDG in July 1989. The most important Task Force recommendations envisioned a new expanded role for the Planning Commission in the planning and programming of food aided programs. The intent here was to ensure that food-aided programs were institutionalized as part of the formal development process and that complementary resources could be

provided to augment food to improve implementation and impacts. The Task Force also recommended that FFW (and the Canadian funded CARE sponsored Rural Maintenance Program-RMP in which destitute women are paid to perform routine maintenance on rural roads) no longer be implemented by the Ministry of Relief but be shifted to the Ministry for Local Government in order to provide the specialized planning, design and supervision that was necessary to enhance the developmental elements of the programs. Action Plans detailing the recommendations that came out of SIFAD have still not been finalized. There has been BDG resistance in some quarters (principally and understandably from the Ministry of Relief that will lose resources because of the SIFAD recommendations) and donors have at times had second thoughts about the potential new role of the Planning Commission in food programming. (The food pipeline has essentially been free of programming bottlenecks that could occur if food is fully incorporated into the planning process.) In advance of the completion of the SIFAD Action Plans expected this spring, the World Food Program has quietly moved its FFW programs to implementation by the Line Ministries (BWDB and MLG and others). CARE requested and received permission to negotiate its new five year agreement for its IFFD program with the Ministry for Local Government (Local Government Engineering Department). The CARE IFFD project combines the USAID funded FFW program with the CIDA funded RMP programs. The RMP women provide routine maintenance on the FFW reconstructed rural roads. This routine maintenance is expected to significantly increase the productive life of the rural road.

After twenty years of slow evolution, both the WFP and CARE programs seemed poised to become truly developmental interventions. Both the WFP and CARE FFW activities have developmental goals, plan to concentrate resources on properly designed and implemented activities, and are implemented by developmentally mandated ministries. Interestingly, both the WFP and CARE programs, although now being implemented by developmentally mandated Ministries have not really been incorporated into developmental planning (in the sense that there is a formal process of marrying the food with cash resources needed to make the programs developmental). Both programs are depending upon the monetization of food aid to provide the complementary resource. In other words, both programs (using donated food aid) generate their own necessary cash resources. With declining food aid levels and increased monetization, the result is a decline in FFW direct beneficiaries. Although the BDG counterparts do contribute significantly (staff and cash resources) there is no integrated overall BDG plan to promote sustainability (particularly encouraging local responsibility for infrastructure). This situation is not unlike that of the Rural Works Program which had relied exclusively on PL 480 sales generations from its inception in 1962-3 until 1970-1. The PL 480 generations were used to support all aspects of the program, staff at Thana Training and Development Center, labor, training. PL-480 was used to fund the entire program. (Sobhan, 1968) However, once those external resources ran out, the RWP program

withered away.

Final Note:

The Bangladesh FFW program has been difficult to change from its original relief orientation to a developmental one. This may be the result of FFW's success as a relief program. Donor directed and funded, FFW programs have succeeded in the delivery of food and employment to the rural poor. Although the donors have gradually changed their perspective and expectations about FFW, the programs themselves may never become sustainable developmental interventions because of the persistent BDG perception that they are donation programs undertaken by the donors. The BDG must be willing to take ownership of the programs and responsibility for them if they are to become truly effective developmental interventions.

III.b) Vulnerable Group Development:

In 1975 WFP initiated the Vulnerable Group Feeding Program (WFP Project NO. 2226 - "Food Assistance for the Rehabilitation of the Vulnerable Groups"). Under the program food aid was provided to destitute women with minor children, women with handicapped husbands, abandoned and landless women. The program began in 1975 with 32,500 MT of wheat from the WFP. During 1992/93 the program delivered roughly 190,000 MT of wheat and edible oil from WFP, bilateral donors (Australia, EEC, CANADA, Germany, France and others) and the BDG. WFP monitors the implementation of the now country-wide program on behalf of the donors and the BDG. Nearly one-half million destitute women and the families are provided food assistance each year. Figures 8 and 9 illustrate program trends and relative donor contributions.

The women who are heads of households, landless, have low and irregular income and lack of productive assets, are selected by local government officials. The beneficiaries are allotted a monthly take-home ration of 31.25 kg of wheat which is distributed at the Union Center. Like the FFW program, wheat allocations were focused on the more distress prone areas. This allocation process, as did the allocation process used in FFW, retarded efforts to shift the program's focus away from relief to development. As with the FFW program, the objective of the VGF Program was redefined in the early 1980s. The program was renamed Vulnerable Group Development (VGD) - "Self-Reliance for Poor Women" - to reflect the change in orientation from relief to development. The VGD program combines food aid with training in health care, family planning and basic numeracy and literacy skills to assist the vulnerable groups in becoming self-reliant. A number of other donors (see Figure 10) began supporting the VGD program administered by WFP during the 1980's, shifting significant food aid tonnages out of the FFW ration channels and into VGD, as was also occurring with other donor support to WFP's FFW program. Figure 11 shows number of beneficiaries from the

VGF/VGD program.

The VGD Program now has four sub-projects: a. the Union Parishad VGD Centers (UPVGD); b. the Women's Training Centers (WTCs); c. the Institutional Feeding and Development Centers (IFDCs) and d. Group Leader/Extension Worker Pilot Scheme (GLEW). In addition to the in-kind distribution of foodstuff, program wheat is monetized for funding credit, training and other program costs.

In attempt to deliver a more diverse range of developmental initiatives, WFP has established a collaborative relationship with local Non-Governmental Organizations (NGOs). The NGOs provide training in income generating activities, health and nutrition, and savings and credit.

The April/May 1992 a Review and Appraisal Mission pointed out that the program has been successful in supplying food to those who do not have enough to eat. The specific nutritional and income benefits were documented by Ahmed. However, it had still not been successful in giving women participating in the VGD sub-project access to the full package of the development services. Although considerable improvement had been made, the leakage of resources continued to be a problem. In 1987, 22 percent of VGD beneficiaries reported receiving a shortfall in their allotment; 14 percent did in 1989; and 7 percent did in 1990/91. The Review and Appraisal Mission recommended that a certain minimum set of key institutional steps should be introduced to enhance the administrative environment of the program pending implementation of the SIFAD Task Force. The primary the need is for increased involvement of the line ministries in the program. The most recent recommendation that has come from the SIFAD Action Plan Consultant is that the VGD program should move from it's the Relief Ministry to the Ministry of Social Welfare and Women's Affairs.

III.c) Rural Maintenance Program:

The Rural Maintenance Program (RMP) like the VGD Program is also targeted toward destitute rural women. CIDA initiated the RMP in 1983 through CARE in seven unions of the country in response to two major problems; 1) the lack of routine maintenance systems for earthen "farm-to-market" roads, and; 2) the inability to reach a significant number of destitute women who are outside the existing relief and employment programs (June 1990 CIDA's Evaluation of Food Aid Program to Bangladesh). Today the program employs over 60,000 destitute women year-round in the maintenance of approximately 60,000 miles of farm-to-market important rural earthen roads in about 4,100 unions of the country's total 4,451 unions. The Rural Maintenance Program (RMP) is one of the largest NGO projects in the world. Fifteen women in each union constitute one "Crew" and maintain 15 miles of earthen road of that union. The RMP beneficiaries are paid Taka 24 per day for all the days of the year. With the introduction of savings

component in 1988, a certain portion of the crews' wages is being saved in their individual savings accounts.

The sale proceeds of the food aid provided by the Canadian International Development Agency (CIDA) has been used to pay 90% of the RMP crew's wages and CARE's operational costs. The participating Union Parishad contributes the remaining 10% of RMP crew wages. Total CIDA assistance from 1983 through 1993 amounts to nearly \$cdn 140 million. The annual cost of the program is currently in the order of \$cdn 23 million.

The 1992 CIDA-commissioned evaluation (page 102) concluded that the RMP has, in general operational and administrative terms, been effectively and efficiently managed by CARE over the years. Ahmed documented both the nutritional and income effect of RMP, and IFPRI found it the most cost effective means to target assistance on very poor women. The deficiencies in the management of the program appear to relate largely to the absence of experimentation, innovation, and long-term strategic 'visioning'. The program has over the years assumed a largely static operational mode and has not advanced significantly in terms of development. That stated, part of the reason for this relates to the confused, ambiguous and perhaps unambitiously expressed objectives of the program.

The evaluation team also added that, perhaps the biggest shortfall in the achievement of the stated objectives of the program pertains to institutionalization. During the early years of the RMP, little attention was given to the ultimate need to transfer management responsibilities for the program to Bangladesh. The objective of institutionalization assumed a formal prominence in the management plan for Phase Two of the program. To date, little has been achieved in this regard and the evaluation team concludes that the institutionalization model that is being pursued is not the appropriate one. The Evaluation Team concluded that the primary justification for the project must be the importance of the roads and the quality of the maintenance work. Without this, the project would be little more than a costly, unsustainable, welfare activity.

The SIFAD Task Force, by way of analyzing the implications of blurring and overlap of different targeted food aid programs, stated that like FFW and VGD programs, the RMP has been characterized as having a blend of relief and development objectives. The employment opportunities it creates for poor rural women works quite well. The task now is to ensure that they are sufficiently well deployed and well supervised to do the best possible road maintenance job. To better accomplish this task, the SIFAD Task Force also recommended RMP as it did with the FFW program, be administratively moved from the Relief Ministry to the Ministry of Local Government Rural Development and Cooperatives (MLGRD&C), Local Government Engineering Department (LGED). (SIFAD page 68, Vol.I)

A strategic plan has now been drawn up by USAID, CIDA and CARE for integrating FFW and RMP projects in order to promote more focused and more effective infrastructure development in Bangladesh by the year 2000. Both IFFD and RMP will give priority attention to upgrading the overall quality of scheme planning and mapping and road network selection. Thus, the RMP and IFFD Projects are now cooperating to develop a road re-selection process in all of the 4000 Unions where road maintenance is to be carried out by the RMP, according to a new set of economic, social and environmental criteria. The RMP and IFFD programs are undertaking to work on the same roads: the IFFD (road reconstruction) and the RMP would continue with providing routine maintenance. (CARE RMP 1994)

IV. Food Aid to Support Food Policy Reforms

The first serious donor attempt to analyze Bangladesh food policy issues was a USAID assessment made in 1975 and 1976 (Crow, 1990). The focus of this analysis was on integration of domestic procurement, imports and open market sales -- three crucial ingredients for stabilization of the domestic food market (World Bank, 1981, p. 81). It was followed by a food policy review carried out by the World Bank in 1977. The January 1978 Aid Group meeting focused donor and Government attention on food policy, and led to endorsement by donors and Government of the World Bank's 1977 recommendation to establish a Food Planning and Monitoring Unit (FPMU), a unit which has continued to function with USAID and other donor support.

USAID and World Bank policy conditionalities in 1978 and 1979 were based on the analyses and policy dialogue of the 1976-1978 period. USAID/Bangladesh initiated food policy conditions through its 1978 multi-year Title III food aid program. The food policy agenda was further reviewed by the World Bank in 1979. The World Bank included food policy conditionalities in 1979 Import Program Credit (IPC) program. This was followed by a joint World Bank/Planning Commission review in 1980 and an AID Group meeting in the same year. Canada included food policy reforms in its 1983 food aid agreement. Other food aid donor agreements have either referred to the food policy issues pursued by USAID, Canada, and the World Bank, or have provided informal support in occasional donor-Government policy review meetings, without including specific food policy conditions in their programs. Other donor support to the general food policy reforms has been manifested through a shift of increasing portions of their food aid from the ration channels to the targeted programs (see Figure 10).

The donor-Government policy agenda pursued since the late 1970's includes the following elements: 1) incentive prices to farmers; 2) containment of abnormal price increases through an open market

sales program; 3) rationalization of food subsidies and reduction in ration channels; 4) liberalization of foodgrain trade; and 5) stocks and import policy.

IV.a) Incentive Prices to Farmers

Until 1974/75 the Government procured limited foodgrain of domestic origin (World Bank, 1977, p. 2). Compulsory procurement at price levels well below the free market was still prevalent to collect grains for the ration system, mostly benefitting some privileged groups. Domestic procurement had been looked upon as a means of feeding the rationing system rather than a means of increasing foodgrain production. USAID and the World Bank's food policy agenda was aimed at reorienting the procurement program more toward increasing productivity. USAID's 1978 Title III Agreement, and the World Bank's 1979 IPC both included conditions related to improving performance of the BDG's procurement program.

Donors and the BDG identified low post-harvest foodgrain prices as a major constraint on increasing productivity and encouraging investment in HYV technology. Donor policy conditionalities encouraged year round operation of the procurement drive so that market prices stabilize within approximately Taka 5 to 10 per maund (1 maund equals 37.32 kilogram) of the Government's official domestic procurement price for the various foodgrain crops. To ensure this, the Food Department were to buy all foodgrain offered for sale at the procurement centers at official procurement price. Also, the official procurement prices were to be reviewed to assess whether the margin between the output prices and the input costs was adequate to encourage widespread adoption of HYV technology. Emphasis on year round procurement was given to encourage increased procurement of boro rice which was gradually becoming a major rice crop. Also, the policy conditionalities stipulated a time table for announcing domestic procurement prices for various foodgrain crops. The purpose was to ensure announcement of procurement prices well in advance of the planting season to allow the growers sufficient planning time.

In the early 1980's, USAID, the World Bank, and CIDA further expanded the policy agenda on procurement (Erhard and Spearman, 1989, pp 8-9) in underscoring the BDG's need to implement its Medium-Term Food Production Plan to improve foodgrain procurement. The Medium-Term Food Production Plan included construction of feeder and access roads connecting villages, market places and procurement centers; increasing Government grain storage capacity, providing procurement fund allocations, and improving organizational efficiency, so as to improve existing constraints on timely foodgrain procurement from farmers by the public sector agencies; and expanding private grain trading by liberalizing the anti-hoarding legislation, improving traders' access to credit and supplying better market information to farmers, consumers and traders.

The donors pursued the same set of procurement policy with some minor modifications until the middle of 1991. One of these modifications initiated by the World Bank saw discarding of the policy of using the approved grain dealers as the only intermediary for procurement of foodgrain from the farmers. This resulted in greater participation of the foodgrain traders in the procurement process.

All of these procurement-related policy conditionalities did not, however, always succeed in establishing floor prices at levels close to the official procurement prices during good harvests. Two factors were mainly responsible: 1) BDG's failure to buy all grains offered at the procurement centers; and 2) farmers' inability to meet the quality specifications required for procurement. Nonetheless, they improved BDG's overall procurement capability, encouraged it to increase the level of procurement, boro in particular, and changed its outlook about the procurement program. The BDG started regarding the procurement drive as largely a tool of supporting post-harvest prices. These improvements at least helped halt to a large extent steep falls in post-harvest foodgrain prices.

By the late 1980's the problems of the existing procurement policy in a situation of surplus rice production began to be evident. The major pitfall was with the method used for setting official procurement prices. The BDG was basically adding the cost of inflation to the previous year's official procurement prices to determine current year's procurement prices. It did not take into account the reduced per unit cost of foodgrain production brought about by widespread adoption of HYV technology, the downward trend in domestic market prices, or world foodgrain prices. In 1990, for example the Government target floor price was about 65 percent higher than the prevailing export parity price (World Bank, 1992, p. 37).

