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NUTRITION ECONOMICS GROUP

The Nutrition Economics Group was created in 1977 with funding from AID under Project 931 "Nutrition: Economic Analysis of Agricultural Policies." The Group's full-time staff of economists and other social scientists is available to assist AID and developing country agricultural planners and analysts develop, implement and evaluate their food and nutrition programs and to evaluate the impacts of their agricultural policies and programs on people's food consumption and nutrition. With its location within the Technical Assistance Division of the U.S. Department of Agriculture, the Group is able to draw upon a wide variety of other agricultural specialists to complement its work.

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JAMAICA'S FOOD STAMP PROGRAM:
A TECHNICAL REVIEW

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June 1984

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Technical Assistance Division
Office of International Cooperation and Development
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FOREWORD

The Nutrition Economics Group was created in 1977 with funding from AID's Office of Nutrition. The Group's staff of economists help AID implement a program of applied research and technical assistance designed to assist developing countries integrate food consumption and nutrition concerns into their agricultural planning, programming and policy making processes. Located within the Technical Assistance Division of USDA's Office of International Cooperation and Development, the Group can draw on a wide variety of other specialists from within the Department as well as the U.S. land grant university system to complement its work.

Public food programs and food subsidies have been policy areas of major interest to the Group. In line with this interest, the Group has helped design and manage major analyses of Egypt's food ration and subsidy program and Sri Lanka's food stamp program. The Group also assisted Peru with the design of a food coupon program.

In this case, the Group arranged for a two person team to travel to Jamaica May 29 to June 5, 1984 to assist the Government of Jamaica with the design and implementation plans for a newly proposed food stamp program. Jim Pines, the policy economist on the team, had worked previously on the design of food stamp programs in Peru and Venezuela and for the Commonwealth of the Northern Mariana Islands. Christy Schmidt, the nutritionist on the team, is the Director of the Analysis Staff in the Office of Analysis and Evaluation of the Food and Nutrition Service, U.S. Department of Agriculture.

The team advised the Government of Jamaica on potential problems with the initial program design and identified options for dealing with these problems. Ms. Schmidt, drawing upon her long experience with the U.S. food stamp program, was also able to provide detailed guidance on forms, procedures and regulations. The team also identified additional technical assistance and training activities which would help the Government to further strengthen its program.

This work was done in response to a request made by the Government of Jamaica through the AID Mission in Jamaica. Financing was provided by the Office of Nutrition in AID/Washington through the Nutrition Economics Group. Shirley Pryor, an agricultural economist with the Nutrition Economics Group, was responsible for the substantive and administrative backstopping provided by the Group.

Roberta van Haeften
Leader, Nutrition Economics Group
July 1984

Jamaica's Food Stamp Program: A Technical Review

Introduction

The Government of Jamaica expressed interest to USAID/J in technical assistance on design and implementation of a proposed Food Security Program, intended to alleviate the most serious nutritional and economic consequences of recent currency devaluation and continuing elimination of subsidies on imported basic food items.

The consultants' initial scope of work included "review of food stamp options," but decisions, announcements, and implementation steps by the Prime Minister's Office and others, after the scope of work and before the consulting visit, foreclosed consideration of broad program options. Food stamps have been printed, some registration began on June 4, and initial distribution is scheduled within a month thereafter. With Mission consent, consultation shifted to technical alternatives possible within the Program announced by the Prime Minister and already being implemented.

The consultants identified likely problems and options for addressing them. They explored related technical assistance needs and Jamaican receptivity to such help. Delivery of training materials, forms, and other information on the U.S. Food Stamp Program was received enthusiastically. The "scope of work for Phase 2 activity," by a technical assistance team, part of the original scope for this visit, has been addressed in this Report.

The Food Security Program

Appendix A presents the "Food Security Plan," Ministry Paper Number 28 (dated May 21, 1984 and announced the next day), prepared by the Prime Minister's Office and staff from the National Planning Institute. The Paper outlines a "bridge program," now being implemented as described, for compensating, by distribution of food and food stamps, those expected to be hurt most by devaluation and subsidy terminations. Described as temporary, the Program contemplates that after two years, as the economy improves, consumers will be better able to protect themselves and emergency benefits can be reduced. Experience in other countries suggests that the Program is overoptimistic with respect to both achievement of planned participation and reduction of the need for it.

The measures proposed include;

- 1) Expansion of the School Lunch Program from an estimated current level of 200,000 beneficiaries to 600,000 in less than two years,
- 2) Increasing participation in the current MCH food distribution program from 80-100,000 to a total of 200,000 pregnant or lactating women and children under three years old, and
- 3) Supplementing present cash welfare programs (Poor Relief and Public Assistance) serving 55,000 elderly or very poor people by a food stamp program for them and for another 145,000 beneficiaries in like or modestly better condition.

MCH commodity distribution, now done at health clinics, will be converted into a food stamp program, with stamps to be distributed at the clinics and used to obtain commodities at private retail stores. As Appendix A indicates, stamps are product-specific, good only for rice, corn meal, and skim milk, all produced nationally in quantities far below Jamaican consumption requirements. The Ministry of Social Security has primary administrative responsibility for the food stamp component, including the former MCH commodity distribution, though the ministries of Health and Local Government play the key roles in implementation. Some 400,000 individuals are expected to receive food stamps, as rapidly as possible, and Government expects to spend no more than \$J 48,000,000 annually to serve them. The Plan assumes that monetization of donated commodities will cover all Program costs, including food stamp redemption, and no allocation from general funds has been made to cover deficiencies arising from lack of monetization proceeds. There is little evidence that commodity shipments will arrive in sufficient quantity and at appropriate times to meet costs and cash flow requirements.

The Prime Minister's proposals, as presented in the Food Security Plan, offer a coherent approach to protecting poor people from the worst economic and nutritional ravages of Jamaica's unavoidable economic policies, though considerable detail remains to be clarified. The Chilean experience, and impact of U.S. food stamp and other programs, illustrate that such compensatory programs, combined with effective MCH services, can maintain national nutrition status despite economic setbacks. Constraints affecting the new Jamaica Program may prevent achievement of the ambitious activities and related goals, but some benefits to the most deprived and nutritionally vulnerable groups seem feasible.

In addition to financial limitations and the difficulties of assuring adequate availability of the quantities and kinds of food required, the constraints include absorptive capacity and administrative capability within the systems expected to execute the activities. Social workers and Poor Relief Officers from the ministries of Social Security and Local Government, for example, exhibit considerable competence and dedication (the consultants observed an orientation for more than 100), but are being called upon for an extraordinary effort. Nurses and primary health care workers have been presented with a similar challenge.

Present reluctance of the Jamaican public to make full use of the national health care system also affects likely Program outcomes. Only 30 per cent of eligible families now use the primary health care services available in clinics and it is difficult to predict impact of food stamp distribution on this number.

Some Major Concerns

The three components of the Food Security Plan all address the goals of maintaining food consumption and nutrition status. This means that failure to increase participation as planned, in schools and health clinics, may affect coverage and benefits in the food stamp component. School children, for example, are not eligible for food stamps and those not receiving lunch in school will benefit less than low-income adults getting food stamps. Government might wish to modify food stamp eligibility criteria should this occur, since nutritional concerns might suggest a different allocation of limited resources.

A. School Feeding

Although the School Lunch Program has some major accomplishments (e.g., a "nutribun" factory, low loss rate), irregular food shipments have prevented effective operation. The contemplated three-fold expansion seems likely to aggravate this and other problems of the Program. Building the proposed five new factories for baking nutribuns, intended to be operating before 1985, requires a herculean effort and, if it succeeds, the transport, storage, and other already existing logistic problems of distributing their output are even greater.

The European Economic Community (EEC) and the World Food Program (WFP), among supporters of the current Program, show only modest inclination to help meet needs of a larger undertaking. Without assurance of timely increases in commodity shipments, the proposed expansion is clearly not feasible. As food availability improves, other support (e.g., construction, vehicles) will be essential. Attention to the current ration, thought by many to be nutritionally adequate, could improve coverage from a given amount of food, but, with the most generous technical assistance and other help, the contemplated increases remain formidable.

The foregoing is not intended to discourage the proposed expansion, but emphasizes the need for more detailed preparation and the importance of building participation at a rate consistent with management readiness, absorptive capacity, and food availability. Tripling school feeding involves as many problems as introducing food stamps. The Ministry of Education may wish to share any technical assistance provided for food stamps, since the two programs involve many similar problems.

B. MCH Food Distribution

The Food Security Plan proposal to shift health staff from food distribution to giving out stamps frees storage space for medical supplies, instead of food, and simplifies health clinic administration. The proposed expansion of participation, however, seems likely to tax the health system severely, unless accompanied by more preparation and funding than is contemplated currently. If 200,000 beneficiaries are enrolled within a year, as planned, clinic staff and facilities will receive a burden that can only overwhelm the already fragile operation. If people come for food stamps, the demand for health services will increase. Staff and facilities are barely adequate for service of present clients. The added food stamp administrative burdens and health services to be delivered may generate reaction from nurses and

other health workers that damages both food stamp distribution and delivery of health services.

The education activities that now accompany MCH food distribution will have to double, at least, since the Food Security Plan emphasizes linkage of food stamp distribution and nutrition education. With only one nutritionist per parish, the Ministry of Health will have difficulty responding.

As in school feeding, rapid expansion may tax the health system to the breaking point, jeopardizing existing services. Without some pilot testing to identify problems and improve implementation, chaos may nullify both economic and political goals of the Program. Early small-scale testing will also clarify likely patterns of participation, a critical need for planning and for assessing impact. The health system now fails to serve many families most in need and which ones will be attracted to it by food stamps cannot be predicted with much confidence.

It would be unfortunate if the current food distribution program, about to receive food after a period of inactivity, were to be terminated before the substitute food stamp arrangement has been tested and made ready to replace it. Smooth transition is essential for maintaining the current useful, though limited, volume of preschool nutrition-related services.

C. The Food Stamp Component

The collaboration among Ministry of Local Government's Poor Relief Officers, the Ministry of Health, and the Ministry of Social Security, required for execution of the food stamp program, would challenge the most effective bureaucracies. Health workers, for example, are likely to have difficulty accommodating responsibilities to their supervisors with added duties needed to meet tasks essential for Ministry of Social Security performance. When people take stamps to stores and find the designated items unavailable, a real possibility unless current supplies improve, Health and Social Security will both be blamed. Interministerial conflicts over other aspects of program execution are also inevitable.

The Ministries may work out effective collaboration eventually, but not if plunged into accelerated expansion immediately. The Plan underestimates seriously the work load involved in registering 400,000 food stamp participants, regardless of who does it. Plans call for about 110 Poor Relief Officers, who now handle 55,000 beneficiaries, to register, after verifying eligibility, 145,000 more people. Allowing two hours per person, a conservative estimate that omits recertifications and rejection of ineligible applicants, yields a work load of more than 140 person years plus higher travel costs. Investigators without vehicles, or making home visits to inaccessible areas, will have special problems and, based on current experience, 12-16 hours per applicant may be required.

It is not clear that Jamaican planners recognize these and other labor burdens of introducing and operating a food stamp program. At an orientation meeting for Poor Relief Officers and others, it was clear that those expected to do the increased work saw the problems vividly. In informal discussions, representatives from the Ministry of Social Security rejected use of a PVO to reduce work load on present staff, though the Principal Secretary of the Ministry of Local Government and working level staff from Social

Security seemed more receptive. Contracting some certification and registration tasks to private businesses (e.g., banks) or to other governmental agencies offers other options for improving implementation.

The planners also underestimate difficulties of administration and the importance of clarifying eligibility and benefit criteria, though the implementing ministries see many of the difficulties. The concept of "income," for example, becomes a complicated criterion for eligibility in an economy characterized by intermittent, informal sector, employment and irregular compensation. Treatment of small farmers presents similar income problems. Wage earners on payrolls, whose income is easier to identify and verify, are less likely to be eligible than other people. Unless the Program gives stamps to all, not now contemplated, there must be cutoff points. The technical issues about income, assets, regularity of employment, response to disasters, and many others must be addressed explicitly and carefully or investigators' discretion will apply. The abrupt cutoff now programmed (\$J 50 weekly or more means no stamps) makes clarity even more important if Program integrity, of great concern to the involved ministries, is to be maintained. The Ministry of Social Security recognizes the need for guidelines and detailed regulations and is concerned that legislation in addition to the executive announcement emerge soon. Materials left by the consultants should be useful in immediate and later work on these matters.

