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AGRICULTURAL POLICY ANALYSIS PROJECT

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MADAGASCAR FOOD FOR
PROGRESS EVALUATION

June 1 - 14, 1987

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TABLE OF CONTENTS

Section Number	Title	Page
1.0	Executive Summary.....	1
1.1	Recommendations.....	3
2.0	Buffer Stock Impact on Prices.....	4
2.1	Background.....	4
2.2	Effect of Buffer Stock on Prices.....	5
3.0	Buffer Stock Pricing Decisions.....	6
3.1	Original Buffer Stock Price.....	6
3.2	March/April 1987 Price Reduction.....	7
3.3	1987-88 Buffer Stock Release Price.....	7
4.0	State of Rice Price and Market Liberalization.....	8
4.1	Source of Urban Rice Sales.....	9
4.2	Control of Rice Movements.....	12
4.3	Control on Rice Prices.....	13
5.0	Licensing Procedures for Traders.....	13
6.0	Liberalization Impact on Rice Production.....	14
7.0	Buffer Stock Impact on Private Marketing Channels...	15
8.0	Management of the Buffer Stock.....	15
8.1	Physical Stock Management.....	16
8.2	Status of Remaining Food for Progress Rice Stocks.....	17

TABLE OF CONTENTS

Section Number	Title	Page
	8.2.1 The SINPA Tamatave Warehouses.....	17
	8.2.2 The Port of Tamatave.....	18
	8.3 Options for Stock Management Until November, 1987.....	20
9.0	AID Management-Donor Coordination.....	21
	9.1 Stock Oversight.....	22
	9.2 Buffer Stock Pricing Decisions.....	23
	9.3 WFP and World Bank Coordination.....	23
10.0	Implications for Year Two of the Madagascar Food for Progress Program.....	24
	10.1 Food Assistance Requirements.....	24
	10.2 Other Considerations.....	24
Appendix 1		
	Machat Buffer Stock Calculation	

Madagascar Food for Progress Evaluation

1.0 Executive Summary

This report presents the findings and recommendations of an evaluation of the Madagascar Food for Progress Program. Fieldwork was conducted in Madagascar from June 3 to June 23, 1987 by a team which included the AID Washington Food for Peace Program Officer, the East Africa Food for Peace Officer, representatives of the World Bank and the World Food Program and a staff member from AID's Agricultural Policy Analysis Project. Valuable support was provided by the AID Representative in Antananarivo and his staff.

The Food for Progress (FFPr) program signed by the United States Government and the Government of the Democratic Republic of Madagascar (GDRM) on August 8, 1986 successfully accomplished its short term goal of stabilizing prices for consumers in urban rice markets. The effectiveness of the GDRM buffer stock program, through which the FFPr rice was channelled to the market, was greatly aided by other rice supply factors in 1986-87, including high levels of imports and large marketed surpluses of local rice.

In general, the overall liberalization program for local rice marketing is proceeding well; legal barriers to interregional rice trade have been eliminated by the GDRM and operators in all sectors of the trade (collection of paddy, milling, wholesale and retail sales) enjoy increased access to the market. The buffer stock program has contributed to this process by making rice available to all licensed traders in Antananarivo and Tamatave during the traditional period of shortage. The evolution in rice marketing from public to private distribution is highlighted by the dramatic reduction in the quantity of rice sold at subsidized prices through official channels, and the concurrent rise in private traders' share of the rice market over the past few years.

The operation of the buffer stock does, however, have the potential for adversely affecting rice production and private trade in rice. The long term goal of the FFPr program is to stabilize the rice market for consumers and producers, allowing the GDRM to proceed with its economic reform program, and creating the proper conditions for an increase in per capita rice production. The danger exists that the GDRM will be tempted by short-term political pressures to neglect the even-handed treatment of rural producers in favor of urban consumers. This tendency was apparently in part responsible for the decision to lower the release price for the buffer stock at the end of the first season of operation and for the failure to effectively publicize the price (higher) at which the program would begin operating in November 1987. The resulting confusion and uncertainty in the market has caused all operators to act very cautiously during the current paddy harvest season, unnecessarily restricting the farmgate price and producers' income, and potentially reducing the interest in and resources for productive investment (infrastructure, inputs, labor) which could lead to expanded rice production next year. This "roller coaster" of fluctuating producer prices and rice production is the antithesis of the conditions required for long term per capita increases in national production. The buffer stock program should be implemented in such a way that the uncertainties of price and market demand which fuel the "roller coaster" are reduced. Manipulations of the price, timing of sales and other operational factors of the buffer stock which increase uncertainty, reduce

confidence in the reliability of the program, and therefore increase variability in production and marketing, are counter-productive to the long-term goal of the program.

The real and potential benefits of the buffer stock are dependent on effective management of the program. The guaranteed supply of quality rice at stable prices, which has both direct economic and indirect psychological effects on market activity, requires that the rice stocks are attractive and palatable to consumers, and delivered in an efficient and timely fashion to the marketplace. The management system developed for the buffer stock program functioned well in the early stages of the activity, when the emphasis was placed on establishing a network of retail outlets. The supporting management structure involving the GDRM Ministry of Agriculture, Tamatave Port Authorities, and several contracts with parastatal trading companies is new, however, inadequate. The unwieldy management hierarchy and multiple lines of authority and responsibility have allowed thousands of tons of FFPr rice to remain in unsafe and unsanitary storage for months on end. Immediate action is required to relocate and treat the stocks if they are to be available for the next buffer stock season. Solutions to the technical problems posed by the current condition of the stocks will require modification of the existing buffer stock management contracts. These immediate measures should be followed by a thorough review of the existing management system, and deficiencies corrected prior to the opening of the buffer stock in November. Finally, A.I.D. needs to drastically improve its monitoring and oversight of the operations of the buffer stock. The inadequate supervision of the use of FFPr stocks contributed to the unacceptable state in which they are now found. The lack of a monitoring presence has also resulted in unnecessary confusion as to the uses to which the GDRM has put the FFPr rice, and raised questions regarding unauthorized transfers to the official distribution (subsidized sales) system run by the government. This inability to generate up-to-date programmatic information has had a direct negative impact on the Mission's capacity to assure proper resource management by the GDRM, and has limited A.I.D.'s ability to be an active, informed participant in buffer stock programmatic discussions between the GDRM and IBRD.

Decisions on the appropriateness of and need for a continued FFPr program in Madagascar are influenced by a number of factors. The economic reform and liberalization program initiated by the GDRM, with support and encouragement from the donor community, is generally viewed as proceeding correctly, albeit somewhat more slowly than desired. It merits continued support. The buffer stock market stabilization program has accomplished its short-term goal of limiting extreme fluctuations in consumer prices, but needs to be closely monitored and controlled to detect and prevent abuse of its power to influence the market. The large rice stocks carried over from year one (1986-87) of the FFPr program provide AID with a means of influencing policy formulation and the use of the buffer stock in 1987-88, but future access to policy-making fora is not guaranteed. Of primary importance in considering the need for a continued program is a food needs assessment for the coming year. Current best estimates are that no additional rice will be needed for the buffer stock program in the 1987-88 season. The need for other basic foods such as wheat or edible oil is uncertain given existing import

plans and expected donor assistance (e.g. Title I and Section 416 Sugar Quota Compensation). The Mission, GDRM and Washington will need to review commodity requirements, political interests, balance of payments benefits and budgetary availabilities in determining the need and timing for a possible second year of the FFPr program.