Setting a relatively high target procurement price had unintended consequences. First, with declining market prices, it caused a stock management problem as the Government was unable to sell sufficient rice without violating food aid agreement conditions and without avoiding a loss. Second, significant differences between official procurement and market price promoted rent seeking among Government officials. Third, it raised the deficit on the Food Account over the years to a staggering Taka 8.2 billion in 1990 (World Bank, 1992, p. 48). This latter development led Government to undertake serious measures to limit the costs of food management and food policy, even at a time when donor conditionalities were ending.

By the early 1990's, USAID and World Bank food policy conditionality ended with the termination of old agreements. Intellectual support for continued procurement policy reform was provided through a Food Policy Review (for the World Bank) and IFPRI technical support. Both IFPRI and the Bank emphasized, first, greater participation of the private sector in the post-harvest price stabilization function, including eliminating laws

hindering private sector transport, storage and trade. Second, they recommended that Government's target floor price should be adjusted downward to reflect the trend in domestic market prices and the long-term trend in world prices. Third, they recommended an adequate margin between the Government's official procurement and sales prices be restored to allow private sector to operate their trade with a reasonable profit (World Bank, 1992, p. 49). In response to IFPRI recommendations, the BDG for the first time initiated tender procurement in 1992. However, tender procurement has yet to gain the desired momentum due mainly to systemic faults and lack of credit facilities in foodgrain trading.

IV.b) Containment of Abnormal Price Increases

One lesson learned from the 1974 famine was that moderating major price hikes would help more people than relying on government ration channels. Keeping this in view both donors and the BDG were looking for a suitable tool to strengthen the Government's role in moderating foodgrain prices during periods of short supply. The first attempt was the Open Market Operation (OMO) channel in May 1976. Under OMO foodgrains were sold mostly through authorized dealers at ration price during the lean seasons. No ration card was required to buy grains under the system. Later, Open Market Sales (OMS) program was introduced in 1979. The basic difference between the two programs was that OMO sold foodgrains at ration prices whereas OMS did so at close-to-market prices.

The USAID and the World Bank jointly led the campaign focussed on the need to channel sufficient grains to the market during the periods of short supply to hold the price peaks to reasonable levels. In its Food Policy Review Paper of 1977 (p. 23-26) the Bank exhorted the urgency to supplant ration sales (and OMO sales at ration prices) by OMS in order to contain rising market prices more effectively. A rule of thumb suggested that 100 thousand tons in the open market has the same impact on market prices as 167 thousand tons in the ration distribution. Thus, less grain and hence, less import would have been required to fulfill the Government's price moderating role had ration distribution been gradually replaced by OMS¹/. Failure of the public food

¹/The benefit OMS could potentially bring about has been eloquently stated in the World Bank Food Policy Issues Paper of 1979: "All consumers including the poor, however, would benefit to some extent if the variations in rice prices between aman harvest lows and summer peaks were limited to about 20 percent. Greater stability of food prices would minimize the need to provide food security for public sector workers and the urban middle class through the ration system. Limiting seasonal variations in food prices to about 20 percent will require that the Government operate an effective procurement system at a support price level and conduct substantial open market sales of rice (and perhaps also of wheat) during the months of short supplies and high prices." (p. 30).

distribution system (PFDS) in reaching the poor and in containing abnormal price increases prompted increased focus on OMS.

USAID was first to extend help to the BDG in launching OMS sales through its 1978 multiyear food aid program, and was also first to commit wheat for the program. Under the program the BDG were to initiate sale of wheat well in advance of the lean season when the open market prices so indicated. At the beginning sales were limited to only licensed dealers and flour millers. The first sale occurred in September 1978. A price of Taka 85 per maund charged for the sale was, however, substantially lower than the prevailing open market price.

In 1980 initiation of OMS sales was tied to rice price under the revised terms of the food aid agreement with the U.S. Government. The BDG were to initiate wheat sale through OMS at Taka 5 above the procurement price when market price of rice reached Taka 200 per maund. These changes were made to make wheat OMS more effective in moderating rice price and to offer the private sector traders room for making a reasonable profit by investing in foodgrain trade. Also, recognizing greater impact of rice sales on rising rice prices, sale of rice in the OMS was opened up for the first time in 1980.

OMS underwent further modifications in 1981 as BDG was unable to supply sufficient grains necessary for stabilizing rice prices around the target ceiling price. As a result a price slab was introduced so that the Government did not lose money by selling foodgrains at a much lower than market price. The mechanism provided for upward and downward adjustment in OMS price whenever the sub-divisional (now district) coarse rice price moved 10 percent from its level at the last previous change in prices. The amount of the stipulated change was one-half the percentage change in the coarse rice price itself. The initial OMS price for rice was to be set at 15 percent above the procurement price in non-Statutory Rationing areas and 20 percent in Statutory Rationing (SR) areas. (Later on in 1988 the price band was reduced to 10 and 15 percent in non-SR and SR areas, respectively.) OMS wheat and paddy prices were to be set at 0.60 and 0.65 of rice procurement price, respectively. However, wheat OMS price could under no circumstances be less than Taka 5 above the wheat procurement price.

Initially the OMS was designed to supply sufficient grain in the market until the prices fell to the target level. However, the BDG did not commit itself fully to such a radical concept for fear of drawing stocks dangerously down without breaking the price increase. This led to modification of the OMS which added quantity restrictions per consumer in the queue (Montgomery, 1983, p. 5).

The OMS was put to real a test for the first time in the fall of 1981 and the spring of 1982. It, however, did not fully succeed in holding the prices to a desired level as the BDG failed to inject sufficient foodgrain through the channel. Finally, OMS

succeeded in moving sizeable quantity of grain to the rural markets during July-October 1982. Although the quantity dispersed was much lower than the estimated deficit (approximately 50 percent), the OMS program was able to hold back a potentially disastrous price increase (Montgomery, 1983, p. 29).

OMS gradually became a regular tool of containing foodgrain price increases in the lean seasons and during any other period of short supplies. In FY 1984/85 OMS was initiated as early as in July in response to price increases caused by poor aus and boro production. However, its success in containing prices was limited as sufficient grain was not initially made available through the program (Beacon Consultant, 1986). In the same year the price setting mechanism for wheat OMS was adjusted to reflect a 15 percent margin over the wheat procurement price. The BDG better appreciated the role OMS can potentially play in moderating price increases during the periods of short supplies in FY 1986/87, 1987/88 and 1988/89 following the devastating floods of 1987 and 1988. Substantial quantities of grain were channelled to the rural and urban markets, during those years which effectively helped contain abnormal price increases and thereby prevent famines.

Since achievement of the breakthrough in foodgrain production in 1988/89, the need to initiate large quantities of OMS sales for stabilizing foodgrain prices has rarely been felt. The considerable amount of OMS sales that show up under FY 1991/92 PFDS offtake is explained by inclusion in the channel sales of low quality stock in auction or at low fixed prices to avert spoilage in the warehouses. Also, with the rapid growth in the dry season boro production and widespread adoption of HYV technology, rice is now grown almost around the year. Foodgrain supplies are therefore more evenly distributed over the year than they were five years ago. Further improvement in the availability and supply of foodgrain throughout the year has occurred with the opening up of wheat import in the private sector since 1992. Yet the need for OMS may continue to be felt until the policy reforms to promote largescale private sector participation in foodgrain trade/import are further consolidated.

IV.c) Rationalization of Food Subsidies

The BDG and donors have agreed for two decades on the need for subsidized food for poor people with inadequate incomes. Differences have arisen, however, as regards the relative role of ration channels vs. other programs in effectively targeting subsidized food to the right groups. The goal of donors, and of many in Government as well, was rationalizing subsidies by redirecting them from the ration channels -- which benefitted privileged groups -- to channels benefitting the neediest, mostly living in the rural areas.

This redirection occurred in two ways. First, an increasing share of donor food aid (especially from Canada, Australia, and the EC and its member states) was distributed through the targeted programs beginning in the late 1970's through the present, as discussed in section III above. Second, USAID, together with the World Bank and later Canada, supported a progressive elimination of subsidies from most of the monetized ration channels.

The World Bank's Food Policy Review paper of 1977 recommended "modifications in the system so that it channels subsidized foodgrains primarily to those vulnerable groups who are unable to buy in the market while at the same time allocating available government supplies both through the ration system and the open market to stabilize prices, thereby benefitting the population at large." (p.12). USAID's first Title III Agreement, in 1978, supported this recommendation by excluding sales through the ration channels targeted on the middle class; Title III food would be sold only through OMS or to Modified Rationing (MR) category A beneficiaries (rural poor who pay no tax).

The BDG formed an interministerial Committee in 1978 to study the possibilities of gradual reduction of food subsidies. The Committee found that foodgrain prices had been lagging behind the cost of living and wage index increase and that this was reducing incentives to increased production of foodgrains. The Committee also found that "The hitherto existing policy of consumption subsidies through the rationing system has not only nurtured vested interests in the urban areas, but also induced stagnation in food production through an artificial depression of the relative prices of foodgrains." The Committee recommended that food subsidy be eliminated in phases in order to free up funds for the development budget and allow market forces to play a greater role in attaining food self-sufficiency (Planning Commission, 1978, p. 14-16).

The World Bank in its Food Policy Issues paper of 1979 once again exposed the glaring urban bias of the PFDS and urged the BDG to increasingly use OMS as a price stabilization tool and redirect the amount of remaining subsidy exclusively towards the poor (p. 26-31). USAID also put greater emphasis on the use of OMS as a tool of price stabilization in its 1981 Title III Sales Agreement. It envisioned that as the country reached foodgrain self-sufficiency, the only categories remaining -- other than OMS -- would be Food for Work, Vulnerable Group Feeding, Gratuitous Relief, and category A of Modified Rationing channel; all targeted on the poor. (With growing concern about even the MR's ability to effectively get grain to the rural poor, Title III sales through MR were completely stopped in 1983).

In the 1981 USAID Title III Sales Agreement, the BDG agreed to implement policies to reduce the ration system outlined in the August 4, 1980 Food Security Plan. These policies included: 1) the gradual alignment of the ration price with the free market price; 2) reduction in the rice portion of the ration and the eventual withdrawal of rice from the ration system; 3) reduction in the ration quota for individual cardholders. The intended purpose of these steps were first to reduce the subsidy element in the ration system, and finally to eliminate major portions of the ration system itself.

In 1986 USAID funded two studies -- one on " Existing System of Public Foodgrain Distribution in Bangladesh and Proposal for Restructuring" (Beacon Consultant) and the other entitled "Study on Subsidies in Public Food Grain Distribution in Bangladesh" -- under its technical assistance grant to Food Planning and Monitoring Unit, Ministry of Food's analytical organ. Both the studies recommended abolition of the Statutory Rationing (SR) system as the channel largely benefitted the relatively well off urban middle class. The former study also recommended reduction of rationing quota for the Essential Priority (EP), Other Priorities (OP) and Large Employers channels in phases. In addition, it recommended other adjustments in prices and sales volumes with the aim of making available increased amount of grains through the channels targeted to the poor and the OMS.

The foregoing prompted USAID in subsequent Title III Sales Agreements and amendments to pursue more vigorously the issue of subsidy elimination from the SR and OP channels. "Subsidy" was defined as the difference between ration channel prices for these channels and the prevailing OMS price. A specific time table was stipulated in the 1987 USAID Title III Sales Agreement for removal of the remaining subsidy from these two channels in phases. Canada's 1983 food aid agreement also included conditions related to Government reductions in foodgrain subsidies in the ration channels. (Ehrhardt and Spearman, 1983).

By 1990, all ration channel subsidies were eliminated -- in the sense that ration prices and OMS prices were equalized -- except in the Essential Priorities channel (for the uniformed services). Figure 11 and Table 1 show the education. First, in 1984, subsidies were removed from the Flour Millers channel, followed by the Large Employers channel in 1985. Subsidies were removed from the Statutory Rationing and the Other Priority channels in 1990. MR was replaced by Palli Rationing in 1989 for better targeting on the poor. Subsequently, Palli Rationing was first suspended and then abolished in 1992 due to its high cost and possibly based on the IFPRI finding that the channel is subject to between 70 and 90 percent leakage. The action engendered a yearly saving of approximately \$60 million.

These changes transformed the monetized channels, except EP, from money losers to money earners, serving to reduce the deficit on the Food Account. (Raisuddin Ahmed et, 1991. p. 7). The principal objective of redirecting subsidy from the relatively affluent to the poor was achieved. Elimination of these subsidies also made the rationing channels unattractive to the beneficiaries. This drove a large proportion of these beneficiaries to the market to meet their foodgrain requirement, thereby strengthening market forces, private sector distribution, and production incentives. These changes set in motion recent developments discussed in section IV g) below.

IV.d) Liberalization of Foodgrain Trade

Since the 1943 famine all administrations -- British, Pakistani or Bangladeshi -- have looked upon foodgrain traders with suspicion. There has been a tendency to believe that speculation and hoarding by foodgrain traders is at the root of all famines. Hence, since 1943 various laws have been promulgated to control foodgrain traders, specifically restricting trader stocks, inter-district movement of foodgrains, and foodgrain trading credit (World Bank, 1979, p. 31-32).

These laws increased the costs of foodgrain trade, encouraged illicit activity, subjected traders to harassment or blackmail, and more generally, increased costs and risks, and decreased incentives for private storage and trading of foodgrains. The negative impact of these laws was first pointed out by the World Bank in its Food Policy Issues paper of 1979. Subsequently, reduction in foodgrain trade restrictions became a condition in World Bank Import Program Credits. USAID also initiated dialogues with the BDG in early 80son the need to relax and eventually abolish these retrogressive laws. However, these dialogues did not find a place in the USAID Title III food aid Sales Agreements until 1987. Broader donor-Government discussion of this topic was difficult due to its sensitive nature.

The BDG for the first time relaxed the conditions of the Anti-Hoarding Law in August 1980 when it raised the maximum quantity of foodgrains retailers and wholesaler could store from 30 to 100 maunds and 300 to 1,000 maunds, respectively. Subsequently, the limits were further raised in January 1981 to 250 and 5,000 maunds respectively. No further relaxation occurred until December 1989 when the BDG suspended enforcement of the Anti-Hoarding Law following a breakthrough in aman production in that year. Suspension of the law persists.

Withdrawal of restrictions on bank credit to the foodgrain traders was recommended for the first time in the World Bank's "Food Policy Review: Adjusting to the Green Revolution" paper of 1992. The BDG subsequently withdrew all restrictions on bank credit facilities for the private foodgrain trade through a Bangladesh Bank order issued in October 1992. That suspension of

the Anti-Hoarding Law is a temporary measure keeps alive the chances of its revival. Hence, it may still inhibit the traders behavior in the market. Informal dialogue between the donors and the BDG on eventual abolition of the law -- and encouragement of greater private sector storage and trade -- are presently underway. The purpose is to effectively promote private trade in foodgrains, and to further strengthen market forces in the context of surplus rice production and private sector wheat imports.

IV.e) Stocks and Import Policy

Bangladesh's ability to respond to food crises has been significantly enhanced since 1974. Better functioning markets together with a Government ability to expand VGD, FFW, and OMS offtake have moderated the impact of a number of food crises since 1974, thereby preventing potential famine conditions from developing. One element in this success is expanded stocks, storage, and commercial import capacity. Since 1974 donors have assisted and encouraged the Government to maintain substantial stocks and adequate storage facilities. Figure 2 demonstrates evolution of stocks and storage capacity with respect to total offtake.