Jamaica plans to give the same stamp benefits to all individuals in the "old or indigent" part of the Program. Graduating benefits, to give the poorest more, increases equity but complicates administration and often diminishes work incentives. The low level of benefits (\$J 10 monthly) limits options, but calling attention to this and other issues may assist Jamaican and USAID review of the Program.

The absolute level of benefits also requires continuing attention. Unless retailers have the designated products available in adequate quantities, food stamp distribution will aggravate inflationary pressures and can easily trivialize benefits. This occurred in Colombia and generated constant pressure for increasing allotments. Even if aggregate food availability appears adequate, internal distribution problems may generate extraordinary price increases in limited areas. Conservative initial policies, emphasizing assessment of food availability before distributing stamps in an area, can avoid many difficulties.

Introduction of food stamps seems likely to increase Jamaican dependence on imports and reduce consumption of local crops that can and should be increasing. Puerto Rican and Pacific island experience showed a significant decline in subsistence agriculture as food stamps or commodity distribution became a way of life. Jamaica would benefit from exploration of ways to link food stamps more directly to stimulation of local production, increasing effectiveness of this activity and aiding achievement of Food Sufficiency Plan goals.

The stamps could be made valid for local production without jeopardizing other aspects of the Program. It would probably eliminate some problems, because the present limited designations assure that many beneficiaries will return empty-handed after trying to use the stamps. While they may be accustomed to this, it will soon destroy Program credibility. Making the stamps product-specific adds little to effectiveness, especially when benefits are low, since beneficiaries are likely to substitute the stamps for cash now spent on the designated items, using the savings to buy (e.g.) cheap calories. Though the Program is not likely to increase

food consumption, substitution will occur as people adjust food behavior to changes in relative prices, food availability, and family income. Making food stamps valid for yams and other local output, and accompanying the change with promotion of their consumption, would reduce shortage problems, encourage favorable nutrition practices, and contribute to effectiveness of the Self-Sufficiency Program. Making imports cheaper through food stamps conflicts with other economic objectives without adding to food stamp impact.

In addition to these technical issues of Program operation, Jamaica will have total budget and cash flow problems in the food stamp component, unless adjustments are made. If stamps are issued and distributed before necessary proceeds of monetization reach the Bank of Jamaica, retailers seeking to redeem them may encounter "insufficient funds." Though this may only involve temporary delay, assuming shipments arrive, the total value of monetizable donated foods must also be monitored. If total value of stamps emitted during the first Program year, for example, exceeds the amount received for commodities, holders of stamps will be without remedy, since no other funds are scheduled to be made available. The cash flow and budget problems require careful linking of stamp distribution to flow and magnitude of funds. There is no indication yet of how this will be done, nor of the agency or individuals responsible for the task.

This litany of issues and possible problems could be continued and the technical appendices to this Report elaborate on enforcement, retailer, security, and other questions. The foregoing seeks to convey a sense of the complexity associated with introduction and operation of a food stamp program. Conversations with staff from the Ministry of Social Security clarified many of their existing concerns and identified others, while reassuring them that orderly implementation could be achieved.

All problems cannot and need not be identified before a program begins. Many become evident only as it unfolds. It is important, though, to test seaworthiness before undertaking a long voyage. Major commitments to procedures, benefits, eligibility criteria, and other program elements, without knowing their implications and likely consequences, risks disaster. Flexible and sensitive planning, responsive to early feedback from those involved in program operation, is essential if the Program's vision is to be carried out in the Jamaican context.

USAID Technical Assistance

The Ministry of Social Security needs help from someone who has been closely associated with field operations of a food stamp program. This is more important than design help, both because the Jamaican design has been formalized and because the best design can be frustrated by problems arising during execution that cannot reasonably be anticipated.

It would be helpful to both USAID and the Food Security Program, if Government or the responsible ministry could designate a single individual for coordination and approval of technical assistance. Identifying the staff expected to receive the help will clarify responsibilities within the Program, a key present need.

The design to which Jamaica is already committed can work if fleshed out in appropriate and consistent detail. The technical appendices begin this process. The Ministry of Social Security would benefit from technical help addressed to basic issues, such as eligibility and benefit levels, and to the many issues that must be resolved in guidelines and regulations. Technical assistance

can also alleviate the problems presented by the disparity between the impressive Program aspirations and the financial, food availability, and administrative obstacles to their achievement.

While an economist and a nutritionist could provide useful help, Jamaican needs and interests give these far lower priority than assistance related more directly to the kind of program management and control issues discussed in the technical appendices. The Mission should offer the Ministry of Social Security the following help, with an understanding that other participating ministries and agencies may share in it as appropriate;

1) A person experienced in design of food stamp programs and related regulations, to assist in identification of basic program issues, alternatives for their solution, and conversion of Jamaican preferred responses into appropriate legal and administrative form,

2) A person experienced in operation of food stamp programs, who may be the same person as number one, to help in review of initial food stamp operations and design of in-course modifications,

3) A specialist in food procurement, transport, storage, and other aspects of distribution, to assist in training and preparing retailers, improving school feeding logistics, and addressing food availability problems likely to emerge during Program operation, and

4) A financial specialist, familiar with food stamp financial and other reporting procedures, to assist in design and implementation of financial and other reporting systems, with particular attention to their role in monitoring execution and compliance.

Because much of the help involves staff training and review of operations, a series of visits will be more useful than a single longer effort. With the Program about to begin, early assistance would be especially helpful. Staff from WIC or U.S. Food Stamp programs, including both Federal and State offices, provide the most promising source for the needed help. Detailed scopes of work can be prepared from the technical appendices to this Report, once skills and experience of the proposed consultants are identified.

The Director of Social Security, an official in the Ministry, is a good person to start technical assistance arrangements discussions with. She will play a major role in preparing guidelines and regulations. Discussions should also explore the possible role of visits to U.S. food stamp operations by Jamaican staff. This is of interest to the Ministry and may be useful both as an alternative for delivering technical assistance and for reinforcing it through observation.

The Mission Response

USAID/J can gain little by further discussion of the number of people who "need" or "deserve" continued subsidy to alleviate dire consequences of recent and anticipated economic changes. Standards are vague at best and depend heavily on both political judgments and changing economic conditions, but cursory review of Jamaican population and least-cost diet data suggests that the Prime Minister's figure of 1,000,000 could be documented easily by skilled advocates. A family of five, with two people earning the current minimum wage of \$J 30 per week cannot afford an adequate diet. Though the Caribbean Food and Nutrition Institute estimate that \$J 72 per week is needed to give the family a nutritionally satisfactory intake may be generous, it is clear that, with any reasonable assumptions about the percentage of family income that should be spent on food,

many Jamaican families are in nutritionally marginal condition and likely to get worse. With well over 200,000 unemployed widely acknowledged among Jamaican investigators, the figure of 1,000,000 beneficiaries for a Food Security Program is not startling. Whether Jamaica can afford to subsidize all of them is a different question.

The Prime Minister, The Ministry of Social Security, and others will soon discover that 1,000,000 can be no more than an aspiration. As the food stamp component, for example, begins, and the high costs and increased staff needs become apparent, goals will be scaled down privately if not in public. The public response rate to the proposed activities cannot be predicted with much accuracy and, if less than anticipated, participation at desired levels may require promotional and outreach efforts not now contemplated. Absorptive capacity and logistics problems, rather than food availability or money, are likely to inhibit expansion first and this should ease response to pressures for increased donation or concessionary sales of commodities.

The Mission can play a useful role by emphasizing the importance of linking introduction of food stamps to availability of designated items in warehouses and retail stores. Considerable skill is required to coordinate stamp distribution and food marketing, to avoid dissipation of benefits through price increases or food unavailability.

It may also be useful to focus attention on narrower issues, such as the fate of four and five year olds, who apparently benefit from none of the components, and the wisdom of Program emphasis on corn meal, reportedly unacceptable to many Jamaicans and too easily traded to the advantage of those in the market for animal feed.

Recognizing that aggregate food availability, the likely budget available if Program funding depends entirely on proceeds from monetization of commodities, and staff shortages within Government, among other factors, limit likely activities and impact of the Food Security Program, while simultaneously providing technical assistance on the microlevel problems of implementation, as though those limitations do not exist, leaves the Mission in a near-schizophrenic position. Response becomes more consistent by acknowledging that, however much food and money may be available, the Program is underway and might as well be done as effectively and efficiently as USAID help can make it.

If the suggested technical assistance is accepted and delivered promptly and effectively, USAID help will pay dividends among the rank and file responsible for doing the work. Sensitive help will improve management, either in Food Security or whatever comes next, and provide sympathetic American presence among a group that plays an important role in Jamaican Government and society. If the Program disappoints, USAID political vulnerability relates more to issues of budget support and food policies than to details of operation. The proposed technical assistance need not increase exposure.

Because the Food Security Program seems unlikely to serve anywhere near 1,000,000 beneficiaries, estimates of economic impact may be exaggerated. There will be a modest addition to purchasing power of the poor majority and this should improve slightly their food purchasing capacity in relation to wealthier consumers. Depending on responses, it is quite possible that real incomes of poor people will change little. If the Lampman estimate (p.8), that the top fifth receives 55 per cent of total income and spends ten times as much on food as the lowest 20 per cent of consumers, is at all close,

efforts by the poor to maintain consumption of certain imported items may be nullified by further price increases. If poor consumers seek to increase consumption of locally grown staples, and supply responds, the food stamp distribution will have contributed to maintenance of nutritional welfare. Difficulties of predicting consumer response, outcome of Agro-21 and other efforts to increase production, and availability of imported foods, for example, make assessment of likely impact difficult. There is little doubt that poor Jamaican consumers have suffered, and will continue to suffer, from the economic policies and conditions now prevailing and likely to continue or even bring further deterioration. Food stamps, and the other activities of the Food Security Program, address both the political and substantive physical consequences of this situation. If catastrophe and major disillusionment can be avoided in the Program, modest benefits will far outweigh any negative macroeconomic consequences.

TECHNICAL APPENDICES

Description

These technical appendices are intended to:

1. Provide an overview and selected details on the proposed Food Security Plan;
2. Identify areas of potential program vulnerability;
3. Offer technical assistance suggestions oriented to reduce program vulnerability.

When appropriate, solutions employed in the U.S. feeding programs are cited. Areas of vulnerability fall into two major categories: those that occur due to program design and those due to the absence of detail to date in what is still an evolving program design. Technical assistance suggestions are mostly operational in nature. However, it is critical to note that what appear to be more mundane operational decisions really structure ultimate program design. Thus, while program design issues are very difficult to confront head-on, they may be adequately addressed through operations guidelines.