1.1 Recommendations

1. A rice buffer stock should be available to be employed by the GDRM in 1987-88. Existing Food for Progress rice stocks should, however, be adequate to meet the commodity requirements for the coming buffer stock season.
2. Operational decisions on the release price, timing of sales, geographic coverage and other aspects of the program should be made jointly by the GDRM and all donors involved in the buffer stock program. The A.I.D. representatives in these discussions should vigorously pursue a policy of clarity and consistency in buffer stock operations. Release prices and other regulations for the following year's program should be determined and disseminated prior to the paddy harvest and not changed except for reasons of vital national interest. Any decision to adjust the program's operating procedures should be jointly reached by the GDRM and concerned donors.
3. The GDRM should immediately announce and widely publicize the opening 1987-88 buffer stock wholesale price of 460 FMC/kilogram (subject to adjustment for the recent devaluation). The GDRM should make every effort to reduce uncertainty in the economy by providing rice marketing information in an open and timely manner. This effort would be aided by increasing the national capability to collect and disseminate agricultural production data.
4. All FFPr stocks currently held in Tamatave should be immediately transported to the National Silo in Antananarivo, treated for infestation and stored in proper conditions for use during the 1987-88 buffer stock season. The existing GDRM management structure for the buffer stock should be reviewed and revised to assure closer adherence to the technical norms for grain storage and more effective lines of operational responsibility.
5. A.I.D. should act as quickly as possible to establish and staff a food program monitoring and evaluation capability within USAID/Madagascar. Immediate actions should include the recruitment of at least two local hire Malagasy food monitors and the establishment, with the assistance of REDSO/ESA Regional Food for Peace Officers, of a program oversight system. Additional steps should include the expansion of the USAID USDH staffing level to allow the recruitment of a professional food program manager (as requested by USAID in its FY 1989 ABS). If this recruitment is delayed, a full-time PSC food program specialist should be hired to

provide necessary direction and supervision for the local hire monitors. REDSO/RFFPO should schedule periodic visits to assist the contract personnel with the establishment and implementation of the program monitoring and evaluation system.

6. A.I.D., IBRD and WFP representatives in Antananarivo, and if necessary at the headquarters level, should confer on approaches to strengthening buffer stock decision making. Agreement should be reached with the GDRM on a more formalized consultative structure, including representatives of all concerned donors, related to buffer stock policy formulation. The role of WFP food allocations to the buffer stock program needs to be greatly clarified, and firm understanding reached on the conditions under which the WFP donation can be utilized.
7. A.I.D. and the GDRM need to review the need for a Food for Progress program activity in 1988. Given that additional rice imports will likely not be required in the near future, decision should be reached on whether other food needs and resource flow requirements can or should be met through a continued FFPr activity. While awaiting those analyses it would be useful for advance planning if a dollar-level budget were established for year two of the FFPr, following a PL 480, Title I model. Given the uncertain and evolving commodity requirements in Madagascar, it would be useful if the GDRM and USAID had a target level of funding against which they could draw down a variety of available commodities, at more than one time during the year, as needs are identified. This flexibility is essential if FFPr program planners are to be able to respond to the still variable nature of Madagascar's agricultural production and import capacity.

2.0 Buffer Stock Impact on Prices

This section addresses the effectiveness of the buffer stock mechanism to stabilize rice prices in the open market in Antananarivo and Tamatave.

2.1 Background

A major goal of the buffer stock is to help maintain reasonable consumer prices on the open market in periods of scarcity. Historically, due to the seasonal nature of the Malagasy rice crop, supplies decrease and prices rise substantially from November through March, a period called the soudure. In April the first rice from the new harvest begins to reach the market and prices begin to fall. Prices rose dramatically during the soudure of 1985-1986 (see Table 2.1). The cause for such an increase, often double the prices for the same period in 1984-85, has been attributed to poor import management by the GDRM in early 1985.* Others attributed the price increase to the market liberalization policies, especially the removal in 1985 of a ceiling

*Economic Policy Reform in Madagascar. Report by Elliot Berg for the U.S.AID Madagascar; February 1986.

price for rice. The undisputable point is that many urban consumers were unable to afford rice at 700 FMG/kg and above, and severe hardship was experienced in Antananarivo and other cities in 1985-86. In an effort to avoid a similar situation from recurring in 1986-87 the GDRM and the donor community agreed to coordinate imports and to establish a buffer stock. The Food for Progress program provided 27,000 MT of rice to be used for buffer stock sales.

2.2 Effect of Buffer Stock on Prices

Table 2.1 shows that urban rice prices from November 1986 to April 1987 were 25% lower than in the corresponding period in 1985-86. It would be inaccurate to attribute this decrease in urban retail prices solely to the operation of the buffer stock. Imports of rice were 50% higher in 1986 (159,000 MT vs. 116,000 MT) than in 1985. In addition, private traders and parastatals bought large stocks of paddy in 1986, spurred in part by the previous year's high prices. It appears that anticipation of a recurrence of 700 FMG/Kg rice prompted the GDRM to import rice in excess of the World Bank's estimated level of 80,000 MT and to encourage parastatals to compete vigorously with the private sector for the purchase of local paddy. Thus, as the buffer stock commenced operations in November 1986, both the public and private sectors were apparently holding large supplies of rice and paddy.

Table 2.1

Monthly Price for Rice in Antananarivo (FMG/KG)

Month	1985	1986	1987
Jan.	325	769	506
Feb.	397	714	482
Mar.	423	690	467
Apr.	381	486	428
May	292	419	360
June	284	420	315
July	309	486	
Aug.	369	527	
Sept.	406	537	
Oct.	482	554	
Nov.	563	530	
Dec.	724	525	

SOURCE: MPARA

The buffer stock price was set a 460 FMC/Kg wholesale and 480 FMC/Kg retail (discussion of buffer stock pricing decisions follows in section 4.0) and the first sales were made in Antananarivo on November 5, 1986. Buffer stock sales began in Tamatave during the first week of December. The average monthly rice price in Antananarivo in November 1986 (530 FMC/Kg) was 24 FMC lower than October 1986 price. Retail rice prices in Antananarivo declined in each succeeding month, though the buffer stock price remained at 480 FMC/Kg until the end of March.

Retail rice prices in Tamatave did not exceed the level recorded in December 1985. In the months following (January-March) rice prices gradually declined in Tamatave. Rice prices in non-buffer stock cities followed trends similar to Antananarivo and Tamatave.

Finding: It is the judgement of the evaluation team that the sale of buffer stock rice in 1986-1987 played a significant role in stabilizing retail rice prices in Antananarivo and Tamatave. Other market conditions, including high levels of imports in 1986 and the purchase of large stocks of paddy by the public and private sectors, were important factors in accounting for the stable and declining prices observed during the 1986-1987 soudure.

Recommendation: A rice buffer stock to help stabilize urban retail rice prices should be available to be employed by the GDRM in 1987-1988. If market conditions warrant (i.e., prices exceed an agreed upon price), buffer stock sales should be made to private traders.