The World Bank's 1977 Food Policy Review recommended maintenance of a security stock of 600 thousand tons of foodgrains, which would increase to 1 million tons on July 1 of each year in preparation for the lean season. This level could be minimized by scheduling imports for arrival during July-October. In 1979, further World Bank analysis led to a recommendation of stock requirements at 1.5 million tons on July 1 and 1.2 million tons on November 1.

USAID's 1981 Title III program sought Government benchmark stock levels of 1.1 million tons on July 1 and 0.9 million tons on November 1. The Title III program incentive was the reduction of food aid debt by an amount equivalent to the value of the PL 480 Title I/III grains used in the reserve stock, provided the benchmark levels were attained and the stocks were held for one full year. Government success in meeting these benchmarks (in part by holding 347,000 MT Title III grain in reserve) helped the BDG to offset nearly \$37 million worth of PL 480 Title I/III loan in 1989. Canada's 1983 food aid agreement called on the Government to build up sufficient stock levels. While other donor food aid agreements were silent about recommended reserve stock levels, they supported increased stock levels informally in various forums where food policy issues were discussed, and some donors financed increased Government food storage capacity. While the BDG was not very successful in consistently attaining the benchmark stock levels, it, nevertheless, did increase stocks and storage capacity significantly, as shown in Figure 12.

Recent changes in private sector foodgrain availability have somewhat reduced the need for the levels of stocks and storage sought by Government and donors in the 1970's and 1980's. Increased production of dry season boro rice, which contributed most to overall production increase, and widespread adoption of HYV technology for growing rice, has considerably improved year round availability. Seasonal fluctuations in price and availability have been considerably moderated as a result of these developments, thereby reducing the need to inject large amounts of government stock for moderating price fluctuations. Indeed, large government stocks over the past one-and-half year rather worked as a deterrent for the private sector to procure large stocks. Uncertainties about Government sales plans may have negatively influenced the traders' stock building behavior.

Until recently commercial foodgrain import was considered a domain of the Government. Largescale private sector import was not allowed until 1992. Prior to that only small amounts of grain imports were allowed in the private sector during periods of severe short supplies. Dependence on concessional food aid, foreign exchange constraints, and the BDG's lack of confidence in private sector ability to import accounted for Government prevention of private sector imports. Lack of reliable projection of foodgrain production and needs caused either inadequate or excess import of foodgrains. At times largescale import lined up in response to crop failures arrived after the emergency was over. Later, warehouse space problem caused by such imports affected the Government's domestic procurement drives on many occasions.

The donors generally pursued the issue of prudent import planning and private sector import of foodgrains through informal dialogues with the BDG. Only in the 1987 Title III Agreement did USAID include private wheat import for the flour millers as a policy condition. The World Bank's Food Policy report in 1992 recommended opening up foodgrain import to the private sector (World Bank, 1992, p. 82). The Bank, however, never included private foodgrain import as a policy conditionality in any of its programs. Despite the keen interest of both BDG and the donors, delays in negotiations, donors' own predicaments and handling constraints at the ports made prudent import planning a difficult task.

Restriction on private sector wheat import was eventually withdrawn in 1992. Within a few months, private imports had reached nearly 350,000 MT of wheat. Initially no import duty was imposed on wheat imports. Later in the year a duty of 7.5%, later increased to 15% in 1993/94, was imposed. This combined with depressed wheat prices over the past few months caused considerable reduction in wheat imports in FY 1993/94.

IV.6) Impact of Food Aid on Food Production

It is clear that in some years, distribution or sale of food aid in the PFDS has created short-term production disincentives. Farmers have made reduced planting decisions in the wake of unfavorable market developments resulting from too-generous food offtake in good production years (eg, Clay, World Bank paper.) Indeed, the US statutory provision (the "Bellmon Determination") requiring that USAID certify that PL 480 shipments will not create such disincentives stems from a Congressional visit to Bangladesh in the mid-1970's in which food aid was creating serious short-term production incentives.

The more important question, however, is what the long term impact of food aid has been. Has it facilitated or hindered the move to high production through investment in Green Revolution technology? Assessing the long-term impact of food aid on grain production is complex (Clay and Singer). First, the price impact is complicated by the long term decline in real rice prices since Independence (documented in a companion paper by aaaa) which has resulted from technical change lowering unit production costs in the rice subsector. Second, food aid quantities (which would tend to dampen prices) have been accompanied in some cases by conditions regarding BDG marketing behavior which over time have probably increased market prices over what they would otherwise have been and by counterpart fund investment in agricultural production. Third, the most likely "counterfactual" or "without food aid case" by which one assesses impact is not entirely obvious. Is it the absence of food aid? The absence of monetized food aid? the presence of food aid, but the absence of counterpart funds or of conditions regarding ration prices, OMS, and procurement which created a more positive market oriented food sector?

Concerns about the long term disincentive effects of food aid in Bangladesh have focused on direct and indirect effects. The direct effect has been the negative price impact of food aid's increase in foodgrain supply. Unless the Government would have imported identical quantities of foodgrain commercially, or unless all food aid went to consumers who would not otherwise have purchased food in the market, then food aid has lowered prices by increasing supplies in the market. Mahmud et al. and Price, Waterhouse document the negative price effects of food aid in the rice sector. Concerns about indirect effects are related to Government relying on food aid supplies as a way to postpone politically difficult decisions required to promote domestic foodgrain production (Stapanek, Hartman and Boyce, 1979; Clay (1978).

In assessing the more recent impact of food aid on production in the post-Independence period, it is instructive first to examine the experience of Pakistan. Nelson -- drawing on Stanford Food Research Institute analysis from the 1950's and 1960's -- looks

at some of the dynamic changes that food aid permitted in Pakistan in the late 1950's and early 1960's. His analysis relies on construction of a "counterfactual" scenario of what would have happened in the absence of food aid. Until the late 1950's investment in agriculture and promotion of agricultural production received low priority from the Pakistan government, while occasional confiscatory Government actions such as forced procurement created disincentives (companion paper by Ahmed and Chowdhury).

Nelson's assessment is that food aid encouraged greater food production in Pakistan. First, food aid prevented further disruptive and confiscatory Government actions which would likely have resulted from increasing concerns about inadequate Government food stocks in the absence of food aid. Second, it allowed the Government to ease the controls that it did have in the food sector. Finally, food aid sales revenues provided resources for the substantial increases in Government investment in agriculture that occurred beginning in the late 1950's.

Our assessment of the impact of food aid on production in Bangladesh, based in part on Nelson's analysis, follows along the similar lines, and is based on four considerations, related to policy impact, BDG resources to invest in agriculture, the impossibility of major food price rises inducing major production strides in the 1970's, and changes in the wheat market.

While it is clear from previous sections that the food policy reforms supported by USAID and the World Bank sometimes fell short of their goals during much of the late 1970's and early 1980's, there was nevertheless an important evolution of the market to which those reforms contributed. By encouraging BDG procurement of local rice and by increasing ration prices and thereby increasing the number of ration card holders who "opted out" of the ration system to purchase grain directly on the market, food aid policy reforms created a more favorable price and policy environment for production. The findings of Mahmud et al. (pp. 104 ff) -- that the negative protection resulting from food aid was most pronounced in the late 1970's -- supports this view, since the real impact of major, consistent procurement, and increased ration prices, was not felt until the 1980's.

As stated in Section VI above, it is difficult to clearly assess the impact of food aid sales revenues on agricultural production, without more fully understanding the process of budget decisions and the impact of ADP investments on agricultural production. It is clear, however, that it is the investment budget (the ADP) not the food subsidy budget or the recurrent budget that has been the residual claimant on Government revenues -- the "last in line" -- in Bangladesh. Food aid sales revenues therefore directly or indirectly added to that budget and promoted food production to the extent that irrigation and agricultural investments were increased as a result. In the case of PL 480 and EC support to

specific programs and projects a more compelling case can be made that investments to support food production directly increased as a result of food aid.

The most complex and telling part of the "incentives" question is what would have happened in the absence of food aid. Price Waterhouse estimates that without food aid, foodgrain prices would have increased approximately 47%. Would such a price increase really have occurred, and if so what would have been its effect, in the absence of food aid? Until the tubewell revolution which has occurred in the 1980's and especially in the late 1980's the farm supply response to such a price increase is uncertain. Government policy constraints on the availability of tubewells and fertilizer would likely have constrained increased production.

In addition, there are political and economic reasons to question whether the Government would have permitted such a price rise. First, until the mid-1980's when jute was eclipsed by garments and other exports as the key foreign exchange earner, increased rice prices meant lower jute production and a substantial loss of foreign exchange earnings (Ahmed, 1978; Planning Commission). Given the foreign exchange constraints faced by the Government especially in the mid-1980's it is unlikely that the relative prices of jute and rice would have been allowed to change to the detriment of jute production. Increased commercial foodgrain imports, or administrative controls, would have prevented this from happening. Second, given Government concerns about keeping the military and middle class beneficiaries of the ration system happy, the political reasons for which the Government would have prevented such a price increase are even more compelling than the economic ones.

Finally, the growing importance of food aid wheat on local markets, including wheat which "leaked" out of targeted programs such as FFW and VGD, created a new agricultural market -- the wheat market -- that barely existed prior to Independence. This market has been increasingly met by local wheat production, whereas in the absence of food aid wheat programs, the market -- and therefore the incentives for local wheat production -- would not exist.

When viewed in the dynamic political and economic context of likely Government actions in the absence of food aid, we believe that it is clear that on balance food aid has had a positive effect on the environment for agricultural production. While other factors, in particular growing input availability and HYV varieties, have been the key determinants of the foodgrain revolution, a congenial price environment and local currency investments in agricultural production have permitted it to take place, and food aid contributed to, or at least did not detract from, that environment.

This is not to say, however, that there have not been particular incentive problems from time to time, nor that food aid decisions now or in the future could not create disincentives on production. Indeed, the cycle Clay (1978) refers to of late food aid arrivals in response to crisis has undoubtedly created production disincentives in some years. The same may well be the case for donor decisions to import rice rather than wheat for reasons of overall availability or pressure from producers' associations back home. In addition, the situation since the late 1980's has changed dramatically, with supply probably significantly more responsive to price than it has been prior to the tubewell revolution. In such circumstances, and with growing domestic capacity for foodgrain production, future food aid decisions may be much more likely to induce disincentive problems than in the past.

V.g) The Current Situation

Since 1992, food aid and food policy have entered uncharted waters, characterized by complexity, confusion, and declining food aid levels. Initiative in food policy management and reform has clearly shifted from donors to the Government. As a result of the Food Account's massive deficits in the late 1980's and 1990, fiscal discipline became the key consideration in food policy and food management decisions. Even as donor food policy conditionalities phased out or ended, the Government itself imposed strict limits on the fiscal costs that food management and policy could incur.

Three separate developments have combined to create uncertainty, undermine the standard operating procedures for managing monetized food aid through the PFDS, and create the need for both donors and Government to forge a new food aid strategy for the 1990's and beyond. The three developments are macroeconomic stabilization, increased productive capacity, and growing worldwide emergency food need.

These three developments have worked together in various ways to reduce food aid levels to Bangladesh. Recent growth rates in foodgrain production exceed the population growth rate, and it is clear that Bangladesh now has the capacity to produce additional foodgrain if market outlets exist. At the same time, the success of the Government's macroeconomic stabilization program has led to unprecedented revenue and foreign exchange surpluses. While success in promoting investment and economic growth would reduce or eliminate these surpluses, and quite possibly take up the existing foodgrain productive capacity as well, the three basic rationales for food aid have been seriously eroded in Bangladesh: budget support, foreign exchange support, and filling the food gap. Bangladesh's success in stabilization and agriculture has also come during a time of growing emergency food need, and declining food aid budgets, worldwide.

Actions taken to promote macroeconomic stabilization have also indirectly contributed to the dislocations in grain markets that have occurred since 1992/93. The largest ration channel, Rural Rationing, was suspended and then eliminated in 1991 and 1992 respectively. While its elimination was undoubtedly due in part to growing documentation of its ineffectiveness, it is clear that Government financial concerns about a very costly subsidized channel were a driving force in the decision. A few months later, the Government opened up the commercial wheat import market to the private sector and reduced and then eliminated Ministry of Food commercial wheat imports, and one of the channels for PFDS wheat, the Flour Millers channel. These decisions also were driven in part by Government desire to reduce its outlays on food. Eliminating or suspending Rural Rationing, Government imports, and the Flour Millers channel set in motion a series of events whose consequences are still being felt.

While Rural Rationing was eliminated, Government nevertheless engaged in a record rice procurement drive for the 1992 boro crop in order to support farm prices. Rahman and Haggblade assess the ways in which this procurement, and its early cessation due to storage constraints, contributed to falling rice prices throughout 1992/93. With the primary outlet for PFDS eliminated (Rural Rationing) the procured rice sat in warehouses and began to deteriorate. Several follow up actions resulted. First, storage constraints and other considerations led to very little procurement for the following two years up to the present; second, the Ministry of Food requested that IFPRI and others participate in a working group to recommend an alternative to Rural Rationing which could more effectively use PFDS foodgrain to reach the poor; third, the Government requested, and donors approved, using the procured rice in donor FFW and VGD programs instead of the wheat which donors had provided for those programs.

As prices fell throughout 1992/93, PFDS monetized offtake also fell to unprecedented low levels. This was partly the result of elimination of Rural Rationing and suspension of the Flour Millers channel, and paddy due to reduced food aid for targeted programs. Offtake in other ration channels was also down, however, because market prices had fallen below OMS and ration prices. It is to the credit of the Government that it did not engage in large scale subsidized sales of stock below the OMS price in order to reduce stocks, because this would have further undermined the foodgrain market. Stocks were slowly sold off, and -- combined with very limited procurement and food aid levels only half of their annual average -- stock levels were brought down considerably, so that they are currently approaching the lowest end-of-year levels in fifteen years.

Government forbearance in not engaging in a massive sell-off of its troublesome 1992/93 stocks at below the OMS price is due in part to the careful crafting of the OMS price formula in the

early and mid-1980's as part of food aid negotiations with USAID and other donors. The formula for OMS price, which links it with procurement price, kept prices from being further undermined in 1992/93 by massive stocks selling by the BDG. As a result of low rice prices, and the market supplying most consumers that traditionally received food from the ration channels, initiatives have been taken to begin eliminating the remaining ration channels.

V. Food Aid Local Currency Generation

From the early years of food aid in East Pakistan, sales of food aid through the PFDS have generated local currency. Local currencies served to fund cash payments to workers under the RWP in East Pakistan. In the years following Independence, donor food aid continued to be sold through the "monetized channels" (the ration channels and later OMS), with the exception of WFP and PL 480 Title II/CARE commodities for food for work and later VGF. Generation of local currency from food aid sales were for many years a byproduct of the programs; but the magnitude of taka involved made food aid a fairly important resource for the Government.

Monetization of the U.S. Title III food aid has always been close to 100%. Monetization of WFP programs has been very limited because of WFP operating rules and because the programs are primarily targeted in-kind distribution programs. Between these two approaches, there has been significant evolution in the monetized share of programs of the other major food aid donors. Canada, the EC and its member states, and Australia provided almost exclusively food aid for sale in the monetized channels for much of the 1970's. However, by the early 1980's, concern about the persistence of the middle class ration channels and about limited impacts of monetized food aid, led to a major shift away from monetized food aid and towards targeted programs. These donors used an increasing proportion of their food in the VGF/VGD and FFW programs managed by WFP.