Appendix A

Functions, Processes and Issues

<u>Function</u>	<u>Process</u>	<u>Issues</u>	<u>Responsibility</u>
Build Central Bank FSP Account	GOJ float to bank	<ul style="list-style-type: none"> flow of \$ to account: smoothly by quarter (\$12/month); all up front and spend down; as monetized. All options have implications for treasury and smooth disbursement/reimbursement stamps. 	Cabinet?
Commodity Donations and monetization	Solicit Donations; sell to processor	<ul style="list-style-type: none"> Security of commitments; plan requires (U.S. raw corn; Italian rice). If the commitments are not firm, expected \$48 million will not be generated. Schedule of donation deliveries. If donations do not arrive early enough in program, how long can GOJ float system for reimbursement. Will program be capped entitlement (spend at full strength through a period, then shut down) or run at partial strength for periods? Goal should be to avoid bank refusal of retailer reimbursement. 	
Stamps to Central Parish Offices	Dual Sign-off by Social Security; coupons for payment cycle sent and vaulted; serial numbers	<ul style="list-style-type: none"> Who monitors disbursements and orders/designs audit trails. Shipment via armored or protected vehicle. Payment cycle - how many coupons kept in field. 	Social Security
Eligibility Determination	<ul style="list-style-type: none"> Current Public Assistance clients (35,000) registered for FSP by workers from case file information. Current Poor Relief clients (20,000) registered for FSP by poor relief worker from case files. Current MJI clients (108,000) registered by MJI staff. 	<ul style="list-style-type: none"> Participation Response uncertain; guidelines required for oversubscription. Budget assumes 40% participation rate among newly eligible. Caseload of workers to increase substantially. Rationing of benefits, and eligibility determinations needed. Regulations/guidelines required to define income, household circumstances, verification elements, schedule of operations, appeals process. 	<p>Social Security (line and supervision)</p> <p>Local Government line, supervise by Social Security Ministry of Health (line and supervision)</p>

Function

Process

Issues

Responsibility

- new applicants (General Public) apply to either poor relief or public assistance workers. Workers conduct home visit verification and file report with Board.
- Final eligibility determined by board comprised of one member each of Poor Relief, Public Assistance Red Cross and 4 MPs within each parish. Composition of Board to minimize duplication participation.
- Client and worker informed of eligibility or denial. Encoded FSP registration card issued.
- Pregnant, lactating women infants and children under 3 apply only to MCH. Eligibility determination at MCH. Registration card issued.

- Case worker/Supervisor Training in new programs and operations.
- Client files/registrations to be established with worker and central office (Social Security), MCH operated independently.
- Length eligibility period. Regulations/guidelines for reverification needed.
- Avoid duplicate eligibility P.R. and P.A. with MCH.

Benefit Issuance

- Poor Relief Worker signs for stamps to disburse for period to all registered clinics.
 - Stamps disbursed from central office or to home (Postal Service not a good alternative).
 - Stamps delivered to MCH clinics for issuance to clients
- Security for Poor Relief Worker; worker handling 9 times amount of money per month as currently w/o any program expansion. With full expansion, 22 times the money amount.
 - Guidelines for timing of issuance, schedules for disbursement.
 - Security for Office Storage; Poor Relief Offices and MCH.
 - Bonding/Insurance for workers.
 - Design and Integrate Issuance Reporting

Poor Relief Workers Supervised/monitored by

- Issuance for currently enrolled clients -\$163,000 per month or \$163,000 per worker per month for fully envisioned program = \$4 million or \$40,000 per worker to carry per month.
- Systems.
- Any emergency needs issuance.
- Replacement coupons for lost, stolen,

Social Security

Food Purchase

- Retailer accepts coupons for full value of specified goods (cornmeal, rice, non-fat dry milk) on presentation of coupon in book and proper registration card.
- No cash change is given.
- Retailer information, training, guidelines to ensure acceptance of coupon, correct handling (reverification, handing in to bank) especially important.
- Because of experienced corn flow problems with small retailers.
- Shortage specified goods; could lead to selling coupons, devaluing coupons, exchange for non-specified items.
- Monitor compliance to ensure program rules, security measures carried out.
- Retailer registration to establish accounts, monitor and prevent fraudulent cashing in of stamps, monitoring volume and flow across retailers to highlight possible fraud.
- Initiate measures, like cancelling stamps and including retailer ID number to prevent recycling of stamps.
- Disqualification procedures and other penalties for fraudulent actions or misuse. Again force of law would be helpful.

No assignment, initial meeting with retailers organization. Possible use of price monitors FSP retailer

Retailer Reimbursement

- Retailer brings stamps to commercial bank for credit to account.
- Retailer can exchange stamps as cash for goods with wholesaler.
- Rules/procedures for acceptance on cashing stamps (e.g. mutilated stamps, whole books, etc.)
- Registration banks and establishing accounting system.
- Registration wholesalers; allowing wholesalers to accept stamps for any good reduces targeting of stamps, fosters exchange stamps for cash as well.

<u>Function</u>	<u>Process</u>	<u>Issues</u>	<u>Responsibility</u>
Bank Credit - Bank of Jamaica	Commercial banks return and are reimbursed	<ul style="list-style-type: none"> • Monitoring wholesalers. • Close out audits with banks including correct coupon numbers for region moving through that bank. • Stamps should receive second cancellation at bank. • Rules/guidelines for counting, packing, etc. • Audit/accounting system, especially important that coupons do not recirculate out of banks after reimbursement of retailer out of commercial bank. • Coupons should be held securely and ultimately destroyed. 	

Existing Systems

Existing Systems

Information in this summary is based on data collected from interviews with senior managers and case workers, and materials prepared by GOJ.

PUBLIC ASSISTANCE

Current Program

Serves 33,000 indigent elderly persons with incomes less than \$5 per week, no other source of income (e.g. other family members), no assets.

Eligibility determined by eligibility Board (Poor Relief, Public Assistance, Red Cross member, and 4 persons nominated by MPs) with information collected and verified through a home visit (interviews with neighbors included, approximately 2 hours on site). Board meets at least every 2 weeks.

Benefits, total \$20 sent every 28 days issued by check in mail for Post Office pick up by client, checks not mailed when insufficient funds.

Regulations and Operations Handbooks in place to establish eligibility rules.

Reverifications performed on irregular basis.

Staff consists of 37 workers and 13 supervisors who spot check workers' work and handle client complaints.

Time till application approval averages one month. Time to benefit usually longer due to funding availability.

New Program

Register current participants; assist in centralization records and issuance book for P.A. and P.R.;

Collect applications (from elderly only or any applicant?); verify information.

Guidelines needed to work through cases in some priority order.

Register or reregister approved applicants on current wait list.

Supervisors monitor Poor Relief workers (each worker about 2 times a month).

Supervisor/staff ratio rises from about 1:3 to 1:10

Social Security informs applicants if eligible and sends registration card.

POOR RELIEF

Current Program

Serves 18,000 indigent individuals with incomes less than \$5 per week, no other source of income (e.g. other family members), no assets. Clients mostly elderly or handicapped.

Eligibility determined by Eligibility Board (Poor Relief, Public, Red Cross and MPs). Applicants referred by churches and MPs as well as self-appointees. Information collected and verified through a home visit. Officers on road 60-80% of time.

Benefits, total \$5 a week, delivered in cash to recipients every two weeks. Issuance is out of a pay office for a one day period. Workers also provide substantial time to traditional social work with families (e.g. family planning, health advice, travel support).

Workers are responsible for own security measures such as having district constable accompany them on cash issuance days.

Travel by own car, public transport or on foot.

Staff consists of approximately 100.

Staff- client ratio varies by district, for example 95 to 375 in largest Kingston Districts. Average is 180 clients per worker.

Reverification: Must see clients every 6 months, usually more often.

New Program

Register current participants; assist in centralizing records.

Create accountability/auditing records for issuance.

Arrange security measures individually

Provide and be responsible for increased issuance - initially for 163,000 payments and ultimately for 400,000 payments.

Payments put out every 2 months.

Accept applications and conduct verification visits.

Issues:

Substantial Security Concerns: because of high amounts money carried. Less concern among workers about investigations. Security required for workers and offices.

- Dollar disbursement increases 4 1/2 times initially and almost 10-fold in final plan.

Need for Regulations/Guidelines: to maintain/ensure depoliticized program.

Accounting Systems Required:

Increased Workload: All applicants must be accepted. If no initial screening done and response to program high, completing verification and getting adjudication.

- Poor Relief workers are 73% of workers accepting applications. If only 145,000 apply (assumes no oversubscription) and new applicants distributed among workers equally, then the P.R. workers' caseload rises by about 106,000 new cases - sixfold their current caseload.
- Responsibility for number of issuances rises from 18,000 to 163,000 - ninefold increase initially and 22 times in final plan.
- Reverifications will need to increase because newly eligible population more likely than current population to have changes in circumstances that will consider them ineligible.

Adjudication Board: Parish committee will or will not have political members.

MINISTRY OF HEALTH PROGRAM

Current Program

Serves 108,438 pregnant/lactating women, infants and children up to age 3. No means test, self-application for health services of clinics.

Eligibility determined at clinic by workers, but eligibility test solely to meet categorical criteria.

Benefits are threefold: health services, supplemental feeding and nutrition/health/family planning education. Supplemental feeding consists of 2-4 lb. commodity package (oil, cornmeal, iron fortified cornmeal and flour, non-fat dry milk, etc.) per child or mother. Larger quantity is for a malnourished child. Supplies have been short so many clinics provide no supplements. Benefits disbursed 3 or 4 times a year.

Currently distributed commodities are packaged by JTCC and sent to two storage centers: Montego Bay and Port Antonio. Commodities flow from these centers to the 13 parish clinics and from there to local clinics. There are frequent breakdowns in this distribution.

Distribution problems have included commodity availability; pilferage during transit; inadequate, non-secure storage; pilferage on-site; poorly targetted benefits due to infrequency of supply.

Staff: approximately 280 clinics of 4 types, 1 main clinic per parish, and mix of smaller units: Type 3 (doctor, nurse, midwife, community aide); Type 2 (nurse, midwife, community aide); Type 1 (midwife and community aide). See reference materials for distribution of clinics.

New Program

Community aides register all currently participating individuals (information from current case files) on cards supplied by Poor Relief workers.

Establish audit, accounting, security procedures for stamps.

Issue stamps; keep accounts; report to social security.

Accept new applications, register and file them with social security.

Issues:

Training and establishing regulations and guidelines for handling a new function: ordering sufficient coupons, keeping track, etc.

Improving security at clinics.

Avoiding duplicate participation in programs (how to cross check with PR workers).

Community aides responsibility and accountability for benefits would increase from infrequent commodity supplies to slightly more than \$1 million a month.

Responsibility for supervision and monitoring of system must be established.

Benefit is for milk only or milk and cereal?

Maintenance of commodity distribution system until stamp system firmly established and accepted.

SCHOOL LUNCH PROGRAM

Current Program

- Serves 160,000 students under 11. No means test.
- Benefits are 1 nutri-bun and 1 serving milk.
- One factory produces nutri-buns and distributes to 100,000 students.
- Program shuts down with insufficient commodities.

New Program

Increase coverage to all students in all public schools more than triples coverage.

Increased wheat, butter-oil and skim milk conations that cannot be monetized (from World Food Plan, EEC and Section 416) will be sent by JTCC for processing at the school plant (ultimately 4 plants) and nutri-buns and milk will be produced. Intent is to purchase raw materials and process rather than processed goods.

Students will be asked to pay 20¢ for a lunch. This finding will be put into an administrative account for FSP but as yet is not linked to any specific administration functions or agency.

Issues:

What level of increased school feeding will increased donation commitments support.

Schedule for building 4 nutribun plants.

Adequacy and variety of lunch.

Assumptions in budget do not seem to account for 1) absentee rates (U.S. budget assumes 11% of enrollment or 534,000) but appropriate local statistics should be applied) or 2) effect of price on participation rate.

Should benefits initially be targetted to lower grades where nutritional need and program participation rates are likely to be greatest.

Appendix C

Options for Future Analysis and Technical Assistance

OPTIONS FOR FUTURE ANALYSIS AND TECHNICAL ASSISTANCE

A. Budget Analysis/Economic Effects

Budget assumptions and details beyond those in the Ministry paper or gathered through interviews could not be fully enough assembled and analyzed during this limited visit (May 30 - June 4, 1984). The minimal analysis included here needs to be expanded to:

- Review donations commitments including assessing whether the volume and scheduled delivery coincide with the requirements of the FSP as planned.
- Assess adequacy of donation mix (monetized commodities vs. non-monetized) to support program plan.
- Construct schedule of product availability and extent float required to support FSP without frequent shut downs.
- Provide analysis of expected economic impact of program under two scenarios (with and without specific commodity shortages). Address effects on prices and recipients considering the value of the benefits to the recipient, recipient share of food market, and substitution effects.
- Provide summary and analysis of recent price changes for low income recipients, effect on their real income and general effect subsidy allowances. For example, recent analysis indicated that least cost diet recently rose \$8.58 while economy food plan (middle class diet) only rose \$3.16. Analyse need and method for possible benefit indexation.
- Analyze specific programmatic components of the budget (best done perhaps by specialist in field, e.g. warehousing and distribution; security maintenance).