3.0 Buffer Stock Pricing Decisions

This section examines the buffer stock pricing decisions under which Food for Progress rice was sold. The pricing decisions for the buffer stock were conditioned on the need (1) to assure an affordable retail price to urban consumers and (2) to provide sufficient incentives for producers to increase their paddy production. This section reviews the following aspects of the buffer stock price:

1. Calculation of the original buffer stock price
2. Price reduction in March-April 1987
3. Buffer stock price for 1987-1988

3.1 Original Buffer Stock Price

The buffer stock began operation on November 5, 1986 at a retail price of 480FMC/Kg. This price was established by Mr. Bernard Machat, a consultant with the FAO and accepted by the GDRM and the World Bank. The price was calculated on the basis of a farm gate price of 227 FMC/Kg for paddy (see appendix 2 for details on the Machat calculations) which was the average price in August 1986. It must be noted that there was no precedent for setting such a price. Given that the market price for non-buffer stock rice in November was 530 FMC/Kg, the 480 FMC/Kg trigger price for the buffer stock was beneficial for urban consumers. If the price had been set significantly below what market conditions warranted, then buffer stock sales would have greatly exceed the planned 12,400 MT, and displaced domestic supplies from the market. This did not happen. It is the judgement of the evaluation team that the original buffer stock retail sale price was appropriate.

3.2 March/April 1987 Price Reduction

During a meeting held between representatives of the World Bank and the Malagasy Government on March 2-6, 1987, it was decided that:

"The intervention price of the stock can be reduced from 460 Fmg/Kg (Wholesaler price) in three successive steps of 40 Fmg/Kg each, starting in the week of Monday, March 30, 1987. The exact timing of each step will be at the discretion of the stock manager."

Furthermore, it was decided that:

"The stock will finally close at the end of the week on April 30th, 1987, and that it will remain closed until further notice."

Finally, it was agreed that:

"The intervention price of the stock for the 1987/88 crop year will remain at 480 Fmg/Kg (retail price) subject to review by Government and Bank supervision missions to be held in the interim".

On April 13, 1987, the buffer stock sale price was reduced to 340 Fmg/Kg (wholesale) and 360 Fmg/Kg (retail) in accordance with the agreement. The estimate for the price reduction centered on (1) the perceived need to push private traders to sell all their 1986 stocks before the 1987 harvest and (2) the desire to set a fixed date for the termination of the buffer stock at a price which would not subsequently rise significantly.

The evaluation team has a number of concerns regarding the buffer stock price reduction. As originally designed, the buffer stock price was a trigger price; i.e., only when market prices exceeded the trigger price for a specified number of days would buffer stocks be sold. By dropping the buffer stock price three times in one month, it appears that the buffer stock changed its character from a price stabilization mechanism to a price setting mechanism. It is hard to understand why private traders would need to be pushed to sell their 1986 stocks just as the 1987 harvest was beginning. The rapid decline in the buffer stock price probably forced private traders to sell rice at a greater loss than if the buffer stock price had remained at 480 Fmg/Kg and prices had declined gradually with the arrival of new paddy on the market. The most disturbing aspect of the price reduction is that the "rules of the game" were changed in mid-stream leaving great uncertainty among traders about the role of the buffer stock.

3.3 1987-1988 Buffer Stock Release price

The principal effects of the buffer stock price reduction was to increase uncertainty among traders and producers regarding this year's buying season and next year's buffer stock operations. Though the March agreement between the World Bank and the GDRM stipulated that that 1987-1988 buffer stock release price would be 480 Fmg/KG (retail), most of the principal

traders and parastatal officials interviewed for this evaluation either believed that the price would be 360 Fmg/Kg (closing price in April 1987) or that no intervention price had yet been established. The GDRM has not effectively communicated the 1987-1988 buffer stock release price to the public. As a result, buying and selling decisions are dominated by uncertainty and the concern that the buffer stock sales will be made at 360 Fmg/Kg. A secondary consequence of these pricing decisions is the danger that the buffer stock will lose credibility because there is no reason (among private traders or consumers) to think that buffer stock prices will not rise or fall unexpectedly next year.

Finding: The original buffer stock release price of 480 Fmg/Kg was appropriate given market conditions and the objectives of the buffer stock program. The subsequent reduction of this price by 25% added uncertainty to a market already beset by major shifts in policy in the past few years. This uncertainty was exacerbated by the GDRM's ineffective (perhaps intentionally) public communication of the 1987-1988 buffer stock release price.

Recommendation: Buffer stock release prices for the following season should be widely publicized by the GDRM in April. USAID should insist on the participation of an AID representative in future discussions regarding buffer stock price changes. The GDRM and the World Bank should be strongly encouraged to resist using the buffer stock as a means of setting prices or manipulating price movements beyond the original objectives of the program.

4.0 State of Rice Price and Market Liberalization

One of the two principal objectives of the Food for Progress Program (FFPR) is to encourage the GDRM to implement its policy commitment to liberalize the rice marketing and pricing system. The evaluation team was asked to assess the steps taken so far by the GDRM in this effort.

Three factors were examined to determine the direction in which liberalization of the rice sector is proceeding:

- Proportion of Rice Sold Outside the Official Distribution System 1982-1987
- Current Controls on Rice Movements
- Current Controls on Rice Prices

4.1 Source of Urban Rice Sales

Prior to the GDRM's decisions to liberalize the marketing of rice in 1983 over 95% of all rice sold in Antananarivo and Tamatave passed through the government's Official Distribution System (ODS) at highly subsidized prices. Tables 4.1, 4.2 and 4.3 illustrate a significant shift in the source of rice from the ODS to the open market for urban consumers. According to Table 4.1, the percentage of rice purchased by urban consumers from the ODS system dropped from 88% in November 1982 to 36% in November 1986. In Antananarivo, the percentage of rice purchased by consumers on the open market has increased yearly, except for early 1986 when open market prices were in the 700 Fmg/Kg range.

It is clear from the figures that the open market is supplying an increasing percentage of the urban consumer's rice needs.

4.2 Control of Rice Movements

The evaluation team's findings on rice movements are based on interviews with GDRM local and national officials, representatives of the donor community, Malagasy rice farmers, millers, wholesale and retail traders parastatal officials and field observation by the evaluation team. Before 1983 inter-regional movement of rice was strictly controlled by local GDRM roadblocks. Transporting rice beyond regional boundaries was the sole right of the parastatals charged with rice distribution. In 1984 the GDRM removed restrictions on the inter-regional transport of rice except in the Lac Aloatra and Fifabe rice areas. In April 1986, the GDRM opened Lac Aloatra and the Fifabe areas to unrestricted commerce in rice.

