

Agriculture - General

MINISTRY PAPER No. 14

FARMERS' PRODUCTION
PROGRAMME

1963-1968

AS APPROVED BY THE HOUSE OF REPRESENTATIVES
ON THE 27TH JUNE, 1963

MINISTRY OF AGRICULTURE AND LANDS

- (b) Installations and Equipment:

25% of the cost of installations up to a maximum of £50 per farmer.

In addition, dairy farmers will also be eligible for assistance under the Farm Water Supply and Farm Buildings Schemes (See Annexure IV).

III. Educational Programme

(a) General

The low level of dairy husbandry among the farming population is partly responsible for the high mortality rate among calves, and is one of the major deterrents to rapid expansion of the industry. It is therefore proposed to pay much more attention to the educational aspects of the industry so as to develop a greater awareness among dairy farmers of the need for improving the level of dairy practice and increasing efficiency in operations. With this aim in view steps have recently been taken to create a new Department in the Ministry which will be responsible for the development of the dairy industry. This Department will be headed by a Director of Livestock Development. Livestock research work will continue under the control of a Director—Livestock Research.

(b) Training for Settlement on medium-sized farms

Two Training and Demonstration Dairy Farms will be established, one at Rhymesbury and the other at Goshen as centres of training and demonstration in good dairy management. At these centres young people with an interest in dairy husbandry will receive training with the objective of providing them with the land and the necessary assistance to establish medium-sized dairy farms at the end of their training. These people will be recruited from such sources as the Jamaica School of Agriculture, 4-H Clubs, Rural Technical Schools and the Jamaica Youth Corps for training on these farms. Arrangements will be made for housing and maintaining them during their period of training and it is expected that the Training Farms will turn out annually about 40 young people trained in dairy husbandry.

The Agricultural Development Corporation will operate these farms in close collaboration with and subject to the advice of the technical staff of the Ministry of Agriculture and Lands.

IV. Land Settlements

Suitable properties acquired by Government will be subdivided into medium-sized farms (10–30 acres) for allotment to the trainees referred to above.

V. Increasing the National Stock of Dairy Cattle

With a view to increasing the national stock of dairy cattle in the shortest possible time the Scheme provides for the purchase of heifer calves from approved herds within about a week of birth and for rearing them up to the age of 18–24 months at which stage they will be offered for sale in-calf.

It is proposed to purchase and rear a minimum of 1,000 calves annually. These animals will, in their turn, produce a number of heifer calves which together with calves from herds at existing Government Stations and the training and demonstration dairy farms at Goshen and Rhymesbury will increase the national stock of dairy cattle by an estimated 13,000 animals in the next 10 years.

VI. Holstein Friesian—Investigations and Artificial Insemination

Investigations into the suitability of the Holstein Friesian breed for rearing in Jamaica will be renewed. At the same time, expansion and intensification of the Artificial Insemination Services will be undertaken to ensure that farmers will have a reliable source of supply of semen of bulls of proven quality.

Estimates of Cost of the Scheme

9. An allocation of £803,000 has been made in the Programme for financing the Scheme over the period ending 31st March, 1968, arrived at as under:—

(a) Pasture Improvement	£305,000
(b) Installations and Equipment	25,000
(c) Training and Demonstration Dairy Farms (Establishment and Maintenance)	314,000
(d) Calf Rearing Scheme	159,000
Total	<u>£803,000</u>

10. A provision of £163,000 has been made in the 1963/64 Estimates for implementing the Scheme. The details are set out below:—

(i) Pasture Improvement	£45,000
(ii) Installations and Equipment	5,000
(iii) Training and Demonstration Dairy Farms—Rhymesbury and Goshen:	
Capital	£38,250
Recurrent	46,250
Total	<u>84,500</u>
(iv) Calf Rearing Scheme	23,500
Total	<u>£163,000</u>

ANNEXURE II

HILL FARMING SCHEME

The Hill Farmers of Jamaica perform a most useful service to the country. It is on these farms that most of our home-grown foodstuff is produced and in this respect they make an invaluable contribution to the Island's economy and to our national well-being.

2. There are, however, certain problems inherent in the cultivation of short-term crops on steep hillsides particularly under conditions of high rainfall, which are now making it increasingly difficult for our Hill Farmers to maintain their position. The continued use of these hillside lands for food production, in areas where the slopes are generally so steep that it is difficult and expensive to provide adequate protection against soil erosion for any form of crop culture which involves repeated tillage operations, has resulted in a steady deterioration of soil fertility and a consequent decline in productivity. Moreover, as no mechanical equipment has been developed which is suitable for working on these slopes, all field operations must be performed by hand. Farmers are finding it increasingly difficult to obtain hired labour for such work and many have been obliged to reduce their activities within the limits of their own labour capacity. There is no reason to suppose that this trend will not continue.

3. On purely technical grounds the practice of arable cultivation is not recommended as the best form of land-use for steep hillsides, and in view of the difficulties which are now being encountered by our Hill Farmers, it is essential that a new approach to farm organisation and land-use be encouraged and developed in these areas. There is general agreement that most of our Hill Farms (*i.e.*, farms in which the slope of the land is beyond the range of practicability for mechanical tillage) should be largely devoted to the culture of permanent tree crops including afforestation, or to the production of fodder for livestock. The area devoted to food crop production on such farms should in each case consist of the most easily managed portion of land on the farm, permanently terraced if necessary and cultivated on an intensive basis, with farmyard manure and artificial fertilisers applied as generously as is required for high production. It is expected that the output of food crops from the average Hill Farm organised on such a basis will be at least as much as is produced at present, in spite of the reduction in the total acreage devoted to food crops which will be involved.