Local currency from monetized food aid has been used for three general purposes: general budget support, specific development projects, and support to targeted programs. With the exception of the most recent PL 480 Title III program, the clear trend has been away from general budget support. The US was the first donor to move away from general budget support in attributing, and later tracking the expenditure of, local currencies in specific development projects beginning with the 1978 Title III agreement. The EC followed a similar model beginning in 1988. Some other donors have attributed their local currency to specific Annual Development Program (ADP) development projects, but -- in not tracking actual financial flows -- have actually been providing general budget support. (Bakht in EC evaluation) Assuming that for most of Bangladesh's history, any incremental revenues have served to increase the Government investment budget

(the ADP), one could conclude that general budget support from food aid revenues has served to increase Government investment in development programs, whether or not the food aid donor actually tracked the financial flows towards specific projects.

US Title III local currency, and later EC local currency, were provided for expenditure under specific development projects, primarily to increase food production. Most of these projects have been in the ADP, with the exception of long term support by US Title III local currency to the recurrent research expenses of the Bangladesh Agricultural Research Council and its member research institutes and to rural infrastructure construed by the Department of Relief and Rehabilitation.

Some food aid sales revenues have supported targeted food programs. US Title III local currency, as well as modest food aid sales revenue of Australia and several other FFW donors, has been used to pay for construction of bridges and culverts to enhance the development impact of food for work roads, as discussed in Section III above. WFP, Australia, and other donors have monetized modest amounts of food to fund the training, NGO support, and other aspects of the VGD program designed to increase its development impact. Finally, the Canadian RMP program is a cash-based program in which food aid is fully monetized for the explicit purpose of generating sales revenues in order to pay the RMP workers a cash wage.

The evolution of food aid local currency from being a byproduct to being increasingly programmed for development purposes culminated in the 1991 and 1992-95 US PL 480 Title III programs. In these programs, food sales serve to generate revenue which is used to support reforms in the Government investment budget process intended to effect more developmentally sound Government investments. Policy reforms sought through these recent Title III agreements fall entirely outside of the food sector, and are aimed at increasing the rigor and management of the Government investment budget process.

The magnitude of overall food aid local currency is significant. With incremental funds generally going to the investment budget, it is pretty clear that food aid counterpart funds have contributed to increasing overall public investment levels, including in those ADP sectors which have facilitated foodgrain production, such as agriculture, rural development, roads, and water development.

VI. Conclusion and Choices for the Future

Conclusions

The evolution of food aid in Bangladesh has been shaped by donor and Government perceptions of lessons learned in the 1974 famine. Inadequate supplies, unreliable food aid quantities, very high

market prices, and a Public Food Distribution System (PFDS) favoring the privileged and middle-class at the expense of the poor resulted in the 1974 famine.

For the two decades since the famine, donor food aid and other resources have focused on assisting and encouraging the Government to increase stock and storage levels to permit active market interventions when prices rise too high; reduce resources going into ration channels; increase resources going into the targeted programs; and undertake procurement, price, and market reforms to provide greater incentives for production and private trade.

While surplus disposal was the original impetus for the first food aid shipments to Pakistan, even before Independence the rationale had shifted to humanitarian, political, and developmental concerns. The humanitarian concern has been to maintain adequate supplies to prevent a recurrence of the 1974 events; with donor support Bangladesh has succeeded in avoiding such a recurrence. The political concern has been to avoid discontent in the military and middle class by maintaining acceptable foodgrain prices and availability. The development concern has been to create an environment conducive to food production and rural development.

Food Aid for Targeted Programs The targeted food programs have clearly reached substantial numbers of poor people. The targeted programs, FFW and VGD in particular, have also experienced a long evolution from relief to development. Although donor directed, when viewed in hindsight this evolution -- which has taken twenty years in the case of FFW -- appears a purposeful journey, learning from mistakes and incorporating positive experiences along the way. The long journey from relief to development is almost complete. The SIFAD consultations have helped in this respect, but SIFAD's joint Government-donor approach to using ADP resources to fund some of the development costs of relief programs has not materialized, and the increasing development focus of CARE FFW, of WFP and other donor FFW and VGD, and of the EC's new commingled food aid and credits program, continues to be donor driven and funded.

With donor food aid budgets under pressure for emergency relief efforts elsewhere in the world, the free flow of donor food aid that has fueled FFW and VGD may continue to decline. Without an unprecedented Government financial commitment to these programs, declining food aid budgets could mean curtailment of programs which after as much as twenty years have finally integrated food relief into effective development interventions. In this sense, the twenty year journey has been too long. Resources that could have had significant developmental impact have been lost. Most troubling may be that Government never considered these programs as its own. If it had, perhaps both Government and donors might have heeded lessons from the Government's pre-Independence

program, the Rural Works Program, that was to some extent a model and in many aspects, a harbinger of the future for the current targeted programs.

Food Aid to Support Food Policy Reform: The "reform agenda" supported initially by USAID and the World Bank, later by Canada, and increasingly through the 1980's -- at least in informal dialogue -- by most other major food aid donors, gained the support of the BDG in the late 1970's, but was incrementally implemented over more than a decade. Ongoing dialogue and Government engagement have characterized this agenda, and the results have been seen in substantial Government voluntary procurement of foodgrains from domestic sources; equivalence of the ration and OMS price; a major reduction in monetized offtake; significant private commercial imports; and Government unwillingness to undersell the private sector in the recent past. Government and donors are clearly at a crossroads regarding future directions for procurement and offtake, but it is a crossroads that Government sees as its own.

While food aid tonnages have clearly had short term disincentive effects in some years, the more important incentives question regards the long term impact of food aid on agricultural innovation and investment: To what extent has the food aid donors' food policy reform agenda facilitated the Green Revolution investments in tubewells, fertilizer, and HYV seed which has brought Bangladesh to the brink of foodgrain self-sufficiency? While some believe that provision of food aid to the PFDS retarded government decisions and investments to promote food production, it is clear that until the early 1980's Bangladesh was not in a situation in which the Green Revolution could really take off. Political concerns about urban rice prices and distribution, economic concerns about the rice-jute price trade-off, and Government policies severely constraining tubewell and fertilizer availability would have prevented a dynamic investment and supply response to higher rice prices in the absence of food aid until the early to mid-1980's. But already by this time food policy changes were helping to create an environment for greater production. In effect, the incentives concerns are much more apt today than the 1970's and early 1980's, because the production environment is more flexible and has much greater productive capacity. In the 1970's and early 1980's, Bangladeshi farmers could not have produced the additional one to one and a half million tons of food represented by food aid. Today, they probably could if they were sure Government or the markets would purchase it.

Food Aid for Local Currency Generation: Food aid through the monetized channels has generated significant local currency resources, which have served, directly or indirectly, to support Government development investment. Until the recent past, Government budgets have been severely constrained, and the resources provided by food aid sales revenues have been a

significant boost to the ADP and other developmental investments, including a number of investments to boost foodgrain production. Local currency from food aid has ranged between xx% and yyy % of the Government development budget. Some food has also been monetized to support specific project expenditures under US, WFP and other donor targeted food programs.

Choices for the Future

The current situation is new for Bangladesh: PFDS Offtake, stocks, and procurement are all at unprecedented low levels. For most of the past twenty years, high or growing procurement levels combined with substantial donor food aid and occasional Government commercial imports have contributed to high PFDS stock levels. Those stocks have generally been maintained in reasonably good condition because offtake through the monetized and non-monetized channels was at high enough levels to ensure a fairly rapid turnover of stocks in most years. In 1992/93, stocks were high, but offtake low, and the result was a significant deterioration in stocks quality. Low offtake relative to stock levels meant a very slow turnover time, and the beginnings of stock spoilage. In 1993/94 both stocks and offtake have been low, and the result is concern in some quarters about inadequate stocks to meet emergencies. In both years, a virtual absence of procurement has led to Government concern about the political and economic consequences of failure to procure foodgrain domestically. A coherent strategy and vision of the future, with clear and mutually reinforcing objectives for procurement, stocks, and targeted offtake, is required in order for donors and Government to use their resources wisely in the food sector of Bangladesh.

What choices does the future hold, and what are the implications for food aid? It may be most useful to look at the choices in terms of stocks, procurement, and offtake.

Stocks. The appropriate size of Government stocks is a subject of some contention. One fact stands out now which is new, however: PFDS offtake has shrunk so far in both targeted and monetized programs, that the stock needed to supply that level of offtake is less than recent estimates of the minimal emergency stock requirement. A reexamination of the "optimal size of stocks" to respond to emergencies is certainly in order now, in light of the major changes which have taken place in Bangladesh in the recent past. Are foodgrain markets now sufficiently integrated within Bangladesh and with the world market that news of impending flood or disaster in Bangladesh would not lead to the kind of price hikes and shortages that killed people in 1974? Or is emergency OMS-type intervention to moderate prices -- which requires a substantial emergency buffer stock to make OMS interventions credible in the market -- still needed in such a situation? To what extent could BDG use forward contracting to ensure an ability to call on supplies in short order in an emergency instead of relying on PFDS stocks?

If it is determined that the current "low" end of year stock level anticipated for June 1994 (currently projected at 576,000 MT) is too low, then donors and Government must be aware of the implications of raising it. Stocks can only increase if procurement and offtake both increase. The reason that procurement would have to increase is that the other potential source of increased stocks, food aid, is on a downward trend. The reason that offtake would have to increase is that high stocks and low offtake mean spoilage. The threat of spoilage felt in 1992/93 and 1993/94 would persist year after year with high stocks and low offtake.

Procurement of Domestic Foodgrains: Donors helped to encourage the Government in the 1970's to use procurement as a way to simultaneously increase stock levels and support farm prices. Procurement policy is currently not the subject of any donor food aid agreements, and is clearly a Government prerogative. However, different procurement policies do have varying implications for food aid. The main implication is that a return to the high procurement levels of the early 1990's could only take place with major additional reductions in food aid, or increases in offtake, or both. The reason is that past procurement levels were possible only in situations of much higher stocks and offtake than currently exist. With relatively low offtake, the only way for high procurement to avoid rotting in Government go-downs -- which almost occurred on a major scale in 1992/93 -- is for domestic procurement to replace some food aid. Significantly higher offtake could avoid this problem.

Offtake: The current low offtake situation is not without a number of advantages. It saves the Government and donors money, and it ensures that PFDS offtake does not interfere with domestic food markets or incentives. The foodgrain markets, and consumers with disposable income, have shown themselves quite capable of functioning well with the ration channels effectively shut down and monetized offtake almost non-existent except for military sales. Certainly any return to the monetized ration channels that have effectively not functioned for a year would be backpeddling on major reforms whose only disadvantage is the damage they have done to special interests. We assume that the monetized ration channels are closed for good. However, there are two other kinds of offtake that merit consideration, targeted programs and "stocks rotation."

Targeted programs (VGD/FFW/RMP): It is clear that Government views the targeted programs as largely donor programs. A new development emphasis in these programs, combined with lack of complementary Government budget resources to fund the development emphasis (eg, to fund FFW structures or VGD training) has led donors to stretch declining food aid levels to cover both direct food wage payments, as well as the monetization requirements to produce cash to pay for the new development focus of these

programs. As a result direct beneficiaries of targeted programs have declined. Pressures in this direction will continue as food aid budgets shrink for Bangladesh. The question for donors and Government is the extent to which Government will commit serious resources to procure the food needed to enable proven, successful food programs such as VGF/VGD and FFW which help the poor to continue and expand. And if Government is unable or unwilling to commit such resources, are donors willing to stem the tide of food aid reductions, or at least to protect the targeted programs while sacrificing program food aid?

Stocks rotation: This is a term used in other countries where stocks serve primarily an emergency buffer stock purpose. In non-emergency years a rotation/sale schedule is maintained to ensure that stocks are rotated out before quality deterioration becomes a problem. The term "stocks rotation" is seldom used in Bangladesh because the traditionally high offtake levels through the PFDS until 1992/93 served to keep stocks moving in and out of the system faster than they could deteriorate. If Bangladesh needs to maintain a stock level that exceeds its capacity to rotate the stock through existing distribution channels, it will need to develop a stocks rotation system. The ideal stocks rotation system minimizes cost and market interference, and might possibly involve either tenders or taking positions in a rice exchange or futures market were one to come into existence locally.

The choices ahead are difficult and complex, but they are the culmination of success in boosting production and in stabilizing the economy. The key question is what the Government wants to achieve through its policies in procurement, stocks, and offtake, and what is the optimal combination of Government financial resources and donor food to achieve those objectives in ways that ensure that the poorest, most vulnerable people in Bangladesh are protected from emergency crises and chronic food shortages in ways that enhance development.

Notes:

1. The authors manage USAID/Dhaka's PL-480 Title III program (Atwood/Jahangir) and Title II program (Smith/Kabir) respectively. The first three authors equally share primary authorship. We wish to thank the following people for their help and support: Lulu Bilquis, Steve Haggblade, Sultanun Nasir, Evelyn Lee, Md. Akhteruzzaman, Syed Nizamuddin, A.H. Shadat Ullah, Andrew Sayles, Nick Roberts, Mr. Halim, Gaston Eyben, K.M. Akhtar, Kumud Bhowmik. The views, errors, and omissions contained in this paper are our own and should not be attributed to USAID.
2. Reduced or delayed food aid is discussed in some detail in Crow, n.d.; Crow, 1990; Sobhan, 1982; Sobhan, 1979; McHenry and Bird; Parkinson; Sen.
3. Figure 6 may overstate the post-Independence expansion in the ration channels, to the extent that the Essential Priorities (EP) channel for the uniformed services may not have been counted in the East Pakistan ration offtake prior to Independence, and may instead have been "counted" in a Central Government of Pakistan budget for feeding the uniformed services. Even assuming, however, that EP offtake remained constant pre- and post-Independence, it is clear that a major post-Independence expansion in the other urban ration channels took place, to a degree that significantly exceeds the size of EP.
4. The Bangladesh experience offers a challenge to the growing viewpoint that rural public infrastructure employment is an effective way to reduce poverty while affecting a sustainable development impact. This viewpoint is reflected, for example, in Ravailon (1991; May 1992; June 1992) and Drecc and Sen. Explicitly or implicitly, this viewpoint assumes that rural public employment programs which effectively target the poor can simultaneously be well managed in the siting and construction of infrastructure. The history technical, programming, and administrative difficulties in successfully siting and building FFW infrastructure for sustainable development impact in Bangladesh counsels caution in making this assumption.