Table 4.1

Percent of Rice Provided by the Official Distribution System,
Open Market and Autoproduction in Urban Areas 1982-1986

	ODS		Open Market		Autopro- duction
	FMG/KG	%	FMG/KG	%	%
November 82	140	88	318	8	4
April 83	140	76	234	11	13
August '83	140	76	223	13	11
January 84	145	75	273	21	4
January 85	210	67	313	31	2
April 85	222	57	303	31	12
October 85	280	52	435	40	8
April 86	250	59	385	28	13
November 86	287	36	541	62	2

Source: MPARA

Table 4.2

Percent of Rice Provided by Official Distribution System
and Open Market in Antananarivo 1982-1986

	ODS %	Open Market %
November 82	96	2
April 83	76	7
August 83	81	10
January 84	87	10
January 85	72	25
April 85	61	26
October 85	61	29
April 86	72	16
November 86	48	50

SOURCE: MPARA

Table 4.3

Percent of Rice Provided by Official Distribution System (ODS
and Open Market in Tamatave 1982-1986

	ODS %	Open Market %
November 82	98	0
April 83	97	0
August 83	99	0
January 84	95	5
January 85	88	10
April 85	85	15
October 85	61	36
April 86	68	31
November 86	38	60

SOURCE: MPARA

The evaluation team learned of no documented instances of restrictions on the movement of rice within or between regions in 1986-87. However, informed observers recounted a number of cases in which local government authorities forced sales at below market prices and restricted movement of paddy from specific areas under their jurisdiction. In general, though, the 1986 rice buying campaign evidenced vigorous competition between parastatals and private buyers. We learned of no incidents in which private traders had cargoes confiscated. Observation of the 1987 season revealed private traders moving rice and paddy freely between Antsirabe and Tamatave, Lac Alaotra and Antananarivo and Antislamby and Antananarivo.

Traders are required to pay 2 FMG/Kg of paddy to the local administrative unit (Fokotany) in which the paddy was purchased. This ristourne (tax) is used to defray the costs of local government administration. Although the collection of this tax has potential for abuse, none of the traders interviewed complained of such problems. On the other hand, collection of the ristourne appears to have become a problem for some Fokotany which complain that both private traders and parastatals avoid their collection barriers.

It is the impression of the evaluation team that GDRM control of the inter- and intra-regional rice trade has been significantly eased in the past several years. Local requirements that traders establish and maintain local security stocks of paddy have been rescinded this year. This is a positive step, though it may be more a reflection of a good harvest than a policy decision to eliminate such requirements for good. Local government officials retain the power and potential to interfere with the fall movement of rice, though such cases do not appear to be widespread.

4.3 Controls on Rice Prices

This subsection examines GDRM actions regarding farmgate prices, retail prices and policies affecting market intermediaries such as millers and wholesalers.

In 1987 the GDRM continues its policy of setting a floor price for paddy - at 120 FMG/Kg. In 1986 the floor price was set at 100 FMG/Kg. In 1986, market conditions and anticipation that rice prices might again return to the 700 FMG/Kg level during the next "soudure" (hungry season-Nov. to March) quickly drove paddy prices above the floor price. In 1987 market conditions (large carryover stocks from 1986 and a good harvest) and anticipation that the buffer stock will cap prices during the next "soudure" had resulted, at the time of the evaluation, in some sales below 120 FMG/Kg and no observed sales above 140-145 FMG/Kg. Predictably, producers have complained that 120 FMG/Kg is insufficient to cover their costs of production. The complaints are strengthened by memories of 200-250 FMG/Kg paddy prices last year.

Some traders and some parastatals have purchased paddy at 120 FMG/Kg. Since they remain uncertain about the release price of the buffer stock in 1987-1988 (and recalling their large losses last year when the buffer stock helped stabilize prices well below 700 FMG/Kg) and faced with a good harvest this year, there is little pressure to offer producers more than the floor price. Many traders and some parastatal officials are under the false

impression that the final buffer stock release price of 360 FMG/Kg (retail) of April 1986 will remain unchanged for the soudure which starts in November 1987. Irrespective of the current supply situation, the belief that next year's buffer stock price will be 360 FMG/Kg effectively prevents traders from offering producers more than 150 FMG/Kg for paddy. The GDRM's failure to publicize effectively the fact that the opening 1987-1988 buffer stock price will be 480 FMG/Kg may have a severe, adverse effect on producers and traders marketing decisions as the 1987 season progresses.

Ceiling prices on retail rice prices were eliminated in 1985. The buffer stock release price is not a ceiling price as evidenced by market prices in excess of 480 FMG/Kg at times during the 1986-87 "soudure". However, the open market price for rice rarely exceeded 510 Fmg/Kg and by January had dropped close to 480 Fmg/Kg. Observations of retail rice prices and actual sales in June 1987 indicated that no controls are in effect. A variety of types and qualities of rice are available in the open market at prices ranging from 280 to 325 Fmg/Kg. It appears that market liberalization has encouraged an increase in the number of small rice mills and small assemblers who supply paddy to those mills. Since rice millers and their assemblers constitute key links between producers and consumers, close attention should be paid to the conditions under which they operate as an important measure of liberalization.

Rice imports are a critical component of Madagascar's rice marketing system. Improper rice import management (i.e. imports exceeding domestic shortfalls or poorly timed deliveries) poses a significant threat to liberalization efforts because it provides disincentives to domestic production. The Food for Progress Program aims at encouraging increased domestic rice production. Under specific supply conditions, as appears to be the case in mid-1987, additional deliveries of FFPr rice may result in harming the market liberalization process.

Finding: The liberalization of the rice market and rice pricing is progressing satisfactorily in accordance with agreements between the GDRM and multi- and bi-lateral donors. Use of the buffer stock mechanism to stabilize market prices can, however, have negative effects on liberalization if it becomes a defacto means of setting a retail ceiling price too low to spur domestic production.

Recommendations: The evaluation team strongly recommends that the GDRM widely publicize as soon as possible that the November 1987 buffer stock retail price will be 480 FMG/Kg. Failure to fully inform producers, traders, parastatals and consumers of pricing decisions already agreed to with the World Bank, may result in rice market participants making decisions which are detrimental to the performance of the marketing system.

5.0 Licensing Procedures for Traders

This section examines whether agreed upon procedures which help ensure freedom to buy and sell rice via the licensing of traders are being observed.

Interviews with large and small rice traders indicate that licensing procedures are not being used to restrict access to the market. Complaints by some large traders that too many millers and small assemblers are buying paddy is the best evidence that market access is open. The 1986 requirement by some Fokotany that all paddy traders maintain a proportion of their purchases in the Fokotany as a security stock has been rescinded in 1987.

Urban retailers who purchased rice from the buffer stock indicated that access was unrestricted. It appears that early in the buffer stock operation a small number of traders were found selling buffer stock rice above 480 FMG/Kg and they were subsequently banned from further purchases. Since access to purchase rice from the buffer stock was contingent on agreement to at 480 FMG/kg, it seems that such sanctions were justified. As noted in earlier sections, it appears that the private purchase, distribution and sale of rice is functioning reasonably well.

Finding: Agreed upon procedures and licensing of traders and their subsequent freedom to buy and sell rice in any part of the country are being followed.

6.0 Liberalization Impact on Rice Production

It is not possible to clearly assess the impact of liberalized rice marketing on rice production in Madagascar. There are several reasons:

1. National rice production figures are unreliable. Given present methods for estimating production levels, it is not possible to place great confidence in the estimates provided by MPARA.
2. Rice policy is in a state of transition and rice prices have market has experienced great fluctuations in the past few years. Uncertainty about policy and market conditions is a common denominator among rice producers, traders, millers parastatals and consumers.
3. Weather plays a major role in rice production levels in Madagascar. The absence or occurrence of cyclones or timely rains can have enormous impacts on final production levels.