4. In order to assist farmers to undertake reorganisation of their farming pattern along these lines, involving as it does considerable capital outlay for the establishment of permanent crops or fodder, terracing of land for food crop production and a period of waiting for the permanent crops to come into full production, an incentive subsidy of £20 will be paid for each acre of land developed along the lines recommended and maintained to the satisfaction of the Extension Officer of the Ministry of Agriculture and Lands.

5. Eligible farmers who wish to participate in this Scheme will be required to prepare and to submit to the Parish Agricultural Development Board through an Extension Officer of the Ministry of Agriculture and Lands a plan of crop establishment and land treatment for a period extending over three years, indicating clearly the acreage to be treated, the crops to be established, and the methods of soil conservation and crop husbandry which will be followed.

6. *This Scheme is applicable only to farmers who do not possess more than 100 acres of land.* Farmers in this category will be eligible for incentive payments amounting to £20 per acre up to a maximum of 10 acres per farmer but this acreage limitation will not apply to farmers in the declared watershed areas.

7. The farmer's performance on his farm will be checked from time to time by the Extension Officer of the Ministry of Agriculture and Lands and as soon as possible after the approved acreage has been established a special inspection will be carried out and the farmer will receive his first reward payment of £10 for each acre of land in respect of which the Extension Officer certifies that it has been planted or treated in conformity with the plan of development approved by the Parish Agricultural Development Board. The farmer will qualify for two subsequent payments of £5 each—a second payment of £5 per acre one year after qualifying for the first payment, and a third and final payment of £5 per acre one year after qualifying for the second payment, for each acre of land in respect of which the Extension Officer is satisfied that he has properly maintained the development for which he was awarded the first payment of £10.

8. In addition, planting material of the recommended tree crops will be provided under the Free Planting Materials Scheme to all farmers with an approved plan of development under this Scheme in sufficient quantity to cover the acreage approved for development under the plan.

9. The Scheme is estimated to cost £495,000 over the period ending 31st March, 1968 and is expected to cover some 30,000 acres.

ANNEXURE III

FARM MECHANISATION SCHEME

This Scheme is designed to provide loan assistance for the purchase of mechanical equipment, and for the operation of farm machinery pools for preparation of farmers' lands in areas where there is need for this service.

2. If Jamaica's agriculture is to survive, if it is to continue to produce for highly competitive world markets and supply the food requirements of a rapidly growing population, it becomes a matter of national urgency that the efficiency of our production methods must be improved. Every effort must be made to increase the output of food and export crops while reducing costs of production.

3. Farmers are finding it increasingly difficult to obtain hired labour for the heavier type of farm work such as land preparation and weed control, and even when labour is available it is mostly unskilled and high priced. It is apparent, therefore, that a greater degree of mechanised cultivation is inevitable.

4. Government made an effort to assist in providing farmers with mechanical equipment when in 1948 it introduced the Farm Implements Scheme. The main objectives of the scheme were to educate farmers in the advantages of mechanised cultivation and to gain information on the type of equipment and other problems involved in providing tillage services through implement contractors. Equipment was delivered to the contractor on a hire-purchase basis and Government was able to exercise control over the type of work the contractor could undertake and also the price he charged farmers for operations.

5. Originally it was proposed that Government should operate a contractor service for the heavier type of operation, such as land clearing, while the lighter cultivation would be done by private contractors under the scheme. Because of the high cost envisaged the Government contractor service was, however, not provided. This decision while effecting a saving to Government, deprived the contractors of essential preliminary work and the assistance which such a partnership would have afforded. The result was that several contractors attempted work for which they were not suitably equipped and consequently their equipment depreciated rapidly. This Scheme was followed by the Hurricane Recovery Programme Farm Machinery Scheme which was implemented after the hurricane of August 1951, and was operated on similar lines.

6. These schemes have made some impact on the problem of mechanisation but it is felt that there is need for more positive action by Government in this field, particularly in view of the necessity to expand food production rapidly while at the same time reducing production costs.

7. The main factors which militate against the more widespread purchase and use of mechanical equipment, under the present commercial arrangements are—

- (i) The high rate of interest imposed by the Finance Corporations for the hire-purchase of the equipment. This rate is 9% non-reducible.
- (ii) The high amount of down-payment required, usually 25% of the cost.
- (iii) The limited time allowed to complete payment of the balance of the purchase price of the equipment, necessitating high instalment payments (average of 24 instalments).
- (iv) The high costs of maintenance of the equipment.

8. Apart from the highly organised and heavily capitalised agricultural enterprises such as sugar estates, existing facilities for mechanical cultivation include:—

- (i) Some sugar estates which hire their equipment to cane farmers with appreciable acreages, and in some instances even undertake work on smaller units. This facility is, however, restricted to cane production.
- (ii) A number of implement contractors who provide a fairly reliable service for farmers requiring the use of mechanical equipment. The contractor provides his own capital for purchase of the equipment although a number of contractors were supplied with equipment under the government-sponsored Farm Implements Scheme. Charges for work done to farmers are on a cash basis.

9. A study of the situation discloses that farmers who require assistance under a Farm Mechanisation Scheme fall into three categories, viz.:—

- (i) Farmers who own large areas of land suitable for mechanical tillage but who through lack of capital are unable to acquire the necessary equipment for their own use.
- (ii) Farmers who own a fair amount of lands which are suitable for mechanical tillage but insufficient to warrant purchase of the equipment.
- (iii) Farmers who own comparatively small parcels of land which are suitable for mechanical cultivation.

10. This Scheme is designed to assist in meeting the demand for the facilities of mechanical tillage and provides:

- (a) loans through the Agricultural Credit Board to farmers as well as contractors for the purchase of tractors and equipment subject to their compliance with the normal credit requirements of the Board;
- (b) for the establishment and maintenance by Government of Farm Machinery Pools to be operated by the Agricultural Development Corporation. They will be located, as a start, in 3 or 4 parishes where there is the demand for this service.