B. Longer Term Issues about Benefit Levels and Program Performance

- Review and analyze food expenditure/consumption data in particular to review the effect of targetted food coupons.
- Review program benefit levels for under/over adequacy; for all three program components effect in meeting appropriately established dietary standards; relationship of benefits to family size, income, etc.

Review and analyze program data collected by Ministry of Social Security and Ministry of Health to describe program participants (income, family size, other program participation, age), to construct a picture of the interaction among the three component parts of the FSP - Terms of coverage and benefit amounts; analyse redistribution effects of the new programs especially as benefits given to individuals cumulate within families.

- Review and analyze program data collected by the Ministry of Social Security to describe amount and patterns of benefit distribution and participation.
- Assist in designing evaluation of FSP impact in terms of participation, benefit delivery and security and achieving of stated program goals.

C. Technical Assistance for Program Operations

- 1) Review current plans for food stamp program and its relationship to current operations guidelines and regulations for poor relief and public assistance programs to assess areas of program vulnerability. Effort should include review of system from production and ordering of coupons; delivery and flow of coupons to issuance centers; issuance operations; eligibility determination and verification, processing guidelines; redemption in store rules, monitoring systems for workers, retailers and banks; accountability and auditing of systems; lines of authority design. Suggestions for maintaining program integrity should be drawn from U.S., Puerto Rico and other food stamp program experiences.
 - Review and assessment should be conducted by persons knowledgeable in Food Stamp program operations and regulation design on the Federal, Regional, or State level.
 - Review should cite specific examples of potential program vulnerability (within existing programs) and methods to address.
- 2) Assist in drafting of operations guidelines to address:
 - Eligibility determination including: definition of income, assets; use of household vs. individual accounting; verification; processing standards; special situations (migrants, those in need of authorized representatives); length eligibility certification; recertification needs and methods; disqualification rules; appeals procedures.

- Issuance procedures including, benefit replacement; accounting systems; inventory management; requisitions and shipping; storage; reconciliation and issuance records; close out audits.
 - Redemption procedures; registration retailers, monitoring retailers; eligible foods rules.
 - Bank procedures: accounting, auditing, reconciliation procedures; coupon destruction.
 - Financial monitoring procedures: guidelines for program suspension or close down; rules for redemption if inadequate funds; monitoring and reports on program expenditures.
 - Assistance in above drafting of operations guidelines can be best provided by regulation drafters or operations technicians on the Federal or Regional level in the U.S. Food Stamp Program. Regional personnel with experience in Puerto Rico or the Virgin Islands would be a useful addition to a Federal regulations design expert.
- 3) Assist in developing training materials and/or assist in training for implementation of operations in coupon handling; security; monitoring; and retailer compliance. This should be for all personnel but will be particularly important for Ministry of Health workers who have had less experience in income-maintenance type programs.
- 4) Provide model accountability and audit systems to track issuance expenditures and redemptions; plan for adequate coupon flow to issuance centers balanced by adequate cash flow through banks for coupon redemption. The effort needs to: (1) address the dual issuance system envisioned via Ministry of Health Clinics and Poor Relief Program Workers; and (2) account for and build upon currently operating accounting systems within the 3 major programs (Poor Relief - cash disbursed by workers; Public Assistance - checks mailed from central issuance; and Ministry of Health clinics - which has existing computerized report system indicating numbers of clients by service received). System should provide minimum information to describe value of issuance in time period and basic client characteristics for program assessment.
- Model systems can be described within FNS headquarters. On-site technical assistance; if necessary, can be further specified by a regulation/operations technical assistant.

- 5) Design a course for technology transfer of appropriate U.S. (Puerto Rican or Virgin Island) accountability and security measures to Jamaica and training in those techniques. Conduct on-site training in the U.S. in FNS headquarters with visits to local agencies. Develop a training course for senior Jamaican managers and supervisors to review all security/integrity protection measures and operations from the beginning of a food stamp system, eligibility, verification, avoidance of duplicate participation through the entire process including all monitoring and accountability techniques. Provide on-site (U.S.) training for up to 12 line managers. Include thorough review of local agency operations with site visits and regional monitoring. Such a course enables Jamaican operations experts to review U.S. techniques in maintaining program integrity and adapt to Jamaican needs.
- Training should be developed by personnel familiar with Jamaican FSP design, U.S. Food Stamp operations and design, and FNS training staff. Options for sites include Puerto Rico (although an operating coupon system cannot be observed there, personnel in the Commonwealth who designed NAP could provide very useful information), U.S. Virgin Islands, Florida (for proximity with SERO participation) or Washington, D.C. (both headquarters, MARO and D.C. local government).

D. Technical Assistance for School Lunch and General Commodity Distribution

- Review current commodity distribution and warehouse capabilities within Jamaica and identify specific areas for improvement. Review successful distribution operations on the island and assess their applicability to commodity distribution.
- Provide report outlining possible warehouse/distribution improvements. The assessment and report should be modelled on the contents of a typical state commodity distribution technical assistance report conducted by the Food Distribution Division Specialists within FNS.
- Conduct a thorough assessment of existing school nutrition programs; provide organizational and process analysis of program; assess benefit adequacy and effect of benefit on income distribution; nutritional status, and potential for income substitution; assess cost-effectiveness of current system including issues of economics of scale; needed commodity donation flow; supply demand; kitchen capabilities;

purchasing/donations commodities and adequacy of commodity flow; warehousing (costs, amortization, operating costs, equipment); delivery (truck costs and labor), inventory, and administrative. Describe possible alternatives to current school lunch program including but limited to different type programs for urban/rural areas; mix of benefits including use of local food stuffs; different type programs for different age groups (i.e. milk only). Assess effect of varying price structures for program. Assess economic cost, and participation consequences of selected alternatives.

Analysis needs to be conducted by personnel experienced in assessing warehousing/distribution and school feeding programs such as PVO's and/or USDA.

References

REFERENCES

- Ministry of Health Jamaica, A Profile of Maternal and Child Health and Family Planning in Jamaica, 1982 (basic census, health and clinic descriptive statistics); Ministry has computer printouts of number clients and services by parish).

- Population Census 1982; Department of Statistics, Jamaica

- "A Proposed Food Subsidy for Jamaica and Alternatives to it" Robert J. Lampman, March 23, 1984 (good bibliography, income distribution data)

- Ministry Paper 28: FOOD SECURITY PLAN

Food Security Plan

I. INTRODUCTION

Since November, 1983, the Jamaican Government has introduced several additional policy measures to improve the country's critical balance of payments position. The cornerstone of these efforts has been the devaluation of the Jamaican dollar vis-a-vis the United States dollar. This has had the positive effect of enhancing the competitive position of Jamaican goods in international markets, especially manufacturing output, thereby stimulating exports. But it has also had the negative effect of eroding the standard of living of many Jamaicans.

Some erosion of real incomes is a necessary consequence of exchange rate reforms, as import prices must rise to discourage demand for imports. At the same time, however, a society must ensure that exchange rate movements do not jeopardize the health of the population.

Rising prices could have this undesirable effect by significantly inhibiting the consumption of nutritious staple foods. This would seriously undermine the welfare of the nation, and it would be bad economic policy.

Jamaicans have long enjoyed a record of reasonably good health. In particular, malnutrition has never been a very serious problem. This satisfactory record, however, is not an occasion for complacency. Evidence suggests that significant numbers of Jamaicans are receiving only marginally adequate levels of nutrition in their diets. Many of those same people are the members of society whose nutrition levels would be adversely affected by rising prices.

Most of the foods contained in the basic needs food basket are currently direct imports. Furthermore, food expenditure constitutes a much larger fraction of the total expenditure of low income consumers. In this context, dramatic adjustments in the exchange rate, such as those which have occurred since November, 1983, could pose a serious threat to the welfare of the target groups in the programme.

It then becomes imperative for the Government to take remedial action to protect those people with special needs: the very poor, pregnant and nursing women, and children. Options for relief include feeding programmes for special target groups, food subsidies and tax concessions. These measures can then be the vehicles to not only maintain, but to actually improve the nutritional intake of the population.

II. OBJECTIVES OF THE PROGRAMME

The Programme is intended to provide access to a specified number of basic food items for approximately 50% of the population so as to:

- a) maintain the existing marginal nutrition levels of persons who are generally "at risk" of falling into the category of being mal-nourished, in the event of a change in purchasing power;
- b) provide improved nutrition levels for school children by expanding the existing school feeding programme;
- c) provide for a minimum nutrition intake level for persons who have little or no visible income.

III. SCOPE OF PROGRAMME

The Programme will provide:

- a. Daily lunches for 600,000 school children in pre-primary, primary, all-age and new secondary schools, aged 4 years and over;
- b. Milk and cornmeal for 200,000 pregnant and nursing women as well as children up to 3 years;
- c. Rice, Cornmeal and Skimmed Milk Powder for 200,000 elderly or very poor people.

A. School Feeding Programme

This segment of the programme will provide daily, a nutribun and half-pint of milk to 600,000 children in pre-primary, primary and all-age and new secondary schools. At present the school feeding programme has the capacity to cater to 150,000 children in pre-primary, primary, all-age and new secondary schools in Kingston and St. Andrew, St. Thomas, part of St. Catherine and Trelawny.

Under the expanded programme, the children will be provided with lunches comprising nutribun and a half-pint of milk for the school year comprised of 190 days. All children in the schools specified will benefit.

The lunches will be prepared on the basis of a fixed formula for baking buns, using flour and cornmeal and butter oil and processing skimmed milk powder to which butter oil is added. This formula is used world-wide in school feeding programmes and is intended to provide an acceptable level of nutrition for the full cross-section of children attending school.

The nutrient intake of children varies according to age. However, the lunch will provide over 30% of the energy (calorie) needs and satisfy the protein needs recommended by the Caribbean Food and Nutrition Institute as adequate daily intake for children in the Region. We expect that the energy gap of these children will be satisfied up to about 75% from family sources.

Preparation of the lunches will be done at five factories located in Kingston, Manchester, Westmoreland, Trelawny and St. Mary. The factories will be operated by Nutrition Products Limited, a statutory organization under the Ministry of Education, which now operates an efficiently run factory providing 100,000 lunches a day.

B. Pregnant and Nursing Women and Children up to 3 years

In 1983, the Ministry of Health distributed 425 metric tons of food to pregnant and nursing women and children up to 3 years, who attended clinics throughout the island. The ante-natal, post-natal, and children visits to clinics averaged 3.5 to 4 for the year. The food distributed comprised corn soy blend, soy fortified bulgar, soy fortified flour, skimmed milk powder and oil. In the three groups, 100,438 people benefitted from the Supplementary Feeding Programme. Generally, if food quantities were adequate, healthy babies up to 3 years would be given 2 lbs. of cereals and skimmed milk whenever they attended clinics, and malnourished babies would be given 4 lbs. As a rule, food quantities were inadequate, and malnourished babies were given priority treatment. Their mothers were issued 4 lbs. of cereals and skimmed milk whenever they attended clinics.

The Food Security Plan will provide skimmed milk to 200,000 persons comprising pregnant and nursing women, and children in the age group up to 3 years.

Based on the supply of Skimmed Milk Powder (SMP) under the new Plan, pregnant and nursing women and children from birth up to 3 years will be able to secure about 36 lbs. of skimmed milk powder a year, and about 60 lbs. of cornmeal.

At present, based on actual attendance and food provided at clinics during 1983, children in the target age group up to 3 years would have been provided with 3% and 5% of the recommended calorie intake and between 5% and 10% of the recommended protein intake. Pregnant and nursing women would have been provided with 1% of the recommended energy intake and between 2.5% and 3% of the recommended protein intake.

Under the Food Security Plan, by providing a combination of milk and cereal and because of consistent availability and a controlled procedure, the proposed programme has the potential to significantly increase the energy and protein intake of pregnant and nursing women and children up to 3 years, over the previous level.