- Abdullah, A.& Murshed, KAS Research Report No. 60, "The Distribution of Benefits from the Public Food Distribution System," Bangladesh Institute of Development Studies, June 1986.
- Ahmed, A.U. Food Consumption and Nutritional Effects of Targeted Food Interventions in Bangladesh, International Food Policy Research Institute, Bangladesh Food Policy Project, Dhaka, June, 1993.
- Ahmed, R. Public Food Distribution & Poverty in Bangladesh The Bangladesh Journal of Agricultural Economics Vol.1, December, 1978. Bangladesh Agr. University Mymensingh.
- Ahmed R. et. al. "Development Impact of the Food-For-Work Program in Bangladesh", 1985 International Food Policy Research Institute, Bangladesh Institute of Development Studies.
- Alamgir, M. 1985 "Bangladesh: Economic and Social Development Prospects" World Bank Report No. 5409.
- Australian Government "Food Aid to Bangladesh" A Review of the Australian Program, Australian Government Publishing Service, Canberra 1983.
- Abt Associates "The Impact of CARE's Rural Roads and Bridges Program in Bangladesh", 1989
- Abt Associates "Follow-up Study of the Development Impact of CARE Food For Work Roads in Bangladesh," 1986
- Abt Associates The Development Impact of Title II Food For Work Roads in Bangladesh, 1984
- Bangladesh Government "Report of the Committee on Gradual Reduction of Food Subsidy", Planning Commission, Ministry of Finance, December 1978.
- Bangladesh Government "Memorandum for the Bangladesh AID Group": Mid-Year Review of Food Situation, 1979-80, External Resources Division (Ministry of Finance) in collaboration with Planning Commission, Ministry of Agriculture & Forests, Ministry of Food. 1980, Dhaka.
- Bangladesh Government & World Food Program "Report of the Seminar on Food aid for Human and Infrastructure Development in Bangladesh," January 18-19, 1988, Dhaka, Bangladesh, March, 1988.

- Bangladesh Institute of Development Studies/ International Food Policy Research Institute Development Impact of the Food For Work Program in Bangladesh, December 1986.
- Beacon Associate "Report on the Existing System of Public Foodgrain Distribution in Bangladesh and Proposals for Restructuring" 1986.
- *Block S.et.al. Agricultural Policy Analysis Project, Abt. Associates Inc., Cambridge, Massachusetts, APAP Staff Paper No. 5, April 1987.
- Brundin, Hjalmar "Preliminary Report FFW Secondary Effect Methodological Study", (mimeo), USAID/Dhaka, May 4, 1979.
- Brundin, Hjalmar "Food For Work Saturation Level and Constraints to Expansion Study", USAID/Dhaka, October, 1979.
- Canadian International Development Agency/U.S. Agency for Int'l.Dev. Agency Technical Report No. 1. 1978. "Canadian Assistance to World Food Program Assisted Food-For-Work Schemes in Bangladesh.'
- *Chen Marty & Ghuznavi World Food Program/CFA: 4/INF/5, Sept. 1977
- Chowdhury, OH "Rural Public Works Program in Bangladesh." The Bangladesh Development Studies, 1983.
- Clay, E. "Food Aid and Food Policy in Bangladesh," Food Policy, May 1979.
- Clay, E. "Floods in Bangladesh 1974 and 1984: From Famine to Food Crisis Management" Food Policy, August 1985.
- Clay, E. "Food Aid and Policy in Bangladesh" Bangladesh Journal of Agricultural Economics 1(2) Dec. 1978 PP112-13.
- Clay, E.J. "Poverty, Food Insecurity, and Public Policy in Bangladesh," in Food Policy in Low Income Countries, World Bank Staff Working Paper #473, 1981.

- Clay, E.J. & Singer, H.W. "Food Aid and Development Issues and Evidence - A Survey of the Literature since 1977 on the Role & Impact of Food in Development Countries", Sept., 1985, Rome, Italy, World Food Program, Occasional Paper No. 3.
- Clements, D.G. et. al. "An Evaluation of CIDA's "Food Aid Programme to Bangladesh", Prepared for the Bangladesh Programme: Canadian International Development Assistance, Asia Branch, June, 1990.
- *Cristeson, Bill "Neither food nor peace: US Food Policy in Bangladesh," Pacific Research 10 (4) 1979.
- Crow, Ben "US Politics in Bangladesh: The Making and the Breaking of Famine, Development Policy and Practice-Working Paper No. 4, Technology Faculty, The Open University, Milton Keynes, England.
- Crow, Ben "Moving the Lever: A new Food Aid Imperialism, : in Henry Bernstein et. al. (ed), The Food Question: Profits Versus People, London, Earthscan, 1990.
- Curry, Bruce. Famine Symposium Report: "The Famine Syndrome: Its Definition for Relief & Rehabilitation in Bangladesh" Ecology of Food & Nutrition 1978, Vol7, pp87-98.
- Curry, Bruce "Food Aid and Agricultural Production in Bangladesh, Bulletin 1983, Vol 14 No.2, Institute of Development Studies, Sussex.
- Day, Madan M. "Impact of Research & Roads on Rice Productivity in Bangladesh: Implications for Rural Poverty Alleviation, International Rice Research Institute/ Bangladesh Agriculture Research Council.
- Ehrhardt, R. Spearman, D. Food Aid and Food Policy in Bangladesh: Report of a Food Policy Review Mission, October 1983/
- Epstein Susan U.S. Bilateral and Multilateral Food Assistance Programs: Report No. 85-114 ENR, Congressional Research Service, The Library of Congress, March 1985.
- EUREKA (Bangladesh) Ltd. Study on Subsidies in Public Food Grain Distribution System in Bangladesh, October, 1986.
- European Economic Commission "Bangladesh Multi-Year Food Aid Programme" Request No. 2132), Final Report, August 1990, Joint Mission of Dangroup International Consulting Engineers and Planners A/S and Setz.

- *Food and Agriculture Organization "The Food Security Formulation and Project Identification," December 19
- Garzon, JM. "Food aid as a tool of development: The experience of PL-480 Title III" Food Policy August 1984, pp232-244.
- Gerin-Lajoie Report to the Secretary of State for External Affairs On the Mission to Bangladesh Canadian International Development Agency, March 19-21, 1975.
- *Ghose, A. K. "Bangladesh Food Strategy Review Exercise," International Labor Organization, February 1985.
- R. J. Szal,
- *Hossain, M. "Food Aid, Food Security and Development: Seminar on Food Strategies in Bangladesh - Medium and Long Term Perspectives - Main Document, Dhaka, 8-10 Oct. 1988, Paper 7, pp65.
- Hartmann, B. Needless Hunger - Voices from A Bangladesh Village Institute for Food and Development Policy, 1979.
- Boyce, J.K.
- Hartmann, B. A Quite Violence - View from a Bangladesh Village. Dhaka: University Press Ltd., 1983.
- Boyce, J.K.
- Hodgdon J.D. "Follow-up Study the Development Impact of CARE Food et.al. For Work Roads in Rural in Bangladesh", Abt Associates Inc, USA, Final Report, Dec, 1986.
- Institute of Nutrition "Economic and Nutritional Effects of Food For Relief Food Science Work Relief Work Projects Institute of Nutrition and Food Science," University of Dhaka, Preliminary Report, August, 1978.
- International Trade & Dev. A Compilation of Informational Materials on United States Public Law 480: The United States Food For Education Foundation Peace Program, 1954-1984
- International Food Policy Research Institute Cost of Public Food Distribution in Bangladesh Bangladesh Food Policy Project, July 1991
- Islam, M. S. "Poverty Alleviation through Rural Infrastructure", Paper presented at the 9th Annual Conference at Bangladesh Agriculture Research Council, May 2, 1993.
- Jackson D, et. al. Against the Grain: The Dilemma of Project Food Aid OXFAM, 19?

- KBN Engg. & Applied Sc. "Programmatic Environmental Assessment of the USAID/ Bangladesh Integrated Food For Development Program" PDC-5513-1-00-7137-00, Delivery Order No. 29, Project No.: 388-0061, January 1991.
- Khan A. H. "Rural Development Approaches and The Comilla Model," 1983.
- Mahmud, W. et. al. "Agricultural Growth through Crop Diversification in Bangladesh", International Food Policy Research Institute-Bangladesh Institute of Development Studies, Dhaka, May 1993.
- Management Systems Int'l. "Institutional Assessment of Food For Work Feeder Roads Program in Bangladesh," 1987.
- Norwest H.C. Ltd. "Canadian Assistance to World Food Programme Assisted Food For Work Schemes in Bangladesh," Technical Report No. 1, July, 1978.
- Maziruddin, Kazi "Price Reporting in Relation to the Food Situation and Outlook," Proc. Seminar on Food Security and Food Situation Monitoring, FPMU/FAO, 1987.
- Malony, C. "Integrated Food For Development Program: Social Soundness Analysis", Institute for Development Anthropology, February, 1993.
- McHenry, D. "Food for Aid and Diplomacy," Foreign Policy, Summer, 1977.
- McHenry, D. & K. Bird "Food Bungle in Bangladesh" Foreign Policy 1977(27) Summer, pp72-88.
- *Maxwell, Simon Food Aid, Food For Work, and Public Works. Discussion Paper #27, Institute of Development Studies, University of Sussex, March 1978.
- Molla, Md. M. Politics of Food Aid: Case of Bangladesh, Academic Publishers, Dhaka, 1990
- Momin, M.A. Poverty Alleviation through Rural Infrastructure Development in Bangladesh, Center on Integrated Rural Development for Asia and Pacific, Dhaka, May 1993.
- Montgomery, R. "The Floods of 1984 in historical context" Disasters 9(3) 1985 pp163-172.
- Montgomery, R. et.al. Open Market Grain Sales as a Public Policy Instrument for Moderating Food Price Fluctuations in Bangladesh, USAID/Bangladesh, July, 1983.

- Murshid, KSA. "Floods and Food Crises: Bangladesh," in 1987, Bangladesh Journal of Political Economy, 1987, Vol.9, #1.
- Nanerjee, N. "Food Aid and Food Policy Review", Bangladesh, Canadian International Development Agency, April/May, 1987.
Rolston, W.
- Nelson, G.O. "Food Aid and Agricultural Production in Bangladesh" IDS Bulletin, Vol 14, (2), 1983 Institute of Development Studies, University of Sussex.
- Parkinson, J. Food Aid, in Just Faaland (ed.) Aid and Influence: A Case of Bangladesh, St. Martin's Press, New York, 1981.
- Quddus, M. & "Food Price Bubbles and the 1974 Bangladesh Famine,"
Becker, C. The Economic Institute, Boulder, Colorado, Nov., 1988
- Ravallion, M. Markets and Famines Dhaka: University Press Ltd., 1990.
- Ravallion, M. "Reaching the Rural Poor Through Public Employment Arguments, Evidence, and Lessons from South Asia, World Bank Research Observer, vol.6, #2, July 1991), pp. 153-175.
- Ravallion, M. World Bank Conference on Public Expenditures and
et. al. and the Poor: Incidence and Targeting: "Is Targeting Through a Work Requirement Efficient? Some Evidence for Rural India, Draft Report, Wash, DC, June 1992.
- Ravallion, M. "Modeling Behavioral Responses to Public Employment
et. al. Projects," The World Bank, May, 1992.
- Richardson, Bangladesh "Food Aid: PL-480 Title I & III" Project B.C.,
et.al. Impact Evaluation, January-February, 1983, United States Agency for International Development.
- Rothschild, "Food Politics," Foreign Affairs 1976, vol 54(2).
Emma
- Scott, Michael Aid to Bangladesh: For Better or Worse. Impact Series #1, OXFAM-America/Institute for Food and Development Policy, Boston, 1979.
- Sen, Amantya, Poverty and Famines, Oxford: Calendar, 1981.
- Sobhan, Rehman "Politics of food and famine in Bangladesh,"
Economic & Political Weekly, Dec. 1, 1979.

- Sobhan, Rehman "Politics of Food and Famine in Bangladesh," in Emajuddin Ahmed (ed), Bangladesh Politics (Dhaka: Center for Social Studies, 1980).
- Sobhan, Rehman The Crisis of External Dependence: The Political Economy of Foreign Aid to Bangladesh Dhaka: University Press Ltd., 1982.
- Sobhan, Rehman Basis Democracies, Works Programs, and Rural Development in East Pakistan, Dhaka: Oxford University Press Ltd., 1968.
- Stapanek, J. Bangladesh: Equitable Growth? New York, Pergamon Press, 1979
- USAID Audit 1981
- World Bank Bangladesh: Food Policy Review (Report No. 1764a-BD) Dec. 12, 1977.
- World Bank Bangladesh: Economic and Social Development Prospects (rpt. 5409) 1985.
- World Bank Bangladesh: Food Policy Issues (Report No. 2761-BD) December 19, 1979.
- World Bank Bangladesh Food Policy Review: Adjusting to the Green Revolution (rpt. #9641-BD), February 28, 1992.
- World Food Program "Final Monitoring Report for 1987/88": Vulnerable Groups Development Programme: Assisted by WFP/ Canada/ Sweden/European Economic Community/ Government of Bangladesh/Australia," December-1988.
- World Food Program "Final Monitoring Report for 1989/90: Vulnerable Groups Development Programme: Assisted by Australia/ Canada/European Economic Community/F.R.Germany/WFP/ Government of Bangladesh/Australia," January-1991.
- World Food Program/Committee on Food Security 17/16 Add C3, 1984 In-depth Impact Assessment.
- Zaman, S.et.al "The Impact of CARE's Rural Roads and Bridges Program in Bangladesh," Abt Associates Inc, USA, Junc, 1989.
- Zahir, S. Rural Roads and Poverty: Some thoughts for Future Strategy, Bangladesh Institute of Development Studies, Paper presented at the 9th Annual Conference at Bangladesh Agricultural Research Council, May 2, 1993.

Table 1-Ration, OMS, & Market Price
Table 2-Monetized vs. Non-monetized Offtake
Table 3-Paddy Procurement and Market Prices

Figure 1-Bangladesh Foodgrain Availability
Figure 2-Total Food Aid
Figure 3-PFDS Wheat and Rice by Source Compared to Offtake
Figure 4-PFDS Rice by Source Compared to Offtake
Figure 5-PFDS wheat by source Compared to Offtake
Figure 6-PFDS Offtake by Category
Figure 7-FFW Tonnages by Donor
Figure 8-VGD Tonnages by Donor
Figure 9-VGD Beneficiaries
Figure 10-Food Aid: Monetized vs. Targetted
Figure 11-Market Price, Ration Price, OMS Price
Figure 12-Storage, Year-end stocks, Annual Offtake

**TABLE 1—RATION, OMS AND DOMESTIC MARKET PRICES OF FOODGRAINS
1972—1993**

YEAR	RICE			WHEAT		
	Ration Price	OMS PRICE	Market Price	Ration Price	OMS PRICE	MARKET PRICE
1972	80.00	—	228.00	—	—	—
1973	113.00	—	300.00	—	—	—
1974	161.00	—	619.00	—	—	—
1975	196.00	—	364.00	158.00	—	241.00
1976	241.00	—	332.00	188.00	—	209.00
1977	255.00	—	421.00	201.00	—	255.00
1978	273.00	—	458.00	217.00	—	260.00
1979	330.00	521.88	606.00	249.00	323.89	354.00
1980	383.00	543.95	514.00	297.00	355.24	332.00
1981	445.00	579.87	565.00	322.00	376.91	354.00
1982	549.00	639.95	624.00	375.00	394.42	410.00
1983	603.00	691.53	670.00	402.00	441.95	418.00
1984	673.00	800.85	750.00	426.00	470.34	442.00
1985	729.00	810.77	726.00	474.00	523.87	472.00
1986	774.00	831.63	855.00	514.00	579.74	528.00
1987	823.00	916.15	919.00	539.00	598.27	547.00
1988	871.00	954.61	941.00	565.00	610.03	571.00
1989	941.00	1000.53	935.00	611.00	629.44	598.00
1990	1000.00	1050.00	1010.00	651.00	680.00	662.00
1991	1000.00	1083.33	1073.00	651.00	691.08	673.00
1992	1125.00	1104.17	921.00	733.00	732.67	675.00
1993	1150.00	1100.00	843.00	750.00	720.00	553.00

Source: Ministry of Food, GoB; I. Khalil, 1991.