Farmers who are in possession of more than 100 acres of land will not be eligible for benefits under the Farm Machinery Pools.

11. It is proposed that the Scheme will provide services to farmers at substantially lower rates than are at present being charged by private contractors. The intention is to provide the service on the basis of charging rates which would merely defray actual expenditure involved in the operation of the Scheme.

12. A sum of £250,000 has been provided in the Programme for equipment and maintenance of the Pools for the period ending 31st March, 1968.

ANNEXURE IV

I. *Farm Water Supplies Scheme*

There is still a great need for the improvement and establishment of facilities for farm water supplies, and this will become more apparent as a result of the accent which is being placed on the development of the dairy industry.

Assistance will be provided on the basis of a grant of 50% of the cost of establishment up to a maximum of £250 per farmer, for such projects as the building of tanks, entombment of springs and provision of piped supplies.

An allocation of £260,000 has been made in the Programme for this Scheme for the period ending 31st March, 1968.

II. *Farm Building Scheme*

Subsidy aid for farm buildings under previous schemes has contributed significantly to the improvement of the capital assets of farming, and provision is made to continue this form of assistance.

A subsidy of 50% of cost up to a maximum of £100 per farmer is provided.

An allocation of £260,000 has been made in the Programme for this Scheme for the period ending 31st March, 1968.

III. *Fish Farming Scheme*

It is considered that fish farming possesses great potential not only as a supplementary source of income to the farmer, but also as a means of providing high quality protein for the nutrition of the people.

Grant assistance will be provided for the establishment of ponds on the basis of 50% of the cost up to a maximum of £50 per acre and for a maximum of 2 acres per farmer.

An allocation of £20,000 has been made in the Programme for this Scheme for the period ending 31st March, 1968.

IV. *Minor Irrigation Scheme*

The Minor Irrigation Scheme previously in operation, which provided loan and grant assistance to farmers as inducements to undertake deep-well and also gravity schemes of irrigation has been very helpful and will be continued under the new programme on the same basis as before, namely—

<u>Deep-Well Schemes</u>	<u>Basis of Assistance</u>
(a) If fully successful:	No grant.
(b) If partially successful:	Grants of not less than 25% nor more than 75% of the cost as may be approved by the Ministry of Agriculture and Lands.
(c) If total failure:	Grant of 90% of the approved cost.
<u>Gravity Schemes</u>	No grant.

An allocation of £25,000 has been made in the Programme for this Scheme for the period ending 31st March, 1968.

V. *Group Facilities—Capital Aid Scheme*

This Scheme was a new feature of the Agricultural Development Programme 1960, and was designed to assist farmers in obtaining, on a co-operative basis, facilities for bulk buying and storage of farm supplies, collection, grading, packing and storage of farm produce etc. It is expected that this Scheme will prove more attractive and effective with the accent which is being placed on increased food production and in view of the facilities to be provided by the Marketing Corporation.

It is proposed, therefore, to continue the Scheme on the same basis, namely, a subsidy of 50% of the cost of establishment up to a maximum of £500 per project to groups of farmers, provided they are able to satisfy the Ministry of Agriculture and Lands that they are organised as a legal entity for the purpose of ownership and maintenance of the assets acquired.

An allocation of £25,000 has been made in the Programme for this Scheme for the period ending 31st March, 1968.

VI. *Fertiliser Demonstration Scheme*

It is recognised that the proper application of fertilisers is an important factor in good husbandry, and is of particular significance to the degree of intensive agriculture which will be required if the goal of increased production of our food requirements is to be realised. Extensive demonstrations will therefore be undertaken on the same basis as under the previous Agricultural Development Programme, but with particular attention to local food crops.

Supplies of fertiliser and soil conditioners will be made available for use by Agricultural Extension Officers for demonstrating on farmers' holdings the techniques of fertiliser application and its value in maximising production.

The Scheme is basically an educational one and is not intended as a fertiliser subsidy.

An allocation of £42,000 has been made in the Programme for this Scheme for the period ending 31st March 1968.

VII. *Free Planting Material*

Free planting material, other than citrus, avocado and certain varieties of mango plants, will be issued, within the resources of Government, to farmers without limitation of acreage, provided that the Agricultural Extension Officer is satisfied that—

- (i) the farmers are able and competent to maintain and develop the crop in accordance with proper land use practices;
- (ii) the area to be planted is suitable for the particular crop;
- (iii) the land has been adequately prepared to receive the plants.

Citrus and avocado plants and certain special varieties of mango plants (Bombay, St. Julian, East Indian, etc.) will be available to farmers at subsidised prices.

Funds have been provided separately under this Ministry's Capital Head of Estimates for the current financial year for the production of plants and will continue to be so provided.

ANNEXURE V

FARM HOUSING SCHEME

1. *Object*

The object of the Scheme is to provide cheap but well constructed houses for farmers who are in need of houses.

2. *Provision of the Scheme*

The Scheme provides for prefabricated units, comprising the foundation, concrete uprights and roof to be issued to selected farmers. One bay of each unit will be enclosed on three sides with 4" c.c. block walls and the fourth side fitted with a wooden frame with hard board; the floor of this bay will be of local cement tiles laid on sand-fill (see note below). The units will be equipped with verge board and vertical boarding at the gable ends and will be available in two sizes:—

- (i) 2-Bay Unit — measuring 12' 4½" x 16' (each Bay having dimensions of 8' x 12' 4½" approximately).
- (ii) 3-Bay Unit — measuring 12' 4½" x 24' (each Bay having dimensions of 8' x 12' 4½" approximately).

NOTE: The bay may be provided with wooden floor, at the option of applicants, on payment of an additional £16 which represents the additional cost involved in raising the building for construction of wooden floor.

3. *Farmer Contribution and Subsidy*

The farmer will be required to pay in one amount £15 on the 2-Bay and £30 on the 3-Bay Unit, in lieu of the purchase price thereof.