In the best of cases where accurate data exists on production over many years and climate factors are fairly constant, it is still difficult to isolate the production response which results from specific policy and marketing reforms. In Madagascar, at this time, it is impossible to make a reasonable judgement on how production has responded to market liberalization because uncertainty about future policy decisions dominates producers decisionmaking processes.

Recommendation: The GDRM should be encouraged to improve its collection of agricultural production data through MPARA's new project with the FAO.

Greater efforts should be made by the GDRM to inform the public of pricing and marketing policies so that uncertainty will be reduced. It will not be possible to identify and assess the impact of policy reform on rice

production until it is clear that rice producers are making decisions based on a clear understanding of those policies coupled with an expectation that such policies will be in effect in succeeding years.

7.0 Buffer Stock Impact on Private Marketing Channels

One of the major concerns regarding the buffer stock was the extent to which it might interfere with private marketing channels. This section examines buffer stock impacts on urban retailers in Antananarivo and Tamatave and assemblers and traders of paddy and rice.

Urban retail rice traders in Antananarivo and Tamatave benefitted substantially from the buffer stock. The buffer stock provided them with an assured supply of quality rice from November through April. Their margin of 20 FMG/Kg remained constant even as the price of buffer stock rice dropped by 25%. Retail traders continued to sell local rice along with buffer stock rice indicating that buffer stock rice did not shut down private marketing channels for domestic rice.

The relatively small quantity (12,400 MT) of buffer stock rice sold also indicates that buffer stock rice did not supplant domestic rice in the market.

Private rice wholesalers who bought large quantities of paddy in 1986 were hurt badly by the buffer stock. A substantial part of the blame is theirs alone since they did not believe GDRM announcements that a buffer stock would operate during the 1986-87 soudure. The GDRM and the donors associated with establishing the buffer stock can also be faulted for failure to set and announce the buffer stock release price before the commencement of the 1986 paddy buying season. In the end, a large number of traders suffered substantial losses because the buffer stock was successful in keeping retail prices at 480 FMG/Kg while they held paddy which could not be profitably sold as rice for less than 500 to 550 FMG/Kg. It is the impression of the evaluation team that the prospect of a 1987 buffer stock has made rice traders more cautious this year. There is some evidence to indicate that a large number of small traders who purchased paddy in 1986 are either unwilling or financially incapable of participating this year due to losses suffered in 1986.

Finding: There is no reason to believe that the operation of the buffer stock adversely affected or interfered with private marketing channels. The buffer stock had a positive impact on private rice retailers. As long as buffer stock pricing policies are well publicized and consistent in the future, private marketing system participants are not likely to be damaged by the buffer stock.

8.0 Management of the Buffer Stock

The purpose of this section of the evaluation is to describe, evaluate and make recommendations concerning the procedures utilized by the GDRM for management of the buffer stock, including physical handling and storage, lines of responsibility, and management procedures. Insofar as the U.S. Food for Progress Program was the primary source of rice utilized (directly or indirectly) for the buffer stock, this section focuses on the

management of the U.S. rice, and the conclusions are extended to the buffer stock program as a whole.

8.1 Physical Stock Management

For the purposes of implementing the buffer stock program in Madagascar, the GDRM, through the Directorate of Food Security (DSA) in the Ministry of Agriculture (MPARA), GDRM appointed and entered into contracts with two parastatal companies--SINPA and SOMACODIS, which were charged with buffer stock sales in Tamatave and Antananarivo, respectively. The contracts specified the responsibilities of the two parastatals vis-a-vis the buffer stock and its operations, and specified the agency fee to be paid to each. These two companies were delegated the responsibility of (a) drawing down from stocks held at port sufficient quantities of rice to meet projected sales (as directed by the DSA, (b) transferring this rice to the designated sale points, (c) selling the rice to eligible buyers in conformity with the directives established for the program.

Responsibility for the physical management of the rice stocks is shared among a variety of organizations participating directly or indirectly in the operation: the DSA the implementing parastatals, the Port of Tamatave and others. Per the terms of the management contracts let by the DSA to SINPA and SOMACODIS, the implementing parastatals are responsible (both financially and legally) for rice that they have removed from the port to their warehouses or other facilities for sale or storage. The DSA is responsible for rice at the port until such time as it is removed by SINPA or SOMACODIS. Thus, for rice physically in the port of Tamatave the DSA retains the management responsibility; all decisions pertaining to the physical management of the rice prior to delivery to the parastatals rest with the DSA. However, at the port of Tamatave, the Port Authority is financially responsible for any rice in the port. In addition, the management of the port silo in Tamatave is financially responsible for rice stored therein. Finally, the national silo in Antananarivo belongs to MPARA, but is managed (under another, different management contract) by SINPA.

SINPA and SOMACODIS have a variety of responsibilities vis-a-vis the buffer stock rice. SINPA is (a) one of the consignees for rice for official distribution, and for part of the rice destined for the buffer stocks; (b) SINPA is responsible for rice that they have removed from the port for sale in Tamatave; (c) SINPA is responsible for the management of the national silo in Antananarivo. SOMACODIS is responsible for rice delivered to them or received by them (both for buffer stock and official distribution) for sale in Antananarivo.

The DSA is responsible for all decisions concerning the rice prior to its release to the implementing parastatals for distribution, and retains overall responsibility for the whole operation.

The Tamatave Port Authority and the Port Silo are financially responsible for rice in their custody, although management decisions are the responsibility of the DSA.

8.2 Status of Remaining Food for Progress Rice Stocks

A total of 30,076 MT of Food for Progress rice were sent to Madagascar during the November 86-April 87 period. A total of 29,968 MT were received at the port of discharge. SINPA (Tamatave) reports that 11,621 MT were sent from Tamatave to the National Silo in Antananarivo. (The Antananarivo silo management reports receiving 11,229 MT from Tamatave. 2,229 MT were transferred from the port to the SINPA warehouses in Tamatave for sale. A total of 3,093 MT were sent by SINPA to its various agencies in Tolagnaro, Manakara, Mananjara, Diego Suarez et al. Per the SINPA Tamatave branch, a total of 16,943 MT were removed from the port for sale through the official distribution system and for the buffer stock. Of the remaining 13,025 MT, theoretically in the port of Tamatave, approximately 100 MT were declared unfit for human consumption, and SINPA Tamatave reports that total stock in the port from all four vessels is 12,878 MT.

Members of the evaluation team visited the port of Tamatave and the SINPA Tamatave warehouses to inspect the rice remaining in these two locations.

8.2.1 The SINPA Tamatave Warehouses.

There are about 230 MT in the Tamatave SINPA warehouse. There are a lot of bugs both on and inside the sacks. Three different kinds were observed: (1) what appear to be confused flour beetles, (2) other dark brown bugs about one quarter the size of the flour beetles, and (3) tiny beige mite-like bugs. Insects of the third variety are to be found uniformly on the outside of the bags and in all the rice, perhaps 1 every square inch on the outside of the sacks. Bugs of the second variety are less numerous, and unevenly spread; larger concentrations were observed near stacks of rice from other sources. Insects thought to be the flour beetles are unevenly spread, with higher concentrations noticed near stacks of domestically produced rice. Insect activity in certain of the sacks was audible. Efforts to locate one bag without insects of all three varieties failed.