Note: 1993 prices are proxy.

Table 2 – Monetized vs Non – Monetized Offtake

(000 MT)

Year	Monetized	Non – Monetized	Total	Monetized (%)	Non – Monetized (%)
1968–69	968	70	1038	93.26	6.74
1969–70	1339	15	1354	98.89	1.11
1970–71	1085	233	1318	82.32	17.68
1971–72	1314	420	1734	75.78	24.22
1972–73	2407	263	2670	90.15	9.85
1973–74	1675	79	1754	95.50	4.50
1974–75	1603	181	1784	89.85	10.15
1975–76	1450	242	1692	85.70	14.30
1976–77	1274	199	1473	86.49	13.51
1977–78	1586	290	1876	84.54	15.46
1978–79	1561	264	1825	85.53	14.47
1979–80	1935	498	2433	79.53	20.47
1980–81	1142	339	1481	77.11	22.89
1981–82	1624	367	1991	81.57	18.43
1982–83	1442	489	1931	74.68	25.32
1983–84	1492	528	2020	73.86	26.14
1984–85	1668	906	2574	64.80	35.20
1985–86	868	550	1418	61.21	38.79
1986–87	1392	688	2080	66.92	33.08
1987–88	1394	1097	2491	55.96	44.04
1988–89	1516	1419	2935	51.65	48.35
1989–90	1371	793	2164	63.35	36.65
1990–91	1518	853	2371	64.02	35.98
1991–92	1421	925	2346	60.57	39.43
1992–93	457	552	1009	45.29	54.71
1993–94	477	627	1104	43.21	56.79

Source: WFP (Bangladesh Foodgrain Forecast, various issues).

Table 3— Paddy Procurement and Market Prices

<u>Year</u>	<u>Procurement</u>	<u>Tk/md</u> <u>Market</u>
1971	23.00	
1972	33.00	
1973	45.00	
1974	77.00	
1975	77.50 /*	119
1976	78.00	69
1977	84.00	87
1978	92.00 /*	93
1979	100.00	129
1980	115.00	121
1981	124.00	121
1982	135.00	167
1983	144.00	164
1984	165.00	200
1985	170.00	185
1986	175.00	200
1987	200.00	214
1988	210.00	214
1989	220.00	205
1990	220.00	236
1991	245.00	248
1992	210.00	213
1993	200.00	185

Source: Hamid, August, 1991.; FSR, February, 1994 and Foodgrain forecast, January, 1994.

Note: /* proxy data: Procurement price is for Aman paddy (November).

52

Figure 1 – Bangladesh Foodgrains Availability
(Rice and Wheat)

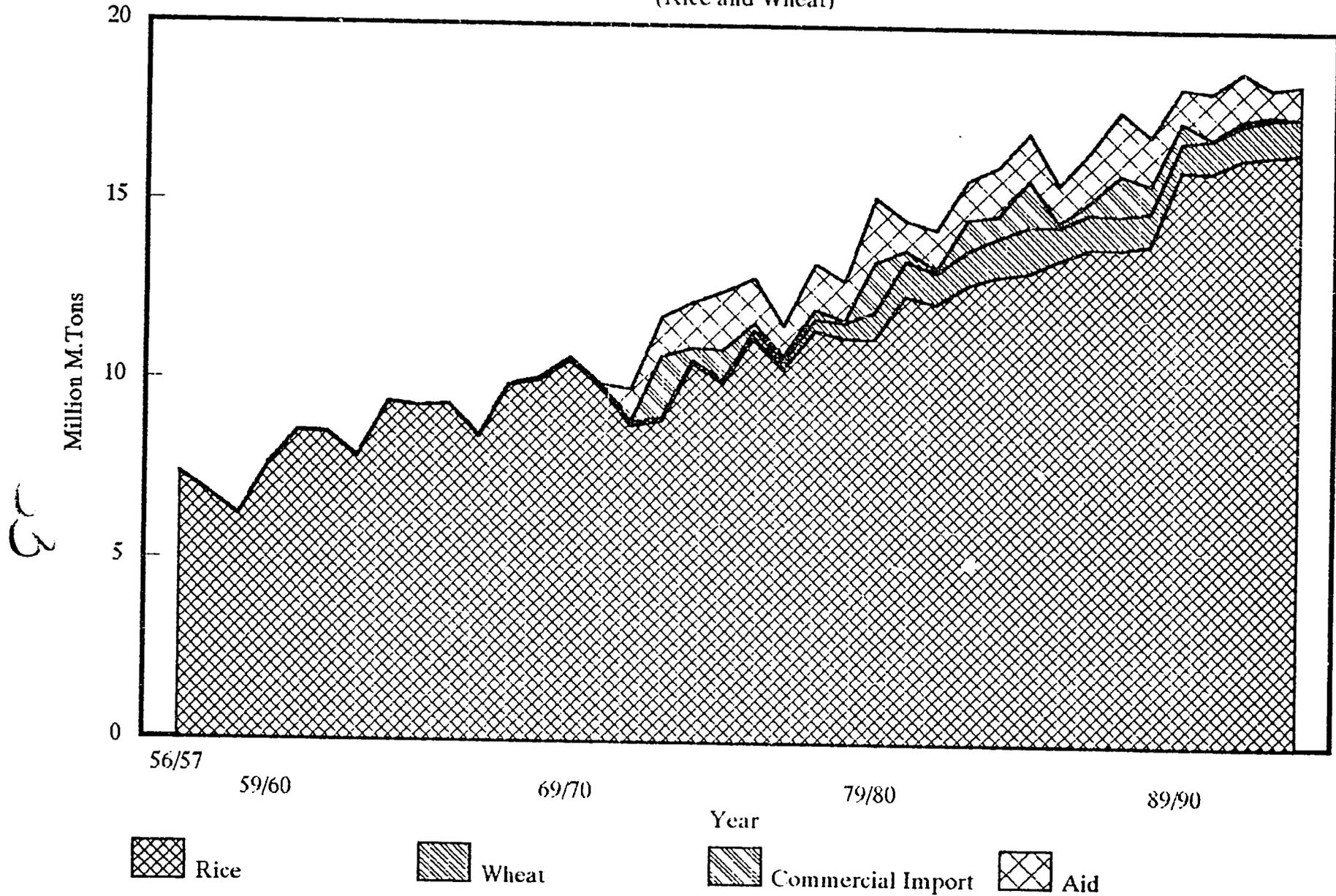


Figure 2—Total Food Aid

(1971/72–1992/93)

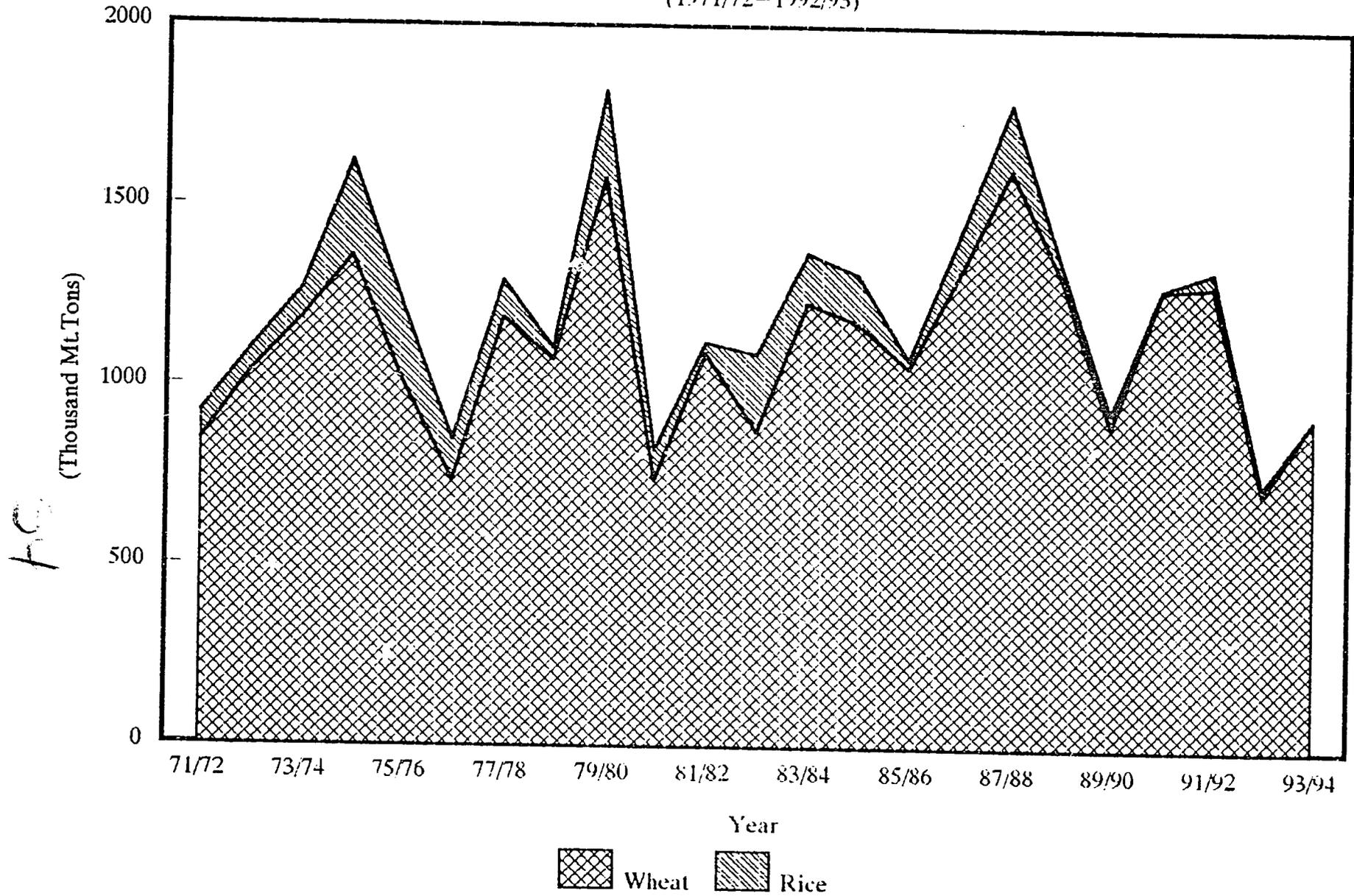


Figure 3 - PFDS by Source Compared to Offtake
(Rice and Wheat)

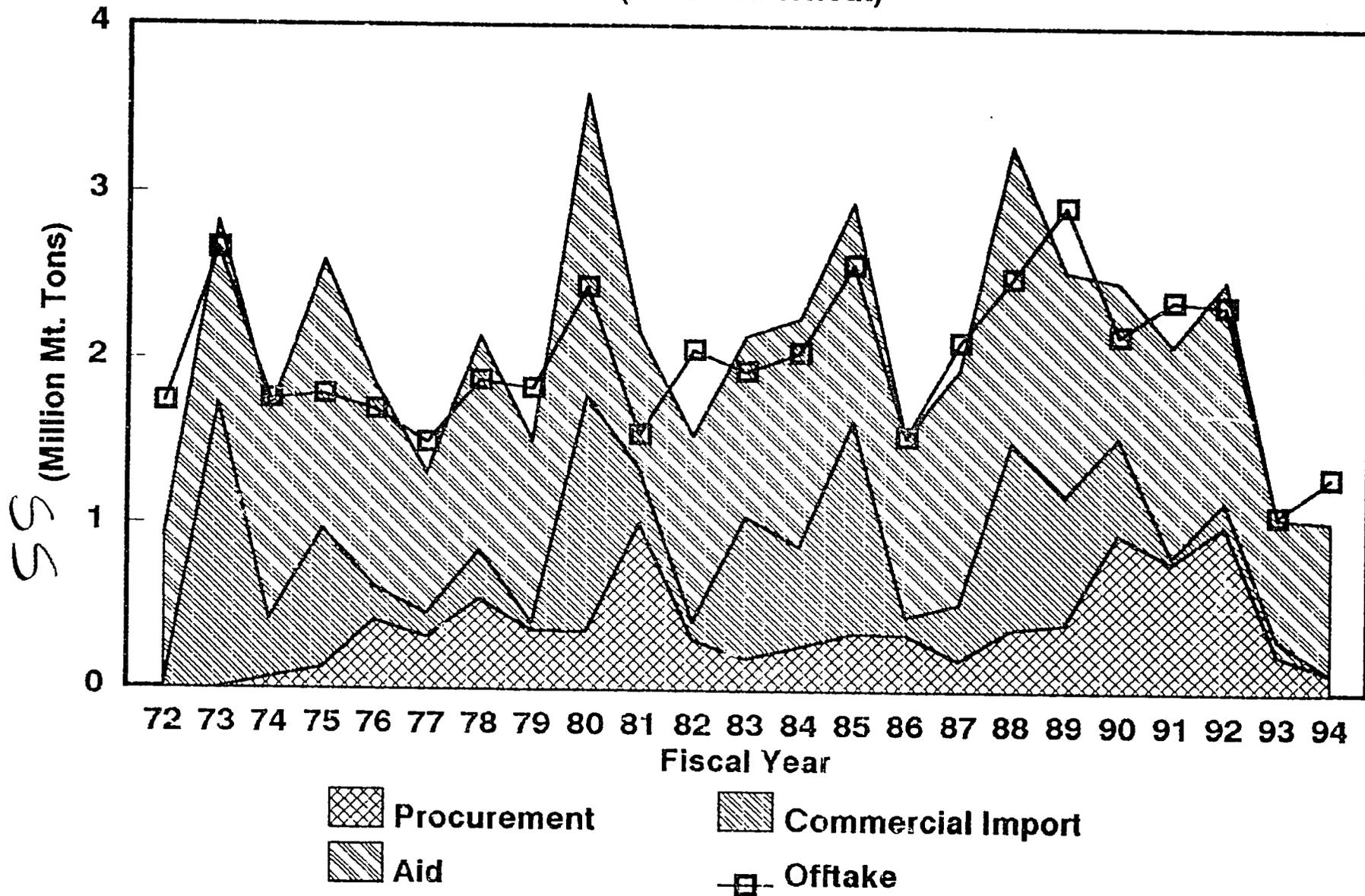


Figure 4—PFDS Rice by Source Compared to Offtake
(1971/72–1993/94)