The subsidy element is indicated below:—

	Cost of Construction of Basic Unit	Subsidy	Farmer's Deposit
(i) 2-Bay Unit	£145	£130	£15
(ii) 3-Bay Unit	£165	£135	£30

4. *Eligibility for Participation*

- (a) Allottees must be *bona fide* farmers who live or wish to live on their holdings but who do not have suitable houses or have no houses thereon.
- (b) Allottees must be farmers earning an income not exceeding £300 per year (wife's income included).
- (c) Allottees must be farmers who are making a genuine effort to develop their holdings in accordance with sound farming practices.
- (d) Allottees must be willing and able to complete the building with the technical and other assistance provided by Government.
- (e) Allottees must pay the stipulated deposit in one amount to the Parish Agricultural Officer, as soon as they are notified of the approval of their applications.
- (f) Allottees must furnish proof that the lands on which the houses are to be constructed are owned by them or that they have reasonable security of tenure.

5. *Administrative Arrangements*I. *Selection of Applicants*

- (a) (i) Approval of applications will be a function of the Parish Agricultural Development Boards.
- (ii) Applications should be made to the local Agricultural Extension Officer.
- (iii) The Agricultural Extension Officer will arrange with the appropriate officer of the Jamaica Social Welfare Commission, and with the Lands Officer in the case of Land Settlements, to carry out the necessary investigations in the field.
- (iv) The applications, having been processed, will be submitted by the local Agricultural Extension Officer to the Parish Agricultural Officer for endorsement and presentation to the Board.
- (b) The Land Authorities will be responsible for the selection of applicants in the Improvement Areas.

II: *Obligations of Participants*

Selected farmers will be required to—

- (a) enter into an agreement for the purchase, erection and completion of the houses;
- (b) prepare the site and provide materials sufficient for the completion of the other room in the case of the 2-Bay Unit and of at least one room in the case of the 3-Bay Unit before delivery of the basic unit;
- (c) transport to the building site from the place at which they are unloaded all the materials for the construction of the units, in cases where the building site is inaccessible to the Housing Department's vehicles.

III: *Construction of Houses—Facilities and Aids*

- (a) The Housing Department will produce the prefabricated units.
- (b) As soon as the Parish Agricultural Officer has satisfied himself that the approved applicant has complied with paragraph 5 II, (a) and (b) above he will request the Housing Department to deliver the unit at the farmer's holding. The units will be erected under the supervision of the Technical Officers of the Housing Department and of the appropriate officers of the Jamaica Social Welfare Commission.
- (c) If the allottee so requires the Housing Department will supply him with materials (as may be available) to complete the unit, subject to payment therefor being made in advance.
- (d) The farmer is expected to complete the house with—
 - (i) his own material and labour and with the co-operation and assistance of his neighbours and friends;
 - (ii) all technical assistance which can be provided by the Housing Department; and with
 - (iii) the guidance of the Jamaica Social Welfare Commission and of the other agencies of the Co-ordinated Extension Services.

IV. *Role of the Co-ordinated Extension Services*

- (i) The officers of the Jamaica Social Welfare Commission and of the other agencies will give guidance and assistance to farmers in the completion of housing units allotted to them. This will include the getting of technical assistance and information through the appropriate official and private organisations and persons and where practicable the organising of the farmers to complete their units by co-operative action and self-help.
- (ii) *The Extension Services of the Ministry of Agriculture and Lands* will be concerned with providing technical guidance and assistance in the development of the holdings on which the houses are being constructed.

V. *Loan Facilities*

Allottees will not be eligible for loan assistance from Government funds for completion of the housing units.

An allocation of £360,000 has been made for this Scheme, over the period ending 31st March, 1968, which should provide about 2,400 houses.

ANNEXURE VI

Estimated Expenditure 1963/64 and Projected Expenditure 1964/65-1967/68

Schemes	1963-64	1964-65	1965-66	1966-67	1967-68	Total
	£	£	£	£	£	£
1. Dairy Industry—Development of	163,000	160,000	160,000	160,000	160,000	803,000
2. Hill Farming	40,000	80,000	110,000	130,000	135,000	495,000
3. Farm Mechanisation	75,000	40,000	45,000	45,000	45,000	250,000
4. Farm Water Supplies—Individual Schemes ..	35,000	45,000	60,000	60,000	60,000	260,000
5. Farm Buildings	35,000	45,000	60,000	60,000	60,000	260,000
6. Fish Farming	2,000	3,000	5,000	5,000	5,000	20,000
7. Minor Irrigation	5,000	5,000	5,000	5,000	5,000	25,000
8. Group Facilities—Capital Aid	5,000	5,000	5,000	5,000	5,000	25,000
9. Fertiliser Demonstration	5,000	7,000	10,000	10,000	10,000	42,000
10. Farm Housing	60,000	75,000	75,000	75,000	75,000	360,000
11. Agricultural Development Schemes (Residual) ..	280,000	170,000	..	..	..	450,000
Total Subsidies	£705,000	£635,000	£535,000	£555,000	£560,000	£2,990,000