All the rice is infested, although some parts of the stacks are more infested than others. Opening one representative bag and finding insects inside led the evaluation team to the conclusion that all the rice is infested within the sacks. There is no dunnage being used at this warehouse, and the rice is poorly stacked. (Some damage from seepage or condensation of the lowest layer of sacks is to be expected.) Fumigation would be difficult, but theoretically possible.

The evaluation team experienced some difficulty in evaluating the extent of the insect damage to the rice. It did not appear that the rice was unfit for human consumption, and it was the impression of the team that remilling and blowing the rice clean would yield an acceptably wholesome commodity, provided that measures to improve storage conditions and control the insects were undertaken without delay. It is difficult to estimate the extent of the insect damage, as some or all of the dust present in the bags could result from other causes. However, the number of insects present is extremely worrisome, as the insect population can only be expected to increase with time, and the resulting damage to the rice will likewise be expected to increase exponentially over time.

The storage conditions at this warehouse are less than ideal: there is no dunnage in use, there are no grills on the windows, there is evidence of bird-entry and of rats, but no evidence of water or mold damage. SINPA reports that the occasional theft does occur.

In conclusion, (1) the rice needs to be fumigated (or treated in some other way to kill the insects present), and (2) the warehouse conditions are not really suited for medium term storage.

The evaluation team queried SINPA about fumigation, and the response was negative. It would appear that normal practice is to blow the rice clean with a blower of some kind, or to re-mill the rice at the time of sale. SINPA in Tamatave does not seem to use any other method of insect control.

8.2.2 The port of Tamatave.

The Port Autonome de Tamatave (PAT) authorities indicated that there are 2,357 MT of US Food for Progress rice in the port silo, and a total of 10,433 MT in the port sheds (as detailed below) for a total of 12,790.

<u>Vessel</u>	<u>Amount</u>	<u>Location</u>
M/Lykes:	29 mt	shed #16
M/Lykes:	100 mt	shed #B1
N/Lykes:	21 mt	shed #B1
S/Lykes:	647 mt	shed #B1
R/Lykes:	2 mt	shed #C2
S/Turman:	9,634 mt	shed #C2
Total:	10,433	

The evaluation team visited the port sheds and inspected the rice in storage on June 16-17, 1987. The results of that visit, and the evaluation team's conclusions follow.

The 29 MT of rice remaining from the Marjorie Lykes was found in shed #16. It would appear to be mostly, if not all, sweepings, as it has been rebagged, and is stacked separately from other cargo. The rice is not stacked on dunnage, but there are not signs of insects, mold or water damage. This rice should be inspected, and if determined to be fit for consumption, should be cleaned and stored properly, or cleared and sold relatively quickly. This rice does not seem to be the target of thieves, who reportedly dislike sweepings.

In shed C2 we saw the remainder of the Solon Turman cargo, amounting to (reportedly) 9,634 MT. It is infested with bugs, mostly the small and medium sized ones described elsewhere, with the small mite-like bugs outnumbering the medium sized ones. The infestation is uniform, leading one to the conclusion (insofar as the cargo arrived in early April only), that the infestation began prior to the arrival of the rice at Tamatave. The rice is not stacked on dunnage, but neither is there evidence of water or mold damage. There is however, a lot of evidence of theft, especially near the doors. Indeed, a theft in progress was observed during the team's visit.

The rice needs fumigation, as the infestation appears to be generalized (insects were observed inside the sacks). In addition, there is a relatively large amount of sweepings, and a quantity of broken bags, the contents of which will deteriorate into sweepings relatively quickly. The twin problems of insect infestation and theft if not controlled immediately will result in significant loss and/or damage.

Shed B1 was in many ways the worst. The following problems were reported or observed: evidence of rats, lack of dunnage, theft of rice and of bags, poor stacking, and failure to rebag torn sacks. However, little evidence of insects was observed, and there was no visible water or mold damage.

Evidence of significant theft was observed, particularly near the port shed doors, and on the top of the stacks. Reportedly, thieves manage to enter the warehouse, and either remove whole bags via unguarded or broken doors, or take small quantities (5-10kgs) out through the main doors. Losses appear to be ongoing from theft. 30-50 MT need to be rebagged and removed from the port as soon as possible.

In summary, the rice ex-Solon Thurman is in the early stages of infestation that needs to be controlled as soon as possible. The rice from the Lykes vessels does not appear to be infested, but (as is the case of the Solon Thurman rice) is the target of thieves. None of the rice is on dunnage (dunnage is not generally used in the port transit sheds), and although no water or mold damage was observed, the bottom layer of bags can be expected to be damaged to some extent. All the rice in the port sheds needs proper handling, rebagging and removal from the port.

Reportedly, there are 2.357 MT of rice in the Port Silo, and (again reportedly) rice is being sent from there to Antananarivo on an irregular basis. There does not seem to be a separate accountability for the rice that is transferred to the port silo, since the rice remains in the area of the port. The DSA reportedly has given instructions that the rice in the port sheds is to be transferred to the silo, but this does not seem to be happening: the port authorities report that the last transfer was over a month ago.

It would not seem to be a viable option to transfer the rice presently in the port sheds to the silo: the theft in transit problem would seem to be so severe that nobody will seriously recommend this transfer. Most people associated with the situation would prefer the rice to be sent to Antananarivo.

Finding:

1) Storage conditions in the sheds at the port of Tamatave are unsatisfactory for the purposes of storing rice for the 4-5 months until the buffer stock becomes operational in November, 1987.

2) The risks of loss and damage to the rice due to theft and insect necessitate its evacuation from the port.

3) Transfer of the rice from the port sheds to the national silo would not seem to be a viable option due to the problem of theft in transit.

4) Immediate measure need to be taken to control insects in the rice currently stocked in the SINPA warehouse and the rice needs to be moved to adequate storage as soon as possible.

8.3 Options for Stock Management Until November, 1987.

The evaluation team's conclusion is that all of the rice currently in storage in Tamatave (both in the port and in the SINPA warehouses) needs to be transferred to better storage facilities. In addition, a large percentage of the rice (i.e., about 90 percent) needs fumigation or other insect control measures. Failure to remove the rice from where it is at present and/or to contain the infestations will result in significant physical losses of commodity. In addition, if the buffer stock rice is not of a sufficiently high quality at the time of sale, it will not have its desired effect.

Taking the above into consideration, three options are available to USAID and the GDRM.

Option No. 1: Transfer of the rice from the sheds to the port silo at the port of Tamatave. The Evaluation team was not able to inspect the silo at Tamatave, and thus any decision to transfer the rice to this facility should be conditioned on a determination by USAID/Antananarivo that the facility has the requisite insect control capacity. Even if this condition is met, it would not (in the opinion of the evaluation team) be appropriate to place the rice in the port silo, as demand in Tamatave can be expected to amount to only approximately 2,000 MT for the next year's buffer stock operations. It is expected that most of the buffer stock rice sales next year will be in Antananarivo. In addition, the problem of theft in transit would militate against this option, as it would appear to be a problem that surpasses the authorities' ability to deal with it effectively.