Specifically, children in the target group age up to 3 years will be provided with between 43 and 71% of the recommended energy (calorie) intake and over 100% of the recommended protein intake. Pregnant and nursing women will be provided with over 21% of the recommended energy (calorie) intake and between 48 and 58% of the recommended protein intake.

We expect that the energy gap in the nutrient intake for children up to one year should be supplemented to a level of about 70% of the required intake from family sources. The gap for the children between the ages of 1 and 3 should be supplemented to about 85% of required intake from family sources because of the ability to eat a variety of locally grown staples. The gaps for the pregnant and nursing women should be supplemented up to about 70% on the basis of a minimal capacity to secure locally grown staples.

C. Elderly or Vary Poor

The 200,000 in this target group includes some 55,000 persons being assisted financially under the existing Public Assistance Programme of the Ministry of Social Security and the Poor Relief Programme of the Ministry of Local Government. These persons currently receive assistance to a value of \$20 a month, some in twice-monthly payments.

The programme will provide food assistance for 40% of the people with income of 350 a week or less, who number approximately 300,000. The food assistance to a value of \$10 a month per person will enable the recipients to purchase quantities of rice, cornmeal and skimmed milk powder from shopkeepers.

By making food assistance specific to certain foods, the Plan will provide over 21% of the energy requirements for adult, men and women and 49% to 62% of their protein requirements.

We expect that the energy gap for these persons will be supplemented up to about 60% during which their protein needs will be fully satisfied, from intake of other staples.

SYSTEM FOR ALLOCATION OF BENEFITS TO ALL GROUPS

For the school feeding programme, the system in place will be used under the new Plan. This means that there will be no special allocation process in the school feeding element of the Plan as all children in the categories of schools named will benefit. These children will comprise three-fifths of the beneficiaries under the Plan.

Food Stamps will be used to provide assistance for the remaining two-fifths of the beneficiaries comprising pregnant and nursing women and children up to 3 years, as well as the elderly and very poor category.

Pregnant and Nursing Women and Children up to 3 years

The pregnant and nursing women will be selected initially from those women receiving pre-natal and post-natal services under the Primary Health Care programme at the 371 Health Centres. In 1983 these numbered approximately 30,000 and 30,000 respectively. The children up to 3 years will be selected from children attending Child Health Clinics for immunization and those who form part of surveillance, supplementary feeding,

training, education and dietary activities of the Ministry of Health's Nutrition programme. In 1963 these numbered 70,376 during the first quarter, and represented 30.6% of the estimated 192,443 who fall into this age group.

No additional or special registration will be required for this group. The Ministry of Health Patient Care records will be used. The system which applies to the existing supplementary feeding programme will be modified to incorporate the delivery of a Registration Card bearing the name of the beneficiary and a serial number to be issued by the Ministry of Social Security. The beneficiaries will be provided with Food Stamps amounting to 51⁰ a month to enable them to obtain about 3 lbs. of skimmed milk powder each month, and 5 lbs. of cornmeal.

Pregnant women who visit the Antenatal Clinic will receive these Food Stamp books on the basis of the clinic registration. These women will receive books throughout the period of pregnancy and into the post-natal nursing period. Thereafter the Food Stamps will still be issued, since the child born falls into the age group up to 3 years.

Children who are found to have an acceptable nutrition level will be given 2 lbs of milk per month. Those who have an unacceptable nutrition level will be given 3 lbs. of milk per month. These rations will be recommended to the beneficiaries during the nutrition education programmes conducted by the Ministry of Health.

Women who are not pregnant or nursing but who have children in the age group up to 3 years will receive stamps to secure milk for each child in that age group.

Elderly and Very Poor

The beneficiaries in the elderly and very poor category will be selected initially from those persons receiving assistance under the Public Assistance Programme of the Ministry of Social Security and the Poor Relief programme of the Ministry of Local Government. These persons

comprise some 55,000 and are already identified as qualifying for assistance based on the income criterion.

The Ministry of Social Security assisted by the Poor Relief Department will have responsibility for this group of beneficiaries. Its Public Assistance officers situated in the capital of each parish, will be the local secretariat for all activities - investigation and registration procedures, as well as the distribution and monitoring mechanisms.

An application form (Form PA 1) will be distributed by Poor Relief officers, which they will have on hand in their respective zones. Applicants who qualify on the basis of a means test, will be registered at the local offices. A record of food stamps issued to the respective Poor Relief officers and signed for by them, will be kept in the local offices.

A card, which will have the beneficiary's name and reference number will be given to each applicant registered. A card addressed to the Ministry of Social Security will also be given to all persons registered, in order that they can notify the Ministry of Social Security in the event of their not receiving their allotment of stamps.

Provision is also being made for those persons who cannot themselves go to the Poor Relief Office in their zone for their stamps to authorize delivery to their agents.

All these precautions are intended to see that the food goes to those people for whom it is intended, and provide for integrity in the system.

THE FOOD STAMP SYSTEM

Implementation

The Ministry of Social Security has responsibility for implementing the Food Security Plan. It will investigate applicants in the "elderly and very poor" category, and register and issue a Registration Card to all beneficiaries except school children.

The Registration Card will identify beneficiaries as participants under the Plan when they go to purchase the specified food items from shopkeepers.

Registration

Initial registration will take place as soon as the Plan is announced, for:

- a) approximately 100,000 pregnant and nursing women and children up to ⁴3 years already on the Ministry of Health ante-natal, post-natal and Child Health clinic records;
- b) approximately 55,000 elderly and very poor already on the Public Assistance and Poor Relief records.

Subsequent registration will be done as new patients in all categories attend the Health Clinics and as applicants at the Public Assistance and Poor Relief offices are investigated and found to qualify under a means test.

Food Stamps Issue

Food Stamps valued at \$70 will be issued in books every 3 months from the date of first issue. The date of issue will be on the cover of the book. Interim issues will be made to applicants at Public Assistance and Poor Relief offices, pending the outcome of investigation by the Ministry of Social Security.

The items for which the Food Stamps can be exchanged are printed on the stamps. Beneficiaries will be told how to use their stamps in the marketplace, and that a new book will be issued only after 2 months have passed, and on presentation of a completely used book.

Food Stamp Exchange

Beneficiaries will exchange the stamps for the food items printed on the stamps at any wholesale or retail shop.

Shopkeepers

The shopkeepers will be informed of the procedures governing the Food Plan. On delivery of food items, the shopkeeper will remove the perforated end of the stamp in exchange for any of the foods listed on the stamp - cornmeal, rice and skimmed milk powder. The shopkeepers will not give cash as change. The shopkeeper will redeem all vouchers for cash at the nearest commercial bank.

Commercial Banks

Commercial Banks will be reimbursed by the Bank of Jamaica.

COST AND FINANCING

Plan Cost

The Plan is estimated to cost J\$141 million (US\$35.3 million) inclusive of contingencies for a fiscal year. The first year of the Plan will have an additional cost for providing equipment, machinery and vehicles, and for buildings amounting to J\$19 million (US\$4.7 million).

Costs comprise:

- direct food imports to meet the needs of the target group;
- machinery to equip new processing plants, delivery vans, upgrading of physical facilities, factory administration, production and transportation for the school feeding programme;

- food stamps preparation and delivery;
- security equipment and stationary.

The capital cost of the Plan is estimated at JS19.0 million (US\$4.7 million).

A breakdown of costs for the first fiscal year is as follows:

<u>Components</u>	<u>Cost JS million</u>	<u>% of Total Cost</u>
Food Imports	68.52	55.3
Machinery and vehicles	11.30	7.0
Building Construction and Repairs	2.50	1.5
Administration, Production and Transport	46.74	29.2
Voucher Preparation and Delivery	4.00	2.5
Security and Stationery	0.52	0.5
Contingency	<u>5.32</u>	<u>4.0</u>
TOTAL	<u>150.00</u>	<u>100.0</u>

Plan Financing

The programme will be financed largely through food aid from the following sources: USAID (PL 480 and Section 416 of the US Agriculture Act), European Economic Commission (EEC), World Food Programme (WFP) and the Italian Government. The total food cost of approximately JS68.52 million for a fiscal year will be financed from these sources.

Approximately J\$15 million will be available to finance the costs, from contributions received from school lunches for a fiscal year. This represents a nominal charge of 20 cents a day for the nutrient and milk lunch to be provided. The charge represents 25% of the manufacturing and delivery cost of 80 cents for each lunch, but about 12.5% of the retail price for the same lunch. The J\$15 million for the fiscal year comprises estimated collections from 75% of the children being provided lunches.

The purchase of vehicles, equipment and packaging materials amounting to J\$11.30 million (US\$2.8 million) will be financed by lines of credit and suppliers credits.

Summing up, it is imperative for the Government to put in place a Plan which protects those segments of the community most at risk of falling into the category of being mal-nourished, due to the price and real income effects of the recent monetary and fiscal measures - the very poor, pregnant and nursing women, and children. The options for providing relief have been carefully considered and on balance, the food plan for the target groups selected can be the strongest vehicle for maintaining or improving the nutrition intake of the population.

The high level of protein to be available simultaneously from a combination of plant proteins for the school children, together with animal protein from milk will facilitate adequate protein synthesis to support tissue development during critical growth years, and contribute to a greater capacity to learn and ultimately the ability to earn.

The availability of the high level of animal protein for the pregnant and nursing woman and children up to 3 years is critical for adequate tissue development during times of body stress occurring during reproduction, lactation and formative growth. Nursing mothers will be relieved of the need to pay the high price of commercially prepared formula milk in tins.

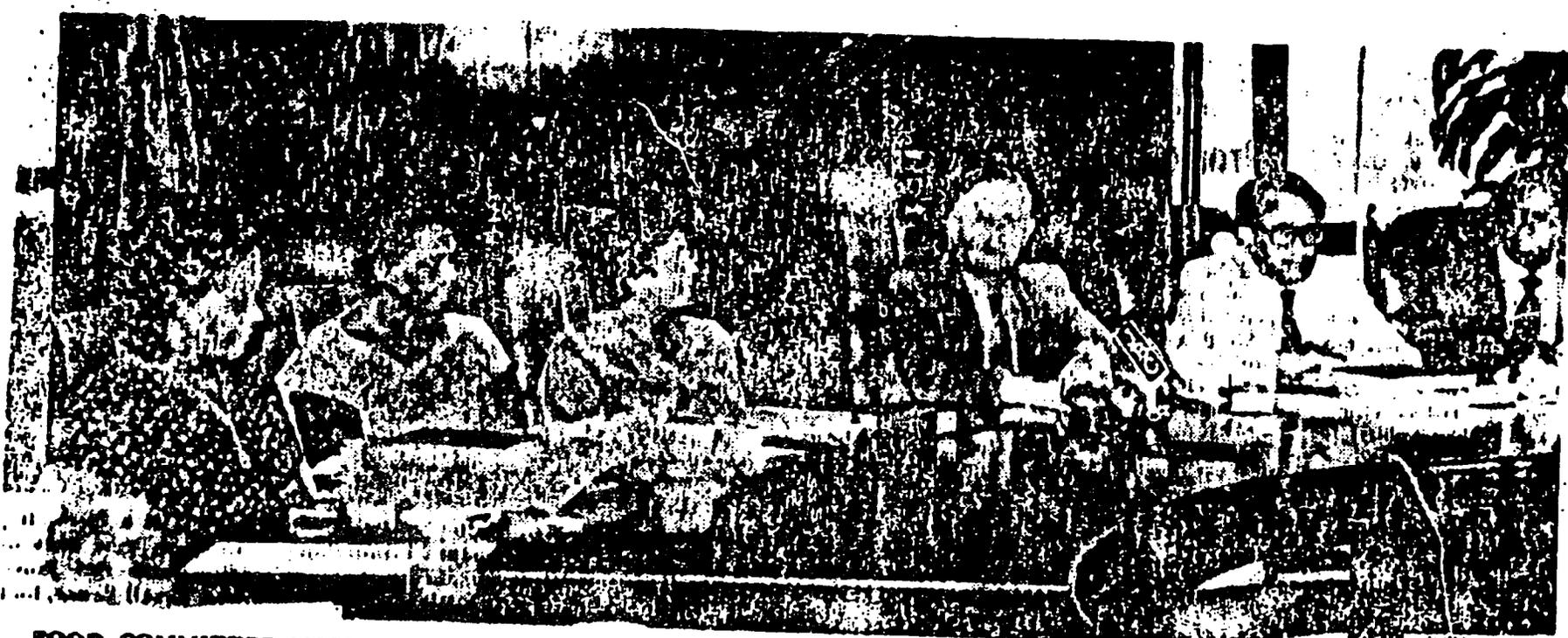
The availability of a high level of protein for the aged is essential. The most common nutrition deficiency found in the aged is protein: and protein availability improves their calcium absorption.