ADMINISTRATION

Items	1963-64	1964-65	1965-66	1966-67	1967-68	Total
	£	£	£	£	£	£
<i>Personal Emoluments</i>						
1 Accountant Grade I	1,040	1,160	1,160	1,160	1,160	5,680
1 Departmental Assistant Grade I	800	800	800	800	800	4,000
1 Departmental Assistant Grade II	496	496	496	496	496	2,480
2 Clerical Assistants (Typists)	854	878	878	878	878	4,366
Temporary and Relief Staff	270	270	270	270	270	1,350
1 Messenger (Female)	208	196	196	196	196	992
1 Cleaner-Attendant	208	196	196	196	196	992
<i>Outstations</i>						
28 Agricultural Assistants	14,950	14,950	14,950	14,950	14,950	74,750
13 Departmental Assistants Grade I	7,865	7,865	7,865	7,865	7,865	39,325
20 Departmental Assistants Grade II	7,616	7,616	7,616	7,616	7,616	38,080
4 Draftsmen	1,720	1,720	1,720	1,720	1,720	8,600
92 Headmen Class II	26,303	26,303	26,303	26,303	26,303	131,515
Total Personal Emoluments	62,330	62,450	62,450	62,450	62,450	312,130
<i>Other Charges</i>						
Travelling and Subsistence	12,000	15,000	15,000	15,000	15,000	72,000
Rental of Offices	3,500	4,000	4,000	4,000	4,000	19,500
Information, Publicity, Printing and Stationery ..	10,000	15,000	15,000	15,000	15,000	70,000
Office Expenses	1,000	1,000	1,000	1,000	1,000	5,000
Miscellaneous	1,170	1,550	1,550	1,550	1,550	7,370
Total Other Charges	27,670	36,550	36,550	36,550	36,550	173,870
<i>Special Expenditure</i>						
Furniture and Equipment	1,000	1,000	1,000	1,000	1,000	5,000
TOTAL ADMINISTRATION	91,000	100,000	100,000	100,000	100,000	491,000

SUMMARY

	1963-64	1964-65	1965-66	1966-67	1967-68	Total
	£	£	£	£	£	£
Total Subsidies	705,000	635,000	535,000	555,000	560,000	2,990,000
Total Administration	91,000	100,000	100,000	100,000	100,000	491,000
Internal Marketing	200,000	200,000	100,000	..	..	500,000
Total Expenditure	£996,000	£935,000	£735,000	£655,000	£660,000	£3,981,000
Less Appropriations-in-aid	43,000	60,000	110,000	110,000	110,000	433,000
Net Expenditure	£953,000	£875,000	£625,000	£545,000	£550,000	£3,548,000

PROJECTED REQUIREMENTS FOR AGRICULTURAL CREDIT

	1963-64	1964-65	1965-66	1966-67	1967-68	Total
	£	£	£	£	£	£
Recoveries and Interest—Agricultural Credit Revolving Fund	600,000	650,000	700,000	750,000	800,000	3,500,000
New Money	750,000	1,000,000	1,250,000	1,000,000	1,000,000	5,000,000
TOTAL	£1,350,000	£1,650,000	£1,950,000	£1,750,000	£1,800,000	£8,500,000

ANNEXURE VII

AGRICULTURAL DEVELOPMENT PROGRAMME—DECEMBER, 1960 TO 31ST MARCH, 1963

Statement of Expenditure and Commitments

A total expenditure of £632,560 has been incurred on subsidies up to the 31st March, 1963 under the Agricultural Development Programme, involving 20,605 farmers and covering 12,700 acres. The details of these are set out below:—

Subsidies	1.2.61-31.3.62	1962-63	Total
	£	£	£
Farm Buildings	83,987	112,043	196,030
Farm Water Supplies	114,025	129,377	243,402
Fish Farming	181	133	314
Approved Dairy Subsidy	400	290	690
Dairy Calf Subsidy	14,198	12,429	26,627
Land Use Incentive	2,407	101,977	104,384
Group Facilities—Capital Aid	1,000	625	1,625
Fertiliser Demonstration	5	..	5
Food Crops	19,314	8,932	28,246
Farm Development Scheme (Residual)	18,588	12,649	31,237
Total	£254,105	£378,455	£632,560

Outstanding commitments on subsidies were approximately £855,000. The details are as under:—

Farm Buildings	£200,000
Farm Water Supplies	210,000
Dairy Calf Subsidy and Approved Dairy	5,000
Land Use Incentive	413,000
Farm Development Scheme (Residual)	27,000
Total	£855,000

2. It is not possible to indicate to what extent these commitments will have to be met as this will depend on the farmers' performance. A tentative provision of £450,000 has, however, been included in the Programme for this purpose.

3. Loans amounting to £2,330,405 were issued under this Programme from its inception up to the 31st March, 1963, and outstanding commitments at that date were approximately £500,000.

MINISTRY PAPER No. 14
FARM PRODUCTION PROGRAM

CONTENTS

	<u>Page</u>
INTRODUCTION	1
GRANT ASSISTANCE AND OTHER INCENTIVES	2
THE AGRICULTURAL SERVICES:	3
Marketing	3
Credit	4
The Extension Services	4
Research Services	4
Watershed Protection	4
The Agricultural Development Corporation	4
Agricultural Education	4
ADVISORY MACHINERY	5
FINANCIAL IMPLICATIONS	5

	<u>Page</u>
ANNEXURE I	
Dairy Industry Development Scheme	6
ANNEXURE II	
Hill Farming Scheme	8
ANNEXURE III	
Farm Mechanisation Scheme	9
ANNEXURE IV	
I. Farm Water Supplies Scheme	10
II. Farm Buildings Scheme	10
III. Fish Farming Scheme	10
IV. Minor Irrigation Scheme	10
V. Group Facilities—Capital Aid Scheme	10
VI. Fertilizer Demonstration Scheme	10
VII. Free Planting Material	10
ANNEXURE V	
Farm Housing Scheme	11
ANNEXURE VI	
Estimates of Cost	13
ANNEXURE VII	
Agricultural Development Programme—	
December 1960—31st March, 1963	14
Statement of Expenditure and Commitments	14

APPENDIX NO. XVII

MINISTRY PAPER No. 14

FARMERS' PRODUCTION PROGRAMME

Members of this Honourable House will recall that in May of last year the operation of the Agricultural Development Programme was suspended, in so far as new applications were concerned, in order to allow the Ministry of Agriculture and Lands to undertake a re-assessment of the objectives and contents of the Programme. This suspension however did not affect applications which had already been approved and in respect of which Government was committed. Subsequently the House was informed that a new Programme to replace the Agricultural Development Programme would be prepared by April this year.