Option No. 2: Transfer the rice to the National Silo in Antananarivo. The evaluation team visited the National Silo, which (as of June 22, 1987) contained only approximately 1,000 MT of rice, against a capacity of 20,000 MT. The installation appeared to be in good shape, and functioning well. The SINPA authorities at the Silo reported that the rice could be treated with pulverized insecticide at the time of entry into the silo, and periodically thereafter, and that insect control was generally not a problem, provided that the requisite chemicals are available on the market. The Director of the silo indicated that the whole amount of rice could be received at the silo in the space of 45-60 days. From a technical point of view, this would be the best option to deal with the carry over stocks remaining in Tamatave.

However, it would appear that certain modifications would have to be made to the management procedures currently in place for the buffer stock if this option is to be a viable one. SOMACODIS is currently the sole distributor of buffer stock rice in Antananarivo. However, SINPA has an open-ended management contract for the National Silo. Heretofore only rice destined for SINPA has been stored in the silo, as the implementing distribution parastatal is responsible for all storage and other costs once the rice is removed from the port. If SOMACODIS is to be the distributor of the buffer stock rice in Antananarivo next year, and SINPA is to be storing the rice, fumigating it, and rebagging it for subsequent sale, a mechanism to compensate SINPA for the above activities will have to be negotiated among SINPA, SOMACODIS and MPARA (DSA).

Option No. 3: Distribution of the entire amount of Food for Progress rice remaining through the official distribution system. It is impossible to predict exactly how much rice will be required for the buffer stock next year. However, there is little indication that more will be required next year than was utilized this year, provided that the release price is set at 460 FMC/kg. If this price is set at a lower level at the beginning of the operation, or if it is reduced as the season progresses, it is possible that more than 15,000 MT will be required. The above imponderables notwithstanding, it would appear that a target buffer stock of 15,000 MT would be reasonable.

As agreement has been reached that the US Food for Progress rice can be used to reimburse the GDRM for the Soviet rice that was utilized for buffer stock operations in Antananarivo, the 30,000 MT of rice supplied under year one of the program are available as follows:

--total supply	30,000 MT
--distributed in Tamatave	2,000 MT
--reimbursed to the GDRM for official distribution	13,000 MT
--total available	15,000 MT

As it turns out, it would appear that the GDRM has taken approximately 14,700 MT of rice for official distribution from the FFPr stocks, and this, combined with losses at the port, leaves a total of 13,000 MT of FFPr rice available for year-two operations. In addition, of the 5,000 MT of rice supplied by WFP for the buffer stock, reportedly 4,500 MT remains in stock. It would appear, thus, that supply and demand for buffer stock rice are in general equilibrium for year two. Insofar as the effect of the buffer stock has been mainly psychological (the 15,000 MT distributed represent approximately 1% yearly rice utilization in Madagascar) it can be concluded that the physical presence of the buffer stock (and not necessarily its use) is a very important consideration. As such, it would not appear to be advisable to draw the stock down to very low levels during the buffer stock season. For this reason, it is not advisable to transfer all or much of the Food for Progress rice to the Official Distribution system. However, as the buffer stock season progresses, USAID/Madagascar will have to monitor carefully the amounts of rice sold through the buffer stock, and arrange to transfer amounts thought to be surplus to the official distribution system so as to have utilized all the rice provided in 1986/87 at the latest by April, 1988.

9.0 AID Management - Donor Coordination

The prospects for achieving the potential economic benefits of the buffer stock and rice market liberalization programs, and for avoiding harmful market effects of improper implementation, can be strengthened by effective donor oversight and assistance to the the GDRM management of the activities. Given the policy interest and resource investment in these activities by all participating donors, program policy and implementation decision making should better reflect a consensus of opinion among all participants.

9.1 Stock Oversight

As noted in the preceding section on the management of the buffer stock, serious problems have arisen over the past year regarding the physical state of the FFPr rice in stock in Tamatave. The rice has been held in unsafe and unsanitary conditions since delivery, apparently without much if any AID recognition of the situation (by locally or regionally based personnel) or influence over those conditions. It appears that as much as 14,700 MT of rice may have been transferred to the GDRM Official Distribution system, versus the 10,000 MT approved transfer level. Even the fact that confusion exists over whether 13,000 or 14,700 MT were transferred, underlines the lack of adequate monitoring of the use of FFPr rice. Finally, the fact that USAID/Madagascar was dependent, for most programmatic reporting, on GDRM and other donor sources limited AID's ability to play a proactive role in buffer stock policy formation and operational decision making.

Finding: AID must drastically improve its monitoring capabilities for the FFPr program. Information generated by an active monitoring system can be used to satisfy USG resource management regulations (e.g. Bellmon Amendment requirements), better guarantee GDRM compliance with the specific terms of the FFPr agreement governing use of the commodities, and provide programmatic information on both the operations of the buffer stock and its impact on the market (e.g. island-wide price effects) which will be useful for continuous donor and GDRM evaluation and policy formulation.

Recommendation: AID should act as quickly as possible to establish and staff a food program monitoring and evaluation capability within USAID/Madagascar. Immediate actions should include the recruitment of at least two local hire Malagasy food monitors and the establishment, with the assistance of REDSO/ESA Regional Food for Peace Officers, of a program oversight system. Additional steps should include the expansion of the USAID USDH staffing level to allow the recruitment of a professional Food program manager (as requested by USAID in its FY 1989 ABS). If this recruitment is delayed, a full-time PSC food program specialist should be hired to provide necessary direction and supervision for the local hire monitors. REDSO/RFFPO should schedule periodic visits to assist the contract personnel with the establishment and implementation of the program monitoring and evaluation system.

9.2 Buffer Stock Pricing Decisions

The discussion of buffer stock pricing decisions in Section 3 of this report notes that subsequent to the general decision on price levels at the beginning of the program, a price reduction was instituted following a March 1987 meeting between representatives of the GDRM and IBRD headquarters in Washington. As implemented by the GDRM, this reduction has had unfortunate negative impact on the ultimate goal of stimulating long term increases in per capita rice production. The process by which this decision was reached, i.e. a private GDRM/IBRD meeting without representation by the two donors of the rice in question, was equally unfortunate. This lack of a collegial approach can have a chilling effect on the close collaboration necessary for the success of the buffer stock and broader reform programs, and ignores the legitimate interests of donors in supervising and jointly programming the use of resources provided under bilateral agreements.

Finding: Important buffer stock pricing decisions were taken without the advice and consent of the donors participating in the program. As a result of the price reduction decision in March 1987, the GDRM may have violated the terms of the FFPr agreement, which requires: "The release price at which these sales will be triggered will be set so as to not undermine private marketing of domestic rice and will be reviewed at regular intervals." (FFPr Agreement; Attachment A - Program Description; Item II B)

Recommendation: Operational and policy decisions regarding the buffer stock, and other possible uses of FFPr rice; including but not limited to the release price, timing of sales, and geographic coverage; should be made jointly by the GDRM and all donors involved in the buffer stock program.