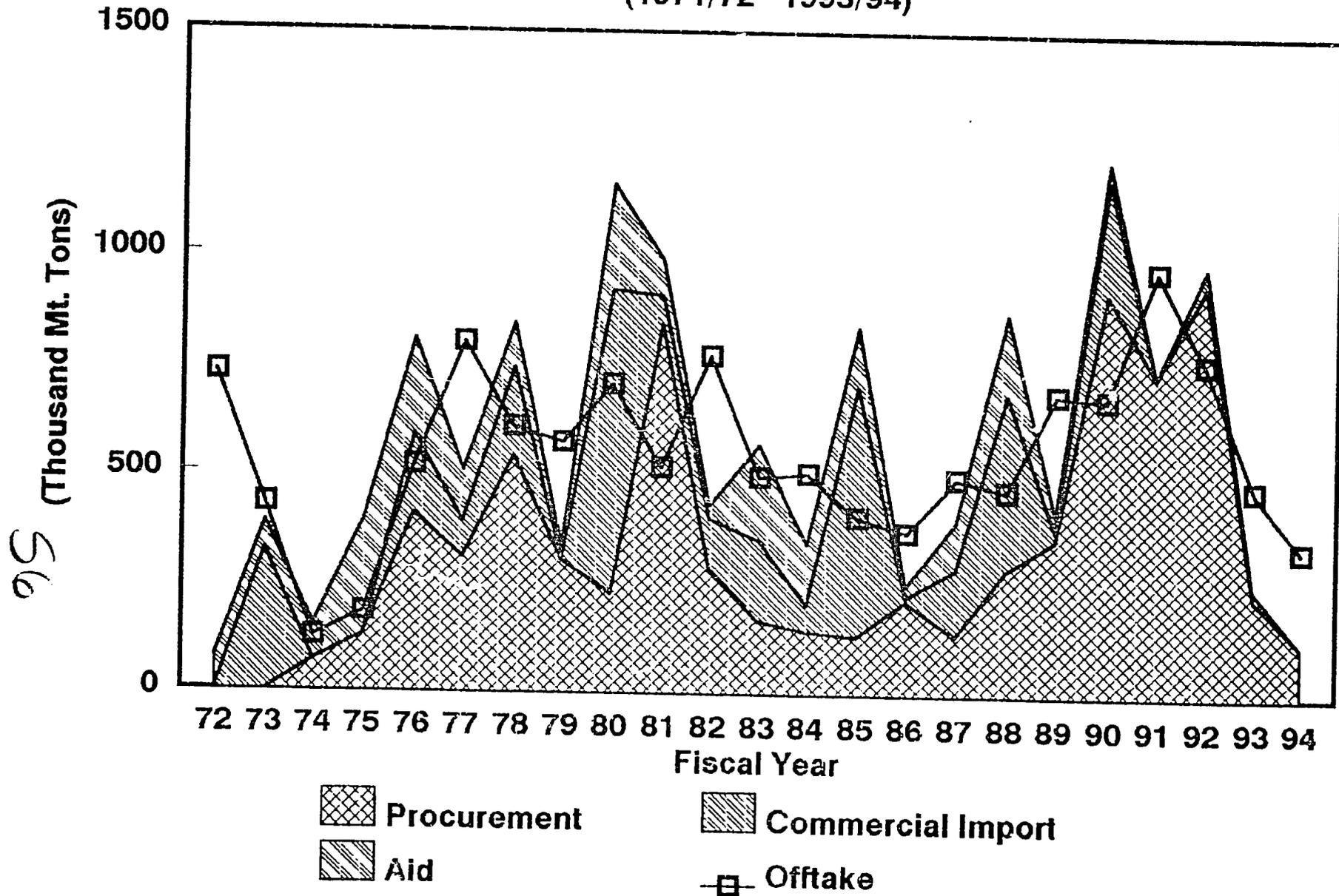


Figure 5 – PFDS Wheat by Source Compared to Offtake
(1971/72 – 1993/94)

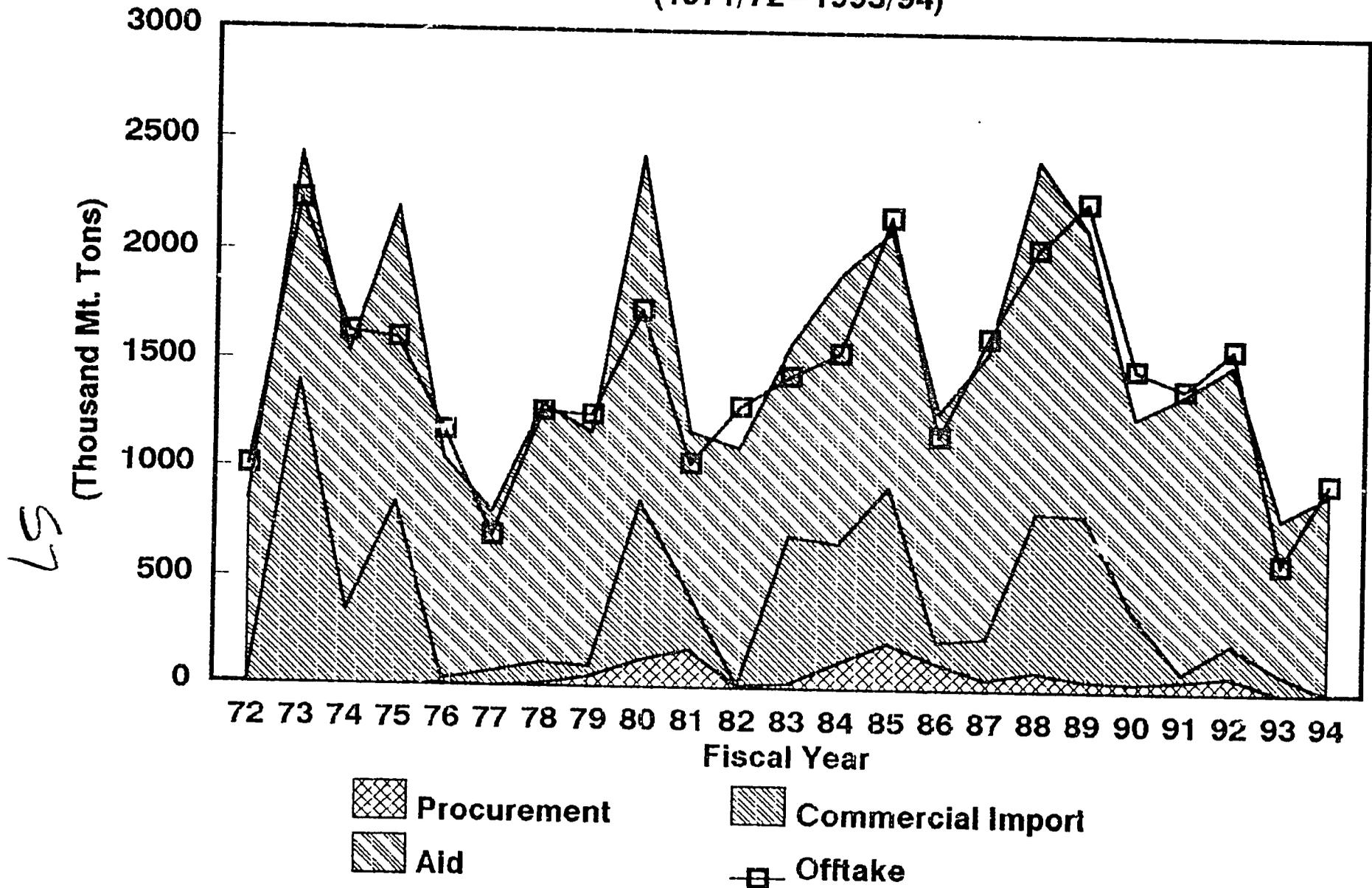
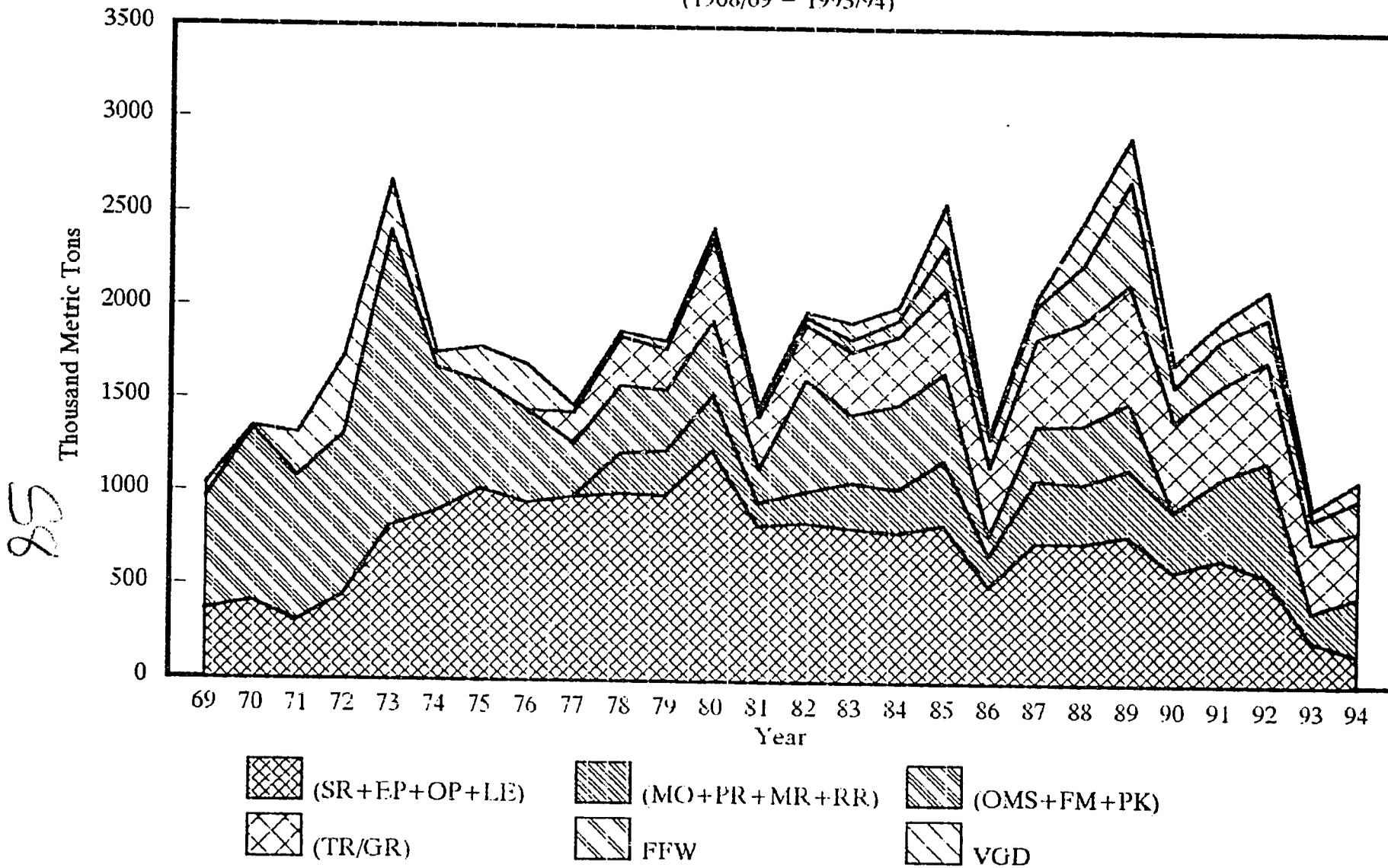


Figure 6—PFDS Offtake by Category (Rice & Wheat)

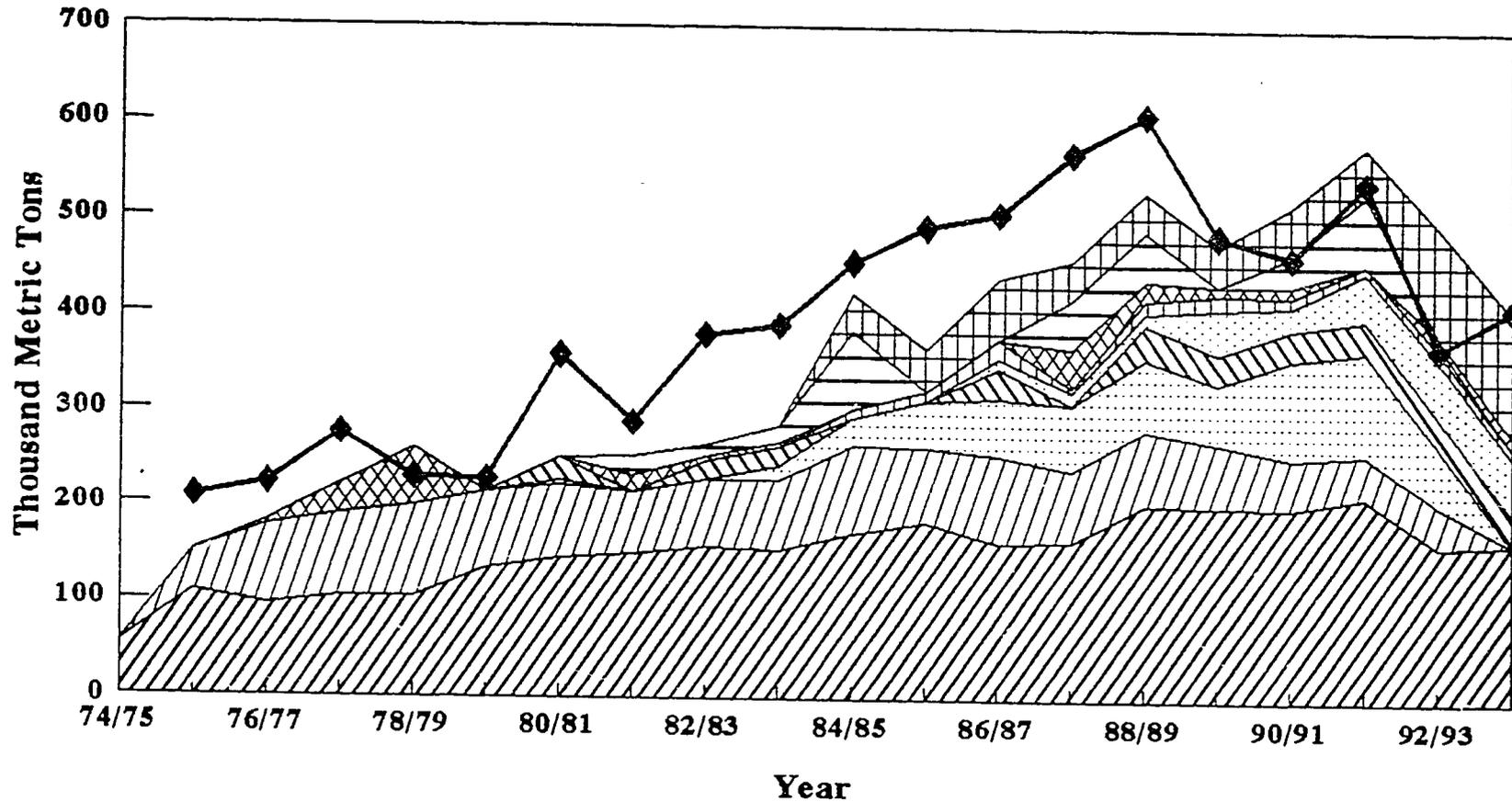
(1968/69 – 1993/94)



Source: N. Ahmed and L. Chowdhury (1994).