2. In accordance with this undertaking the proposals set out in this Ministry Paper for implementing a new Programme—the Farmers' Production Programme—are presented for the consideration of the House.

The Programme covers the period ending on the 31st March, 1968, and calls for a total expenditure of over £12½ million. Emphasis is placed on development of the Dairy Industry and provision is made for direct subsidies, marketing facilities, credit for farmers, farm housing and the operation of a Farm Mechanisation Scheme. Details of the projected expenditure are given at Annexure VI.

This figure does not include funds for crop development (coffee, cocoa, citrus plants, etc.), livestock development and miscellaneous development projects for which a provision of nearly £1 million is included in the 1963/64 Budget under the Ministry of Agriculture and Lands Head of Estimates. These development projects will be continued and the necessary funds will be provided separately in the annual estimates as at present.

3. The Agricultural Development Programme was the second of two major development programmes introduced in recent years, aimed primarily at stimulating expansion in agricultural production and improving the standard of living of the farming communities.

The investment in subsidies and loans in these two Programmes up to the 31st March, 1963, is set out below:—

(a) <i>Farm Development Scheme:</i>					
Subsidies	..	..	..	..	£1,155,053
Loans	..	..	..	..	£396,310
(b) <i>Agricultural Development Programme:</i>					
Subsidies	..	..	..	..	£632,560
Loans	..	..	..	..	£2,330,405

In addition the outstanding commitments as at that date on subsidies was £855,000 and on loans approximately £500,000.

A detailed statement setting out expenditure and commitments under the Agricultural Development Programme is attached as Annexure VII.

4. In spite, however, of the considerable investment in terms of loans and subsidies there is no evidence that these programmes have had a significant impact on production or on reducing the widening gap between urban and rural incomes. So far as production for local consumption is concerned, only in the case of beef, pork, poultry and Irish potatoes has there been any noticeable expansion. Production in the dairy industry which has considerable potential in Jamaica in terms of both production and market, has remained static for the last ten years. As far as exports are concerned, except for sugar and citrus, the situation is little better.

5. Although there has been a slight increase in the contribution of agriculture to the Gross Domestic Product in money terms over the years between 1950 and 1961, the proportion of this contribution has declined from 30.8% in 1950 to a mere 13% in 1961. Comparatively, mining and manufacturing contributed 11.3% in 1950 and 22.3% in 1961.

6. Jamaica does not possess the natural resources (of raw materials and cheap power) which can sustain the level of industrialisation necessary to provide employment for the large proportion of our labour force that is now unemployed. It is clear therefore that the major contribution to the solution of our unemployment problem must be made by agriculture. Furthermore, the low ratio of cultivable land to population, (a condition being continuously aggravated by the high rate of population increase), makes it a matter of national urgency to intensify as fully and as quickly as possible development in the agricultural sector of the economy so as to improve the level of income of the rural people and provide for maximum employment in the rural areas and stem the tide of migration from rural to urban areas.

7. Agriculture must also play a major role in improving the nation's Balance of Payments position, a matter of much greater significance than previously to our newly independent nation. The adverse balance of trade in 1961 was about £13.8 million; our imports of food have risen from roughly £9 million in 1955 to some £15 million in 1961. A large percentage of this food can be produced locally and the aim must therefore be to supply, to the fullest extent of our resources, the food requirement of the nation and to intensify production and improve the efficiency of export crops.

8. In view of the foregoing it is evident that there must be a change in emphasis in development policy in keeping with the needs of the country as an independent nation. The Farmers' Production Programme is therefore designed to accelerate the growing of food for local consumption with particular emphasis on the development of the dairy industry. Full attention will also be given to improving efficiency in the production of export crops and to broadening the base of exports.

The objectives of the Programme may therefore be stated thus—

- (a) to secure a rapid increase in agricultural production consistent with the needs of the country as an independent nation;
- (b) To secure the fullest and most efficient use of all the land in Jamaica; and
- (c) to improve the economy of rural areas and raise the standard of living of the rural population.

In order to achieve the above objectives it is proposed:—

- (i) to assist farmers to develop their holdings, within the overall development policy, by the provision of grant and loan assistance associated with intensive extension advice;
- (ii) to establish a Marketing Corporation which will give special attention to the marketing of local food crops and will provide—
 - (a) an assured market for farmers' produce at reasonable prices to the growers; and
 - (b) guaranteed prices for selected crops;
- (iii) to introduce and intensify agricultural education at all levels of the educational system;
- (iv) to institute measures designed to encourage mobilisation of private savings and generation of capital from the private sector for investment in agriculture;
- (v) to institute measures designed to ensure that unused and under-employed lands are brought into full agricultural production;
- (vi) to intensify the research activities of the Ministry of Agriculture and Lands with special emphasis on crops produced for local consumption;
- (vii) to improve the organisation and efficiency of the Extension Services for the effective execution of the Programme.

Emphasis is also given, as a new feature of the Land Use Programme, to the development of a larger number of medium-sized farms and to the provision of facilities for implemental tillage in the drive for increased production of local food crops.

9. Grant Assistance and Other Incentives

The Programme comprises the following Schemes:—

- I. *Dairy Industry Development Scheme*—Expansion of dairying in Jamaica with the aim of increasing production of milk from the present level of some 10 million gallons to 30 million gallons in ten years by means of the following:—
 - (i) provision of capital by way of loans and subsidies;
 - (ii) an intensive education programme to improve the standards of husbandry of dairy farmers;
 - (iii) training of a corps of potential dairy farmers who will be eligible for the allotments at (iv) below;
 - (iv) subdivision of lands in medium-sized farms of 10–30 acres in areas suitable for dairying for allotment to selected farmers;
 - (v) rearing heifer calves up to the age of 18–24 months for distribution in-calf to farmers;
 - (vi) establishment of Training and Demonstration Dairy Farms at Goshen in St. Elizabeth and Rhymesbury in Clarendon for the training of dairy farmers, demonstration of good dairy management, and experiments to test the suitability of Holstein-Freisian cattle to local conditions. (See Annexure I).