9.3 WFP and World Bank Coordination

The WFP and IBRD, on technical and policy issues respectively, can and should play key roles in coordinating both the internal operations of the buffer stock and the interrelationships among the buffer stock and other elements of the GDRM reform program. There are, however, major issues which need to be clarified and resolved before these organizations can exercise their coordination functions with the full confidence of the donors.

Findings: As previously discussed, the IBRD role in policy coordination should not imply a unilateral assumption of representational authority in donors' dealings with the GDRM. Donors have a legitimate right to advise on and consent to programmatic decisions which involve the use of bilaterally donated resources.

The conditions which trigger allocations from WFP project Madagascar 3123 to the buffer stock program must be clarified. AID representatives in Antananarivo and Washington have been operating under the assumption, based on their reading of the project document, that WFP - programmed rice would be supplied only in the event that no other supplies were available for the actual requirements of the buffer stock. The WFP representative in Madagascar, however, professed to be unaware of these conditions. His view is that the GDRM finds it politically useful not to have the buffer stock program linked exclusively to one bilateral donor. The sales proceeds will also allow WFP to finance projects for which other funds are not available. The WFP and GDRM have already called forward 5,000 MT of rice for the program, and were planning another 5,000 MT delivery until questions from AID induced them to postpone the shipment. Unless agreement to the contrary is reached, however, it can be expected that additional quantities will be programmed regardless of the availability of other rice stocks and donor commitments.

Recommendations: AID, IBRD and WFP representatives in Antananarivo, and if necessary at the headquarters level, should confer on approaches to strengthening buffer stock decision making. Agreement should be reached with the GDRM on a more formalized consultative structure, including representatives of all concerned donors, related to buffer stock policy formulation. The role of WFP food allocations to the buffer stock program

needs to be greatly clarified and firm understanding reached on the conditions under which the WFP donation can be utilized.

10.0 Implications for Year Two of the Madagascar Food for Progress Program

Decisions on the appropriateness of and need for a continued FFPr program in Madagascar are influenced by a number of factors. The economic reform and liberalization program initiated by the GDRM, with support and encouragement from the donor community, is generally viewed as proceeding correctly, albeit somewhat more slowly than desired. It merits continued support. The buffer stock market stabilization program has accomplished its short-term goal of limiting extreme fluctuations in consumer prices, but needs to be closely monitored and controlled to detect and prevent abuse of its power to influence the market. The large rice stocks carried over from year one (1986-87) of the FFPr program provide AID with a means of influencing policy formulation and the use of the buffer stock in 1987-88, but future access to policy-making fora is not guaranteed.

10.1 Food Assistance Requirements

Of primary importance in considering the need for a continued program is a food needs assessment for the coming year. Current best estimates are that no additional rice will be needed for the buffer stock program in the 1987-88 season. The need for other basic foods such as wheat or edible oil is uncertain given existing import plans and expected donor assistance (e.g. Title I and Section 416 Sugar Quota Compensation). Other variables also affect the need for food assistance. In addition to existing import plans, unexpected donations can upset GDRM import planning assumptions. This was the case in 1986 when a delivery of rice provided by the Soviet Union substantially altered the national supply situation. Total rice imports rose to 124,100 MT for the year, rather than the 80,000 MT anticipated in GDRM/IBRD planning. Future unplanned donations, which the GDRM can or will not refuse for political or economic reasons, could have an equally important effect on overall requirements.

On the other side of the available supply situation, local production can be equally difficult to predict. Madagascar depends on local paddy production for the vast majority of its rice consumption requirements. That production is very vulnerable to shifts in weather conditions. In a good year, such as 1985-87, production can surpass expectations. At other times, damage from cyclones during the paddy growing season can greatly increase the rice import requirement, literally overnight. Food needs assessments therefore must be conducted periodically throughout the year to account for variations in both local production and actual imports.

10.2 Other Considerations

The FFPr program in Madagascar provides a number of other benefits to the two governments. The USC enhances its position in relations with the GDRM by being responsive to the resource requirements of the GDRM reform program. The FFPr program provides an outlet for the productive use of American farm surpluses. The GDRM enjoys important debt relief advantages, and reduces foreign exchange import payments, because of the grant nature of

the FFPr program. These factors will all enter into a decision on the future direction and content of the Food for Progress program in Madagascar.

Finding: AID and the GDRM need to review the need for a Food for Progress program activity in 1988. Given that additional rice imports will likely not be required in the near future, decision should be reached on whether other food needs and resource flow requirements can or should be met through a continued FFPr activity.

Recommendation: While awaiting those analyses, it would be useful for advance planning if a dollar-level budget were established for year two of the FFPr, following a PL 480, Title I model. Given the uncertain and evolving commodity requirements in Madagascar, it would be useful if the GDRM and USAID had a target level of funding against which they could draw down a variety of available commodities, at more than one time during the year, as needs are identified. This flexibility is essential if FFPr program planners are to be able to respond to the still variable nature of Madagascar's agricultural production and import capacity.

Individuals Contacted During Evaluation

U.S. Ambassador to Madagascar	- Hon. Patricia Gates Lynch
USAID Representative	- Mr. Sam Rea
USAID Economist	- Ms. Louise Desjardin
Director, Office of Food Security (DAS)	- Mme. Vololona Radanielson
Director, Division of Studies (DAS)	- M. William Rabemanolontsoa
Office of Agricultural Extension (MPARA)	- M. Remusat
Director General of Somalac (and staff)	- M. Raymond Randriananisoa
Director of Marketing for Sinpa	- M. Jean-Clovis Ralijesu
Director of National Silo (Sinpa)	- M. Leon Razafindranovana
Director of Sinpa (Toamasina)	- M. William Ramboatiana
Director of Operations Port of Toamasina	- M. Elson Randriamanana
Director General Somacodis	- M. Vincent Radanielson
Director General of Sinpa (Antsirabe)	
Director of Marketing of Coroi (Musabe)	
Agricultural Extension Chief	- Betafo
Vice President, Fokotany of Antsirabe Peasant Association in Lac Alaotra	- Ambojanatiany, Ampanamina
Farmers in ODR Project (Antsirabe)	- M. Jerome
Project Staff FIFAMANOR (Antsirabe)	
World Bank Economist	- Ms. Tina Kimes
World Food Program Resident Representative	- Mr. Aryld Oyen
World Food Program Program Officer	- Ms. Susan Nelson
EEC Economist	- Mr. John Crosthwaite
Independent Consultant	- Mr. Elliot Berg
Independent Consultant	- Mr. Peter Robinson

MACHAT BUFFER STOCK CALCULATION

Figure 1

Costs associated with a retail price
of 479 Fmg/Kg in the area of Ambatondrazaka (Lac Alaotra).

227 Fmg/Kg (Paddy Price)	Farm Gate
240 Fmg/Kg (Paddy Price)	At Mill
255 Fmg/Kg (414 Fmg/Kg)	Milled Paddy Value (Converted to rice)
437 Fmg/Kg	At Warehouse
445 Fmg/Kg	At Distributors Warehouse
454 Fmg/Kg	Wholesaler Price
479 Fmg/Kg	Consumer Price

From this distribution it was decided that 480 Fmg/Kg is a reasonable price for the consumer while it still gives an incentive to the producer, and the other participants in the rice marketing system.