PLAN START-UP DATE

Registration for the pregnant and nursing women, children up to 3 years, the elderly and very poor will begin on June 4, and will be finalized by gradual phasing-in of all beneficiaries during the summer months.

The school feeding programme will be expanded from 150,000 at the end of this term to about 300,000 at the beginning of the Christmas term in September 1984, with a gradual phasing-in to reach the target of 600,000 when all the plants are ready to produce, by about November 1984.

Edward Seaga
Prime Minister and
Minister of Finance and Planning
May 21, 1984.



William Pharo

FOOD COMMITTEE MEETS: Prime Minister Edward Seaga (at mike) addresses the first meeting of the Administrative Committee, which will be concerned with working out details of the Government's Food Security Programme, at Jamaica House on Friday. Seated, from left, are Miss Carole Dixon of the Prime Minister's Office; Mrs. M. Brown, Permanent Secretary in the Ministry of Social Security; the Hon. Zaid Bennett, Minister of State in the Ministry of Social Security, who has been given charge of the Programme; Prime Minister Seaga; Mr. Don Brice, Permanent Secretary in the Prime Minister's Office and Dr. Headley Brown, of the Planning Institute.

Food Committee sits first time

The first meeting of the Committee appointed by Prime Minister Edward Seaga to assess the administrative aspects of the Food Security Programme, took place yesterday in the conference room at Jamaica House, under chairmanship of the Prime Minister.

He told the members they would be responsible for making the necessary administrative arrangements to enable the programme to get off to a smooth start. He said:

"I expect formidable things from you. You have a plan here which is a

great challenge...to provide flows of assistance by way of food covering half of the population, is not an easy exercise. We have been able to simplify it by distributing food stamps. And we will be distributing school lunches.

"The food stamps will be used to purchase the items designated on the stamps, from the shops; and therefore there will be no need to distribute food."

On the committee are representatives of the Ministry of Social Security, led by the Minister of State, the Hon. Enid Bennett, who has been assigned to that Ministry in order to take charge of the committee; the

Ministry of Education, the Ministry of Health, the Planning Institute of Jamaica, Jamaica Nutrition Products, the Ministry of Finance and the Jamaica Commodity Trading Corporation. Other representatives include personnel from the Bureau of Standards, who will be monitoring the programme and reporting back to the Prime Minister's Office.

Clarifying the question, how does one receive Food Stamps, the Prime Minister said that in order to do so, one had to have come from a household in which the income was less than \$50 or less per week, because the assistance was meant for the very poor. The groups to which it applies are the poor and aged, expectant and

nursing mothers and mothers of children of pre-school age.

Altogether, some 400,000 persons would be embraced by the programme. There was little possibility of victimisation, because the statistics were based on live studies done on households with earnings of \$50 and less, and of the number of indigent poor, the number of nursing and expectant mothers and pre-school children.

Mr. Seaga said the Government intended to appoint committees to operate throughout the rural areas, having a monitoring function "in order to ensure that we conduct this programme on the highest basis of integrity."

Appendix F

Ministry of Health Analysis of Food Security Program

i

Food Availability and Cost

Food balance sheets produced in 1975 and in 1980 (modified version) suggested that, overall food availability has been adequate on a per capita calculation, providing over 150% of recommended protein allowance and 1% of energy requirements. It is well recognized, however, that these calculations do not adequately explain food intakes of the population as consumption patterns vary according to socioeconomic group. The most important factor influencing these patterns is income. Thus, for example, the more expensive foods such as animal products, are consumed in far greater quantities by middle income groups and these foods are the greatest contributors of protein. Whereas, among the low income groups, cereal and cereal products form the bulk of the diet and are the main providers of protein and energy. Also the low income groups tend to have lower food intakes than the rest of the population - 1974 estimates suggested that 15% of the population had shortfalls of 30% of dietary energy. More recent data are not available to determine what the situation is today. However, calculations of least cost of feeding a family of four (average household size 4.3 - 1981 census), can provide a reasonable picture of the population's ability to purchase food and the likelihood of adequate food intakes in certain population groups. In December 1983, the cost of feeding a family of four was \$9.68 per day or \$67.76 per week.

This represents 22.9% of the minimum wage (compared with 193.5% in 1982 and 174.6% in 1979). If both adults were earning the minimum wage, their combined income could not meet the cost of feeding the family. Thus it is becoming increasingly difficult for households to purchase sufficient food to meet their needs. The implications of this are that one would expect a higher prevalence of malnutrition among children under five (5) and under-nutrition in the rest of the population. Data from the Ministry of Health's monthly clinic summary records do not suggest a change in nutritional status of those attending clinic in the past three (3) years. However, these data only reflect the nutritional status of children attending clinic and not the whole population. Paediatricians from urban hospitals have reported increases in admissions from malnutrition/gastroenteritis over the past year. Sustacante Children Hospital had 231 admissions in 1983, compared with 133 in 1982, and this was the highest during the past five (5) years (1979-1983).

Implication of Removal of Subsidies on Basic Food Items

The basic food items being subsidised are rice, flour and cornmeal. Figures on the value of the subsidy were not available. However, if the increase in importation costs that have occurred as a result of the recent devaluations are not absorbed by an increase in the value of the subsidy, the consumer will have to pay approximately 35 cents per pound more for these foods.

Using the "least cost" meal plan for feeding a family of four, the additional cost from this increase will be \$8.53 per week making total weekly food cost \$76.29 or 254.3% of the minimum wage. Middle income earners consume less cereal and cereal products and therefore will be less seriously affected by such increase. Using an "economy" food plan for feeding a family of four, the additional cost from the increase will be only \$3.15 per week.

A total removal of subsidies on basic food items would of course have an even greater negative effect.

*Note that overall, the economy meal plan is more costly than a least cost meal plan as more food from animals, fats and vegetables are included in the former.

POPULATION DISTRIBUTION BY PARISH ON CENSUS DAY
1982

TABLE 2

PARISH	Population 2,000	Distribution
ALL PARISHES	2,095.9	100.0
KINGSTON	100.6	4.8
ST. ANDREW	464.9	22.2
ST. THOMAS	76.3	3.6
PORTLAND	70.8	3.4
ST. MARY	101.4	4.8
ST. ANN	132.5	6.3
TRELAWNY	65.0	3.1
ST. JAMES	128.0	6.1
HANOVER	60.4	2.9
WESTMORELAND	116.2	5.5
ST. ELIZABETH	132.4	6.3
MANCHESTER	136.5	6.5
CLARENDON	194.9	9.3
ST. CATHERINE	316.0	15.1

Source: Population Census 1982, Preliminary Report
Department of Statistics

ESTIMATES ⁽¹⁾ OF THE JAMAICAN POPULATION BY AGE AND PARISH - 1982 ⁽²⁾

TABLE 3

PARISH	ALL AGES	AGE IN YEARS (in thousands)													
		0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65+
ALL PARISHES	2,331.8	262.1	280.0	209.3	270.3	317.0	344.4	309.7	288.5	288.4	211.0	174.4	125.6	66.3	171.0
KINGSTON & ST. ANDREW	666.0	74.5	76.7	78.9	91.3	80.9	50.8	40.4	36.9	33.1	25.1	25.6	21.6	19.2	40.9
ST. THOMAS	81.2	8.7	9.8	9.9	6.8	6.5	3.7	3.6	3.2	2.9	1.8	2.4	5.9	5.2	10.7
PORTLAND	77.2	7.8	8.4	11.2	12.9	8.6	4.6	3.2	1.9	2.0	1.7	2.0	1.8	2.3	8.6
ST. MARY	112.5	11.9	16.1	15.9	16.1	11.4	6.0	3.7	3.1	2.9	3.9	3.7	4.4	2.6	10.9
ST. ANDREW	140.6	16.3	18.8	18.3	21.1	13.2	7.9	5.1	3.0	2.9	5.7	7.2	5.4	3.6	12.1
PRELAMB	70.3	4.6	7.3	6.0	8.8	6.9	5.5	3.7	3.2	3.7	4.0	2.5	3.5	3.1	7.9
ST. JAMES	131.3	15.6	16.9	17.4	19.0	12.6	9.0	9.8	5.6	5.8	3.1	2.8	2.3	3.0	8.1
MANOR	65.8	6.9	10.4	11.9	7.3	5.9	4.5	2.9	1.6	2.5	1.3	2.4	1.2	2.4	3.2
WESTMORELAND	125.8	15.3	16.0	18.5	15.7	11.6	5.6	3.9	3.2	3.9	5.6	4.5	5.3	3.0	13.5
ST. ELIZABETH	144.6	24.6	21.5	22.2	18.1	8.8	8.0	6.5	3.3	3.6	3.3	5.4	5.0	7.1	13.2
MANCHESTER	153.3	14.1	18.2	23.1	20.7	13.7	8.8	6.9	7.6	7.8	5.6	5.5	6.4	6.0	8.8
CLARENDON	204.5	26.9	29.2	30.7	23.3	18.1	13.5	8.4	7.1	6.0	6.9	5.3	8.6	6.4	14.2
ST. CATHERINE	238.5	34.9	41.4	35.5	25.1	18.8	16.4	12.1	8.5	11.2	5.0	4.8	4.2	3.7	16.8

(1) Estimates in thousands

(2) Estimates based on the results of a Demographic Sample Survey conducted by the Department of Statistics in April 1982

Note: Discrepancies in totals due to rounding.

DISTRIBUTION OF GOVERNMENT HEALTH CENTRES REPORTING SERVICES BY PARISH AND DESIGNATED TYPE: 1982

TABLE 28

PARISH	YEAR	ALL TYPES	TYPE 1	TYPE 2	TYPE 3	TYPE 4	TYPE 5
<u>ALL PARISHES</u>	82	362	198	86	76	2	2
	81	361	195	86	76	2	2
KINGSTON & ST. ANDREW	82	46	20	7	18	-	1
	81	51	24	8	18	-	1
ST. THOMAS	82	21	13	4	4	-	-
	81	21	13	4	4	-	-
PORTLAND	82	19	12	4	3	-	-
	81	19	12	4	3	-	-
ST. MARY	82	28	17	7	4	-	-
	81	28	17	7	4	-	-
ST. AKE	82	27	15	7	5	-	-
	81	26	14	7	5	-	-
TRELAWNY	82	20	11	6	2	1	-
	81	19	10	6	2	1	-
ST. JAMES	82	26	15	6	5	-	-
	81	27	15	7	5	-	-
HA TOVER	82	22	12	7	2	1	-
	81	21	11	7	2	-	-
WESTMORELAND	82	24	13	5	6	-	-
	81	24	13	5	6	-	-
ST. ELIZABETH	82	31	16	8	7	-	-
	81	30	15	8	7	-	-
MANCHESTER	82	32	19	7	6	-	-
	81	32	19	7	6	-	-
CLARENDON	82	44	25	10	9	-	-
	81	41	23	9	9	-	-
ST. CATHERINE	82	24	10	8	5	-	-
	81	22	9	7	5	-	-

ESTIMATED NUMBERS AND RATIOS OF GOVERNMENT HEALTH PERSONNEL
IN SELECTED CATEGORIES: 1981 - 1982:

E 29

CATEGORY	YEAR	NUMBER EMPLOYED		RATIO OF TOTAL PERSONNEL PER 10,000 POPULATION	RATIO OF PUBLIC HEALTH PERSONNEL PER 1,000 POPULATION
		TOTAL	PRIMARY CARE		
DENTISTS	1982	416	82	1.9	0.4
	1981	370	63	1.7	0.3
PRACTITIONERS	1982	62	62	0.3	0.3
	1981	57	57	0.3	0.3
HEALTH NURSES	1982	163	163	0.8	0.8
	1981	135	133	0.6	0.6
REGISTERED NURSES	1982	1,918	22	8.6	0.99
	1981		297	8.5	1.4
MEDICAL ASSISTANT NURSES	1982	998	9	0.0	0.0
	1981	913	9	0.0	0.0
PHYSICIANS	1982	497	368	2.2	1.6
	1981	493	327	2.2	1.5
PUBLIC HEALTH AIDES	1982	1,183	1,142	5.3	5.3
	1981	1,174	1,174	5.4	5.4
DIETITIAN & NUTRITIONISTS	1982	27	23	0.1	0.1
	1981	21	17	0.1	0.1
HEALTH EDUCATION OFFICERS	1982	32	29	0.1	0.1
	1981	—	—	—	—
HEALTH INSPECTORS	1982	396	396	1.8	1.8
	1981	380	380	1.7	1.7

data not available

Appendix G

List of Persons Contacted

TECHNICAL ASSISTANCE CONTACTS

Miss Carole Dixon: Institute of Planning (Program Conceptualization)

Mrs. Merle Brown: Permanent Secretary, Ministry of Social Security (Implementation, Final Design, Board)

Mr. Edward Miller: Permanent Secretary, Ministry of Local Government (Board, Final Design)

Mrs. M. R. Bassie: Director, Social Security (Final Design, Implementation)

Mrs. Andrea King-Bird: Chief Counsel, Social Security (Regulations/guidelines)

Mrs. Warden: Director, Public Assistance (Regulations/guidelines)

Mrs. Tolen: Statistics, Social Security (Monitoring Statistics, Client Characteristics)

INTERVIEWS

USAID:

Lewis P. Reade, Julius Schlotthauer,
Francesca Nelson, Sam Skogstad, John Jones,
Al Larson, Robert Friedline

GOJ:

Miss Carol Dickson, Mrs. Marle Brown,
Mr. Edward Miller, Mr. Don Bryce (Permanent
Secretary, Office of the Prime Minister),
Mrs. Kathleen Rainford (Ministry of Health),
Carla Vendreys (Prime Minister's Office),
Mrs. M. R. Bassie, Mrs. Andrea King-Bird,
Mrs. Warden, Mrs. Tolen, 5 Poor Relief
Workers

Other:

Mr. Charles Brook, EEC Agriculture Advisor

Mr. David Knight, AGRO 21 consultant to
Ministry of Agriculture.

Proposed Forms Designed by Jamaican Staff

Address:

My Registration No:

I have not received my Food Stamp Book
for the month of

Name.....(Capitals)

Signature

DISTRIBUTION CENTRE PARISH

FORM FA3
5.64

To be revised: add rehired/widowed
and signature block

MINISTRY OF SOCIAL SERVICES
REGISTRATION CARD
FOR
FOOD SECURITY PLAN

Name:

Dist. No.

Address:

Date of Birth:

Marital Status: Married / Single / Divorced / Separated

Type of House:

Number of Dependents
(children under 18 years):

Number in School:

Applicant's Income:

Total Income of Household:

Page 2 of 2

Date of Issue

Date of Expiry

Date of
Investigation

Date of
Review/Check

1

Address:

My Registration No:

Please deliver my Food Stamp Card
for the month of
to Mr./Mrs./Miss
my agent.

Name (optional)

Signature

Form 514
1974

Least Cost Diet For Family of Five

AMOUNTS, COST, CALORIE AND NUTRIENT CONTENT OF FOODS
FOR A *HOUSEHOLD OF 5 FOR ONE WEEK

	Cost \$	Energy (Calories)	Protein g.	Iron mg.
6 lbs. green bananas	1.80	1,914	24.6	15.6
4 lbs. sweet potato	3.20	1,760	19.6	15.2
2 lbs. dried peas (1 quart.)	8.00	3,058	198.0	69.0
2 lbs. pumpkin/carrots	1.60	144	2.8	2.4
2 lbs. callaloo	1.40	244	22.0	25.6
2 lbs. cabbage	1.60	156	10.0	2.6
1 doz. (3 lbs.) oranges	2.50	486	9.9	3.9
½ doz. limes (6 oz. juice)	0.40	30	0.5	0.3
½ doz. ripe bananas (3 lbs.)	<u>1.50</u>	<u>846</u>	<u>10.6</u>	<u>5.2</u>
Subtotal	<u>22.00</u>	<u>8,638</u>	<u>298.00</u>	<u>139.8</u>
6 lbs. rice 1.20/lb	4.50 7.20	9,798	204.0	43.8
6 lbs. cornmeal 1.00/lb	1.92 4.56	9,906	214.8	30.0
6 lbs. flour 1.20/lb	2.70 7.20	9,906	285.6	21.6
4 lbs. bread 1.25/100g	1.20 6.10	4,880	140.0	45.2
1 lb. crackers	<u>2.18</u>	<u>1,992</u>	<u>41.8</u>	<u>6.8</u>
Subtotal	<u>14.98</u>	<u>36,482</u>	<u>886.2</u>	<u>147.4</u>
2 lbs. SMP	1.66	3,266	326.6	8.2
2 tins sweetened condensed milk 1.60	2.80 3.45	<u>2,541</u>	<u>64.2</u>	<u>1.6</u>
Subtotal	<u>4.46</u>	<u>5,807</u>	<u>390.8</u>	<u>9.8</u>
5 lbs chicken necks and backs	3.25	1,785	185.0	21.0
½ lb. salt fish 4.50/lb	1.75 2.25	509	76.5	5.8
2 lbs. pork (medium fat)	6.00	3,654	72.6	10.6
2 lbs. (4 tins) canned mackerel 1.40	3.20 5.60	1,660	175.0	19.0
2 lbs. tripe	5.00	908	173.2	14.6
1 lb. minced beef	<u>4.50</u>	<u>1,347</u>	<u>72.6</u>	<u>11.8</u>
Subtotal	<u>23.70</u>	<u>9,863</u>	<u>754.9</u>	<u>82.8</u>

AMOUNTS, COST, CALORIE AND NUTRIENT CONTENT OF FOODS
FOR A *HOUSEHOLD OF 5 FOR ONE WEEK

	Cost \$	Energy (Calories)	Protein g.	Iron mg.
1 quart cooking oil	7.20	8,020	-	-
2 lbs. margarine	<u>6.92</u>	<u>6,522</u>	<u>-</u>	<u>-</u>
Subtotal	<u>14.12</u>	<u>14,542</u>	<u>-</u>	<u>-</u>
6 lbs. dark brown sugar	4.32	10,152	-	92.4
Miscellaneous -				
Spices, beverages, condiments	<u>5.00</u>	<u>-</u>	<u>-</u>	<u>-</u>
Subtotal	<u>9.32</u>	<u>10,152</u>	<u>-</u>	<u>-</u>
Total	<u>\$88.58</u>	<u>85,484</u>	<u>2329.9</u>	<u>472.2</u>

*Composition of household: Female - 35 years old
Male - 40 years old
Adolescent girl - 15 years old
Boys - 10 and 6 years old

*Add \$3 -10 for fuel. (December 1983)

Proposed Food Sufficiency Plan

Appendix J

MINISTRY PAPER NO:

FOOD SUFFICIENCY PLAN

INTRODUCTION

Jamaica relies heavily on imported foodstuffs to provide for the nutritional needs of the population. In 1983 alone, imports of the six basic food items: rice, milk, meat, fish, soyabeans, and corn amounted to US\$115 million, or almost 10% of the total import budget. Substitution of these imports through domestic production under the umbrella of a Food Sufficiency Plan could therefore result in substantial foreign exchange savings and a significant improvement in the balance of payments. Furthermore, agricultural production has a relatively low import content per unit of output, implying that the net as well as the gross foreign exchange benefits from substitution would be relatively large. Self-sufficiency in essential foods would go far in easing the current foreign exchange shortage and providing the economy with the foreign resources required for sustained economic growth.

2. The Food Sufficiency Plan would also create thousands of new jobs for Jamaicans, particularly in the rural areas. The agricultural sector is notably labour intensive: in 1983 agricultural employment accounted for a full one-third of the total number of people employed in the economy. The major new thrust in food production that this Plan represents could contribute significantly to the reduction of Jamaica's high rate of unemployment.

3. Through increased domestic production, the Plan would also directly lead to higher Gross Domestic Product (GDP) growth. By replacing foreign production with domestic production of these food items, total value added in the Jamaican economy could expand by several hundred million dollars. Moreover, multiplier effects involving the expenditure of the increased wage income on additional domestic goods will ensure that the positive impact of increased production accrues to many sectors of the economy.

4. The current reliance on imported supplies of essential foodstuffs makes Jamaicans extremely vulnerable to external disruptions. This dependence poses a very real threat to the sustained health of the population. A Food Sufficiency Plan would remove that threat by providing a reliable domestic supply of these necessities. It would also leave the country poised to significantly improve the nutritional intake of the Jamaican people from its own effort, as the targeted food items are rich sources of protein, vitamins, and carbohydrates. In both economic and social contexts, the Food Sufficiency Plan promises to provide an important contribution to the enhanced well-being of the nation.

ECONOMIC BENEFITS

A four-year period has been set for the first phase of the Food Sufficiency Programme with the first year for preparatory work in identifying water, land, farmers, and investment. It is recognised that in particular land and water resources will be inadequate for achieving complete self-sufficiency in the early future. Estimates for achieving partial self-sufficiency in the four-year period ending 1987/88 are presented in the Table below:

TABLE I
ECONOMIC OUTLOOK OF FOOD SUFFICIENCY PLAN IN 1987/88

Crop	* % Self Sufficiency	Output	Gross Foreign Exchange Savings (US\$M)	Net Foreign Exchange Savings (US\$M)	Employment
Meat	98.0	22.7 lbs.	28.2	15.2	3,243
Fish	123.6	55 m. lbs.	55.0	29.2	1,000
Milk	9.0	19.7 m. qts.	6.52	3.52	540
Soyabbeans	45.1	42,720 ctn.	13.91	9.03	2,849
Cassava	31.1	61,700 s. ctn.	9.46	6.15	800
Rice	74.7	41,220 s. ctn.	16.02	9.32	4,580
TOTAL	-	-	129.11	72.42	13,012

* Refers to percentage of estimated import demand satisfied by incremental local production. This definition is employed throughout the paper.

6. The estimated gross foreign exchange benefits represent the savings garnered directly from the reduced level of imported foodstuffs. As such, the savings under a partial self-sufficiency scenario are equivalent to the US\$ value of the replaced import levels of the six foods. The estimate of US\$129 million gross foreign exchange savings illustrates the immense drain on foreign reserves resulting from Jamaica's heavy reliance on foreign supplies of these essential goods. Implicit in these estimates of gross foreign exchange savings are conservative assumptions about the rate of inflation of the US\$ prices of these imported goods. In an inflationary world, the foreign exchange savings from self-sufficiency necessarily grow over time.

7. The net foreign exchange savings resulting from partial self-sufficiency are substantial. The plan has the potential to improve the merchandise balance by US\$80 million. Overall, the Food Sufficiency Plan could increase Jamaica's level of net international reserves by US\$72 million.

8. The relatively high levels of foreign capital investment required to implement a self-sufficiency programme mean that the net foreign exchange savings from such a programme will be significantly less in the Plan's initial years. This foreign capital is an essential input in the development of these import-substitution sectors. The potential foreign exchange savings from a self-sufficiency programme should justify these initial outlays. The negative effects of this initial foreign exchange expenditure on the balance of payments will be mitigated over time by the savings that will accrue.

9. Partial self-sufficiency could be expected to add 13,012 new jobs to the economy. Assuming trend rates of growth in the labour force over the next three years, this increment could reduce Jamaica's unemployment rate by 1.2 percentage points.

10. The employment gains would occur predominantly in rural parts of the country areas badly in need of employment opportunities and economic development. Additionally, the level of sophistication currently planned for these agricultural projects will help impart valuable agronomic skills to the related workforce.