Subsidies will also be provided in the Scheme as follows:—

- (a) *Pasture Improvement*—50% of the cost of establishment up to a maximum of £10 per acre and a limit of 25 acres per farmer. Assistance will be restricted to farmers who are engaged in the dairy industry or who propose to engage in that industry.
- (b) *Installations and Equipment*—25% of the cost of installations (e.g., coolers) up to a maximum of £50 per farmer.
- (c) In addition farmers will also be eligible for grants in respect of farm buildings and farm water supplies (See IV and V below).

- II. *Hill Farming Scheme* which provides incentive payments, amounting to £20 per acre in three instalments, for the protection of steep hillsides from erosion and the rehabilitation of eroded lands. This Scheme is applicable only to farmers who do not possess more than 100 acres of land. Farmers in this category will be eligible for subsidy up to a maximum of 10 acres per farmer, but this limitation will not apply to farmers in the declared watershed areas. (See Annexure II).

III. *Farm Mechanisation Scheme* which is designed to:—

- (a) provide loan assistance to farmers as well as implement contractors for the purchase of tractors and ancillary equipment; and
- (b) provide farm machinery pools for preparation of farmers' lands in areas where there is need for these services. The pools will be established in three or four parishes in the first instance and the rates charged will be subsidised.

Farmers who are in possession of more than 100 acres of land will not be eligible for benefits under the Farm Machinery Pools. (See Annexure III).

- IV. *Farm Water Supplies Scheme* which provides grants for the improvement and establishment of facilities for water supplies on individual farms to a limit of 50% of the cost up to a maximum of £250 per farmer. (See Annexure IV)
- V. *Farm Buildings Scheme* which provides grants for the establishment of farm buildings to the extent of 50% of the cost up to a maximum of £100 per farmer. (See Annexure IV).
- VI. *Fish Farming Scheme* which provides a grant of 50% of the cost of constructing ponds for fish farming up to a maximum of £50 per acre and for a maximum of 2 acres per farmer. (See Annexure IV).
- VII. *Minor Irrigation Scheme*—Under this Scheme grants to cover 90% of the actual cost incurred in digging and testing of wells for irrigation will be made to farmers if attempts to establish a well at a site and under conditions approved by the Ministry of Agriculture and Lands prove a total failure. In case of partial failure, grants ranging from 25% to 75%, depending on the particular circumstances, will be available. (See Annexure IV).
- VIII. *Group Facilities—Capital Aid Scheme* which provides grants of 50% of the cost of establishment up to a maximum of £500 per project to groups of farmers for providing facilities on a co-operative basis for bulk buying and storage of farm supplies, for collection, grading, packing, and storage of farm produce, etc. (See Annexure IV).
- IX. *Fertiliser Demonstration Scheme*—Fertiliser demonstrations will be undertaken by the Ministry of Agriculture and Lands with particular attention to local food crops. Supplies of fertiliser and soil conditioners will be made available for use by Agricultural Extension Officers as an extension tool for demonstrating on farmers' holdings the techniques of fertiliser application and its value. The Scheme is basically an educational one and is not intended as a fertiliser subsidy. (See Annexure IV).
- X. *Planting Material*—Free plants such as cocoa, coffee, pimento and miscellaneous tree crops will be issued as in the past to farmers without limitation of acreage. Citrus plants and special varieties of mangoes (Bombay, Julie, etc.) and avocados will be made available at subsidised prices subject to certain conditions being fulfilled. (See Annexure IV).
- XI. *Farm Housing Scheme*—This Scheme was previously administered by the former Ministry of Housing and Social Welfare but has now been transferred to this Ministry, the intention being to integrate the provision of farm houses with agricultural development on the land.

Briefly, the scheme provides for the issue of prefabricated units to *bona fide* farmers who fulfil certain prescribed conditions for entry. The Scheme was recently revised and the financial provisions are indicated below:—

	Cost of Construction of Basic Unit	Subsidy	Farmer's Deposit
(i) 2-Bay Unit	£145	£130	£ 15
(ii) 3-Bay Unit	£165	£135	£ 30

(The details are given at Annexure V.)

- XII. *Previous Agricultural Schemes—Residual*—Government has undertaken to honour outstanding commitments under the previous Agricultural Development Schemes and appropriate provision for this is made in the Programme. Farmers will be eligible to receive further subsidy payments over the next two financial years.

10. *The Land Use Programme*

It is felt that the full development of our agricultural potential can more effectively be achieved by promoting the establishment of a larger number of medium-sized farms, ranging from 10–30 acres, and this is particularly true of the dairy industry. It is therefore proposed, as a new feature of the land use programme, to promote the establishment of more medium-sized farms. This proposal ties in with the plan to train a new corps of dairymen who will be provided with lands under the Land Settlement Programme for dairy farming.

The Land Settlement Programme will, of course, continue to provide lands, for small farmers, among whom there is still a great need.

THE AGRICULTURAL SERVICES

11. *Marketing:* In order to encourage increased production of agricultural products for local consumption and the promotion of new export outlets for vegetables and livestock products it is necessary to develop an efficient marketing system. The House recently approved the establishment of a Statutory Marketing Corporation which will be responsible for providing and maintaining an efficient marketing system for agricultural produce. The Corporation will provide an assured market for farmers' produce at reasonable prices as well as guaranteed prices for selected crops. It is expected that the Corporation will incur losses in the initial years as a result of its guarantees of markets and prices and provision is made for this purpose under this Ministry's Recurrent Head of Estimates for 1963/64.