Figure 7- FFW Tonnages by Donor

(1974/75-1993/94)



59

- WFP**
- Australia**
- Other**
- All Sources**
- CARE Title II**
- EEC**
- Donor Disaster Aid**
- Canada**
- Germany**
- GOB**

Figure 8—VGD Tonnages by Donor

(1974/75—1992/93)

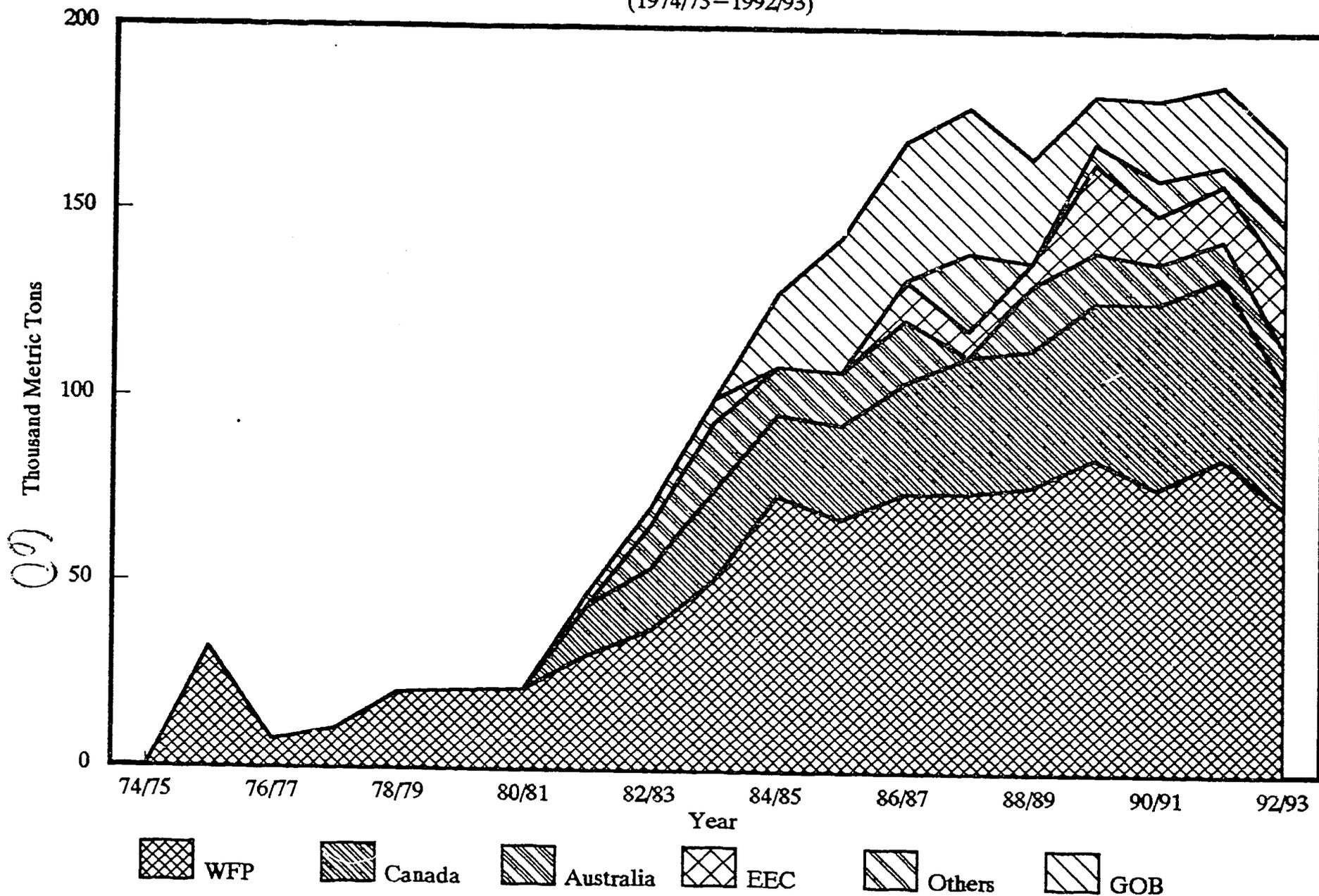


Figure 9 – VGD Beneficiaries

number of women

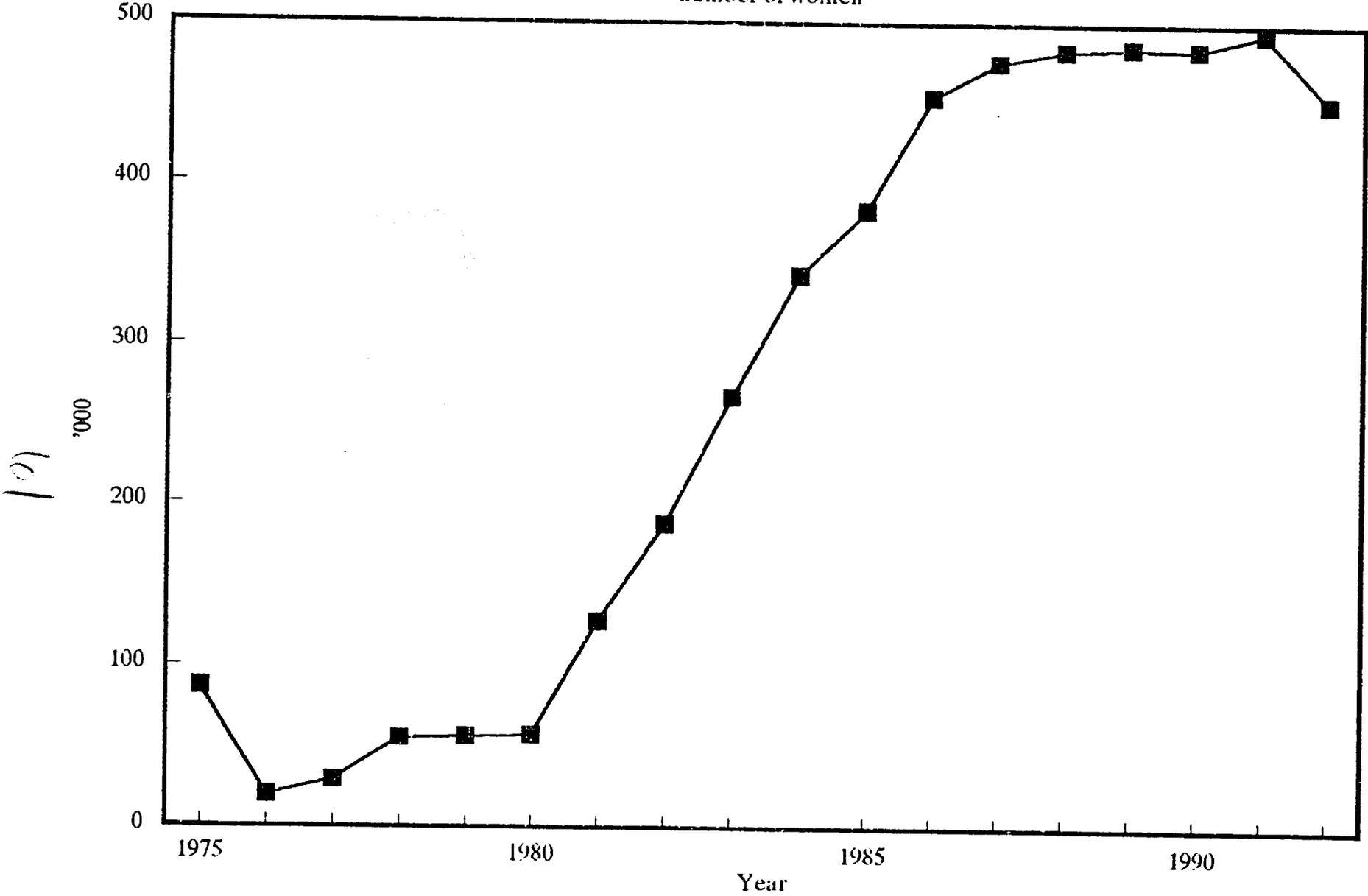


Figure 10— Food Aid: Monetized vs. Targetted

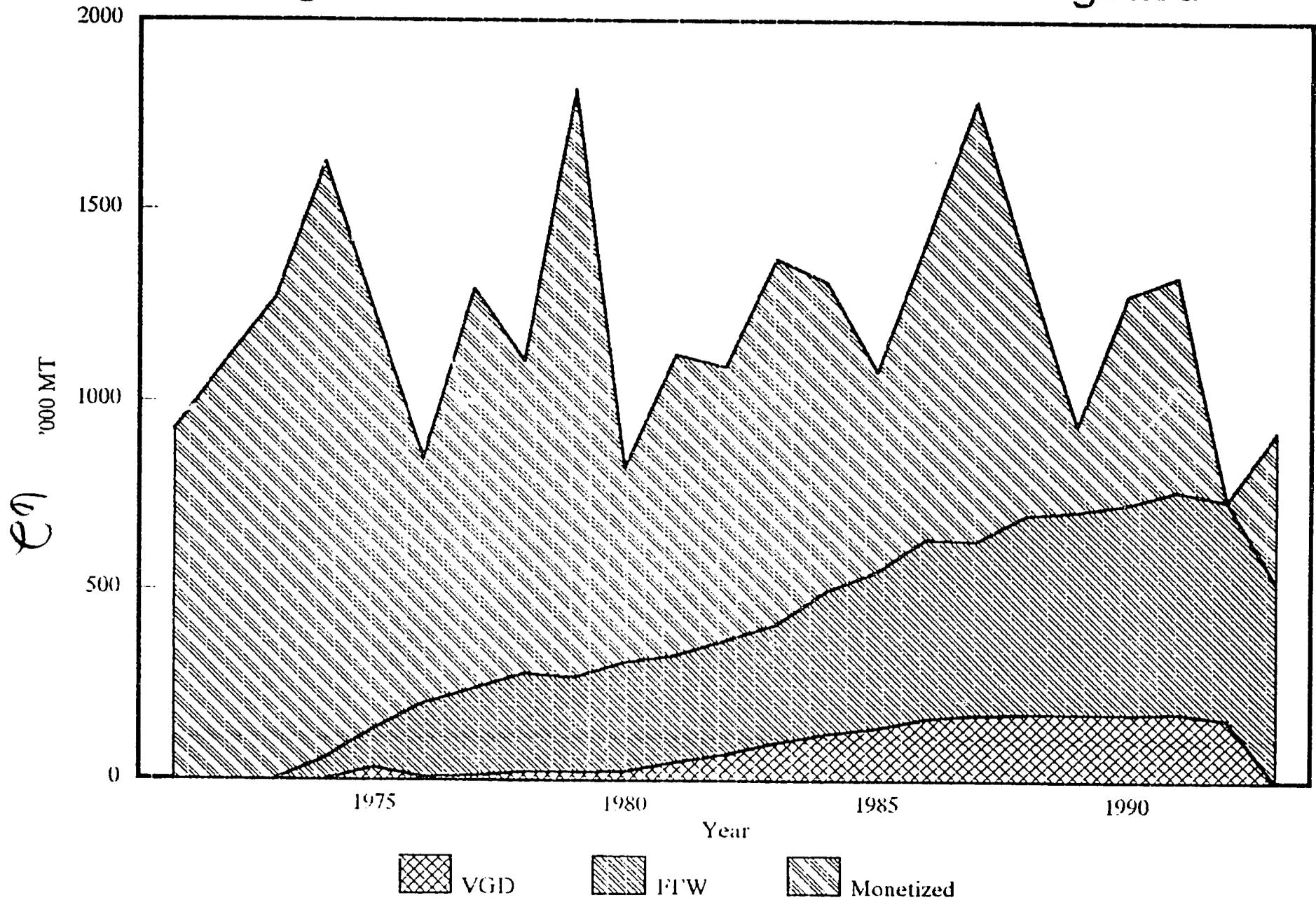


Figure 11 – Coarse Rice : Market, Ration and OMS prices

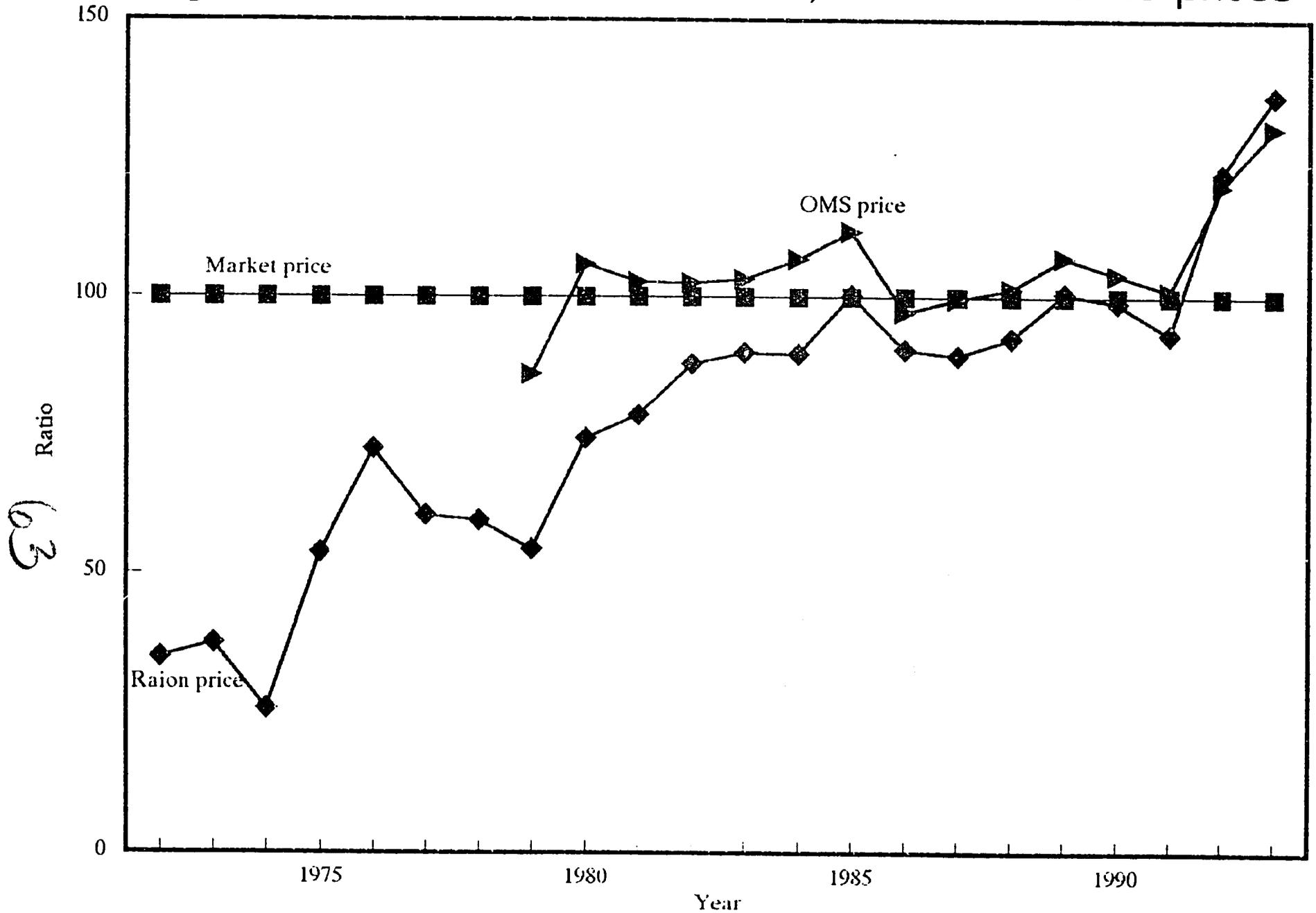


Figure 12—Storage, Year—End Stock and Annual Offtake (Rice & Wheat)
 (19972/73—1993/94)