11. Overall, ~~partial~~ self-sufficiency could raise the level of real GDP by as much as J\$77 million in 1974 dollars, or 3%. Approximately J\$8 million of that increment would accrue directly from the additional food production contained in the self-sufficiency plan. The additional J\$19 million would be generated by the multiplier effects alluded to earlier. The multiplier effects are not larger because of the fact that Jamaica is a very open economy, with a sizable import demand function. Hence, a significant fraction of the incremental income resulting from expanded food production is likely to be spent on imports, which will not boost domestic production in other sectors of the economy. The greater import demand engendered by higher national income could attenuate the projected net foreign exchange benefits of the Plan.

12. The replacement of the six products by full local production requires a time-frame which extends beyond 1987/88 with one year dedicated to the mobilization of resources. If 100% substitution was achieved, the benefits to the local economy could be as follows:

Gross Foreign Exchange Saving	...	US\$228.0 million
Net Foreign Exchange Saving	...	US\$130.5 million
Employment	...	25,139
GDP in 1974 prices	...	J\$ 110 million

Based on these estimates, the Plan has the potential of improving Jamaica's Net International Reserves by US\$131 million; the unemployment rate could be reduced by some 2 percentage points; and GDP could be raised by as much as 6%.

13. The factor which makes the self-sufficiency programme viable is the recent devaluation of the Jamaican dollar vis-a-vis the U dollar. Since January 1983, the exchange rate has risen by over 100%. That means that the cost of these imported essential foodstuffs has more than doubled in just over a year. This provides domestic producers with an unprecedented opportunity to compete successfully in local markets. The success of the Plan will necessarily depend on several other factors as well, such as increased productivity, improved technology, and development of Jamaica's economic infrastructure. Nonetheless, it is the dramatic realignment of exchange rates which underpins the decision to currently embark on a Food Sufficiency Plan.

THE PROGRAMME UP TO 1987/88

14. The production profile in respect of the six products for the period up to 1986/87 is outlined below:

TABLE 2

FOOD SUFFICIENCY PLAN OUTPUT PROFILE

Food	Unit	1985/86	1986/87	1987/88
Meat	Million lbs.	6.9	13.9	22.7
Fish	Million lbs.	9.5	32.5	55.0
Milk	Million qrts.	7.1	13.5	19.7
Soyabeans	'000 tons	14.0	23.3	42.7
Cassava	'000 tons	7.5	22.5	60.0
Rice	'000 tons	13.3	29.5	41.2

1. SOYBEANS

15. Soya is an essential ingredient in livestock food providing protein necessary for animal nutrition. In addition, a substantial amount of soy oil is used in the local human diet.

16. The country will import approximately 86,000 metric tons of soya annually at a value of US\$30.87 million in 1987/88. Jamaica can produce soya under certain conditions. But because of competing use of land it is not advisable at this stage to work towards full self-sufficiency. The target is to achieve self-sufficiency in this commodity by 1987/88. This will require approximately 39,500 crop acres of land. It is proposed to utilise land already in certain crops to grow soya on a rotation basis - rice, sugar cane, vegetable and tobacco. Currently, 35,600 crop acres have been identified for soyabean production leaving an unidentified crop acreage of 3,900.

17. Cultivation of this land will generate employment for 2,848 persons by the third year and result in foreign exchange savings amounting to about US\$13.9 million in that year alone.

TABLE 3

SOYA BEAN

Indicators	1985/86	1986/87	1987/88
Cumulative Employment	936	1,552	2,848
Cumulative Crop Acreage	11,700	19,400	35,600
Output (short tons)	14,040	23,280	42,720
Level of Self-Sufficiency	15%	25%	45%
Gross Foreign Exchange Savings (US\$ million) per annum	4.15	7.22	13.91

2. RICE

18. Rice is a staple item in the diet of the Jamaican people and remains one of the most affordable and popular food items. Annual demand for rice in Jamaica is estimated at somewhere in the region of 53,000 metric tons (59,000 short tons). In 1982 local production of rice was approximately 1,650 short tons while imports amounted to 43,126 tons costing US\$29.9 million. Some years ago, Jamaica produced large quantities of rice but this declined significantly while importation of rice particularly from Guyana increased accordingly.

19. Jamaica has the potential to become self-sufficient in the production of rice. With this objective in view, AGRO 21 has identified 22,900 acres of land suitable for rice production. The schedule towards self-sufficiency is as follows:

1985/86	...	7,400 acres
1986/87	...	9,000 acres
1987/88	...	6,500 acres

giving a total of 45,000 crop acres over the three-year period. An average yield of 0.9 short tons per crop acre of milled rice has been assumed based on 1.5 tons of paddy rice per crop acre and 60% conversion of milled rice. If the plan materialises fully, this will result in import substitution of some 13,320 short tons (4% self-sufficiency) in 1985/86; about 29,520 short tons (or 54% self-sufficiency) in 1986/87 and 41,220 short tons or 75% self-sufficiency in 1987/88.

TABLE 4
RICE

Indicators	1985/86	1986/87	1987/88
Cumulative Employment	1,480	3,200	4,580
Cumulative Acreage	7,400	16,000	22,900
Cumulative Crop Acreage	14,800	32,000	45,800
Import Substitution (Short tons milled rice)	13,320	29,520	41,220
Level of Self-Sufficiency	24%	54%	75%
Gross Foreign Exchange Savings (US\$ million per annum)	4.70	10.93	16.02

CASSAVA

20. In several parts of the world, cassava is being used as the energy source in livestock feed. While cassava grows well in Jamaica, it has not played a role in livestock feed production; instead local livestock feed is a composite of imported corn and soya. Corn can be substituted by cassava in animal feeds thus reducing the country's heavy dependence on imports. It is proposed therefore to reduce this dependence by increasing national self-sufficiency in feedstock by expanding the acreage in cassava. To achieve this objective it will be necessary to treat cassava as a serious economic crop by utilizing improved varieties, applying improved technology and agronomic practices including irrigation in order to increase yields to 15 tons per acre. A total of 13,000 acres will need to be put under this crop to produce 198,360 tons which is the estimated requirement for self-sufficiency in this ingredient if cassava were to be used as a one to one substitute for imported feed corn. An initial 4,000 acres are projected for 1987/88, representing 3% self-sufficiency.

21. Incremental phasing of the programme is estimated as follows: 1985/86: 500 acres; 1986/87: 1,000 acres; and 1987/88: 2,500 acres. The main production areas for this development are in the parishes of St. Elizabeth, Clarendon, Manchester, St. Catherine and St. James.

22. The project is expected to generate 800 jobs and effect foreign exchange savings of over US\$9 million in 1987/88.

TABLE 5CASSAVA

Indicators	1985/86	1986/87	1987/88
Cumulative Employment	100	300	800
Cumulative Acreage	500	1,500	4,000
Cassava Production ('000 tons)	7.5	22.5	60.0
Corn Substitution Value (0.973:1 - 000 tons)	7.7	23.1	61.7
Level of Self-Sufficiency	4%	11%	31%
Gross Foreign Exchange Equivalent (US\$'000 million per annum)	1.07	3.38	9.46

FISH

23. The local catch from marine fishing has remained at the low level of about 18 million lbs. annually for many years.

24. The cost of inputs for fishing and fish imports has escalated resulting in high prices for fish catches. Jamaica has limited coastal resources requiring that it fish in extended waters requiring a high fuel expenditure per ton of fish caught. This has created an opportunity for the exploitation of pond fishing which has the potential for significantly increasing the supply of fish for the local market and of providing a surplus for export under known and controllable conditions.

25. In 1983, some 29 million lbs. of fish were imported into Jamaica at a cost of US\$23.8 million. It is proposed to expand pond acreage to 4,000 acres to produce some 60 million lbs. of pond fish by 1987/88. This, together with catches from marine fishing should place the country in a strong position to achieve self-sufficiency and to enter export markets.

TABLE 6

FISH

Indicators	1985/86	1986/87	1987/88
Cumulative Employment	193	693	1,000
Cumulative Pond Acreage	965	2,500	4,000
Cumulative Production (Million lbs.)	9.47	32.50	55.0
% Self Sufficiency	21.3	73.0	123.6
Foreign Exchange Savings (US\$ Million per annum)	9.5	32.5	55.0

DAIRY

26. Consumption of milk in Jamaica is estimated at between 220 and 260 million quarts of fresh milk equivalents - milk, milk solids, butter and cheese. The local level of milk output is in the region of 41.6 million quarts from a milking herd size of 37,000 cows, leaving a gap of between 178 and 218 million quarts which has so far been met from imports. It is proposed to achieve as high a rate of self-sufficiency in local milk production as is feasible within the shortest time frame although total self-sufficiency may be difficult having regard to the constraints imposed by land and water availability, in particular development of a proper breeding programme and the mobilization of the requisite veterinary and other manpower resources, in general.

27. The programme proposes to double milk production to 87.5 million quarts in six years through improved management and breeding practices, attaining thereby 20-25 per cent of self-sufficiency in milk. By year ten, milk production from the near doubling of the herd size to some 72,000 dairy animals is targeted to almost quadruple to 135.5 million quarts or almost 45% self-sufficiency. By 1987/88, local milk production is likely to achieve no more than 9 per cent self-sufficiency however, having regard to the institutional constraints and other technical bottlenecks which the programme aims to clear away through a systematic programme of training and other activities. The foreign exchange savings that are expected to accrue assume that local milk production will be going into higher value dairy products such as cheese and butter.

TABLE 7DAIRY

Indicators	1985/86	1986/87	1987/88
Cumulative Incremental Milking herd size	1,400	2,800	5,400
Cumulative Incremental Employment	140	280	540
Cumulative Incremental Acreage	5,600	11,200	21,600
Cumulative increase in Milk Production (million quarts)	7.1	13.5	19.7
Level of Self-Sufficiency	3.3	6.2	9.0
Gross Foreign Exchange Savings (US\$ million)	2.34	4.52	6.52

MEAT

28. Total demand for meat including processed and unprocessed beef, pork and mutton amounted to approximately 29 thousand tons or 64 million lbs. in 1983. Of this, roughly 25 per cent was imported at a cost of almost US\$18 million. The majority of this was beef imports, as Jamaica is already virtually self-sufficient in pork, and mutton demand is overshadowed by beef demand. It is important to note that of total beef imports, a significant portion consists of beef offals. In 1983 Jamaica produced 94% of her carcass requirements but only 45% of her offal requirements. Therefore, although complete self-sufficiency in beef production is a realistic goal within three years, it will not be possible to be self sufficient in offal production in the foreseeable future. Self sufficiency in pork and mutton appear to be attainable in three years. This would entail increasing mutton production by 1,500 tonnes by 1986/87, and pork production by 572 tonnes in the same year. Beef production will be further expedited by improving the average weight of slaughtered animals and by increasing the beef contribution from dairy production. Expected incremental levels of production, employment, and foreign exchange savings by 1987/88 are as follows:

TABLE 8MEAT

Indicators	1985/86	1986/87	1987/88
Cumulative Incremental Acreage	4,850	8,866	22,750
Cumulative Incremental Employment	987	1,969	3,243
Production (million lb.)			
Mutton	2.07	3.27	4.24
Pork	16.52	16.84	17.27
Beef	34.88	40.30	47.73
Total Production	53.47	60.41	69.24
Incremental Production	6.92	13.86	22.69
Level of self-sufficiency (%)	29.9	59.9	98.0
Gross Foreign Exchange Savings (US\$M)	9.4	17.2	28.2

29. Summing up, for the reasons outlined above, it is logical that the focus of the Agro-21 Programme is broadened to embrace food import substitution on an extensive scale, in respect of the product areas examined. They provide the broadest basis on which to intensify the onslaught on the country's most pressing problem - the foreign exchange gap.

30. The net effects of the programme for the period up to 1987/88 are the projected increases in employment, net foreign exchange earnings and incremental of GDP 13,012, US\$72 million and J\$78 million, respectively.

Edward Seaga
Prime Minister and Minister of
Finance and Planning
24th May, 1984