A provision of £200,000 has also been made in the Programme for financing the capital requirements of the Corporation during 1963/64. (See Annexure VI).

With assurances of outlets for their produce it is expected that farmers will invest a greater proportion of their own resources as well as loan funds provided by Government directly in the production of local food crops on which emphasis is placed in this Programme. A Marketing Intelligence Service will be established in the Economics Division of the Ministry of Agriculture and Lands which will be assigned responsibility for crop forecasting, so as to provide the Marketing Corporation with up-to-date production statistics from time to time.

The necessary legislation for the establishment of the Statutory Marketing Corporation will be introduced into the House at an early date.

12. *Credit*: One of the chief handicaps in the development of agriculture is the absence of a dependable and adequate flow of credit. Government will therefore continue to provide loan capital for farmers within the limits of its resources. Government will, however, have to supplement its own resources if the loan requirements of all farmers are to be met, and every effort is being made to tap other sources of credit for agricultural purposes.

13. In this connection proposals to explore the possibility of generating a greater flow of credit from the private sector into agricultural development are currently being studied.

14. The considerable increase in the volume of credit now administered by the Agricultural Credit Board and the associated lending agencies has emphasised the need to strengthen and re-organise the agricultural credit services. The United States Agency for International Development under its Technical Assistance Programme has already agreed to make available to the Jamaican Government the services of three agricultural credit experts in the field of credit administration, fiscal matters and personnel training.

15. *The Extension Services*

The effective prosecution of any agricultural development programme in Jamaica requires an efficiently organised and well trained Extension Service. This Ministry has been carrying out an examination of the organisation of the Extension Services as well as of the other agencies associated with agricultural development, and has been assisted in this examination by a team of experts made available to the Jamaican Government from the Inter-American Institute of Agricultural Sciences of the Organisation of American States, Turrialba, Costa Rica, under the auspices of the Agency for International Development. Preliminary indications are that certain changes will have to be made in the organisation of these services and proposals in this regard are at present being formulated.

16. *Research Services*

The research programme of this Ministry has in the past been biased towards experiments on export crops. In view of the accent which is placed in this programme on expansion of local food production, it is necessary to shift the emphasis in the research activities to crops for local consumption and an investigation into the organisation and operation of the research services is being undertaken with a view to achieving greater effectiveness consistent with the needs of agricultural development. Proposals for re-organisation of these services are being carefully examined.

17. *Watershed Protection*

The deterioration in the supply of water available from springs, streams, rivers and underground reservoirs which has become evident in recent years has emphasised the need to protect and rehabilitate the Island's watersheds by the control of land use in those areas.

The House of Representatives has recently passed an Act for the establishment of a Watershed Protection Commission which provides for the protection of watersheds to promote the conservation of our water resources. It will be the duty of the Commission to formulate schemes which it considers necessary for the protection of the Island's watersheds. Protection Programmes have already been prepared and approved in respect of the Upper Rio Minho and Cane River areas which will be started this year.

18. *The Agricultural Development Corporation*

The terms of reference of the Agricultural Development Corporation have been recently revised to enable it to make a more positive contribution to agricultural development. The policy of the Corporation now embraces the following activities:—

- (i) Crop Production—
 - (a) demonstration of the economics of large-scale production of particular crops;
 - (b) initial trials under estate conditions of new crops which show promise of commercial development but which require large-scale testing;
 - (c) rapid expansion of production of crops which are in short supply which Government desires as a matter of policy to increase production expeditiously.
- (ii) Facilitating the development of the dairy industry by administering the Training and Demonstration Dairy Farms and the Calf Rearing Scheme;
- (iii) Propagation of planting material to supplement the nursery programmes of Government and private nurserymen;
- (iv) Management of the Farm Machinery Pools being established under the Farm Mechanisation Scheme;
- (v) Subdivision of such of the Corporation's properties as are suitable for allotment in medium-sized farms;
- (vi) Operation of pilot projects in the canning, processing and preservation of locally produced crops, in consultation with the Industrial Development Corporation and having regard to existing canning and processing facilities;
- (vii) Swamp reclamation and rehabilitation of lands;
- (viii) The purchase and milling of farmers' rice paddy;
- (ix) Demonstration of fish farming on a commercial scale.

The Corporation has been working closely with the Steering Committee which has been laying the ground-work for the proposed Agricultural Marketing Corporation. Even now it is engaged in the development of such crops as onions, plantains and corn, with a view to encouraging expansion in the commercial production of these crops.

19. *Agricultural Education*

The low educational level of the majority of farmers is a major factor in the backwardness of Jamaican agriculture as the bulk of farmers lack the capacity to benefit fully from the advice provided by the Government Extension Services. Besides, our educational system has never been sufficiently closely identified with our socio-economic developments. The bias has always been towards a classical type of education modelled on the British system and with no particular relationship to the agricultural nature of our rural economy.

It is clear that any effort aimed at tackling the problems of the farmer before educational progress has enabled him to absorb technical knowledge is bound to fail, and it is necessary therefore to re-design the educational system at all levels to give full recognition to agricultural training.

In this connection active consultation is taking place between this Ministry and the Ministry of Education.

20. Advisory Machinery

The following bodies will function as a part of the machinery for the execution of the Programme:—

- (a) *The Agricultural Planning Committee:* At policy level this Committee will keep under review and advise the Minister of Agriculture and Lands on—
- (i) the planning of agricultural development and land use
 - (ii) the design and structure of Government machinery for execution of agricultural development programmes.
- (b) *The Parish Agricultural Development Boards:* These Boards will, as in the past, have responsibility for approving all applications for grant assistance under the Programme and in addition will advise the Minister of Agriculture and Lands on the needs and problems of development in their respective parishes.

21. Financial Implications

Detailed estimates of the financial requirements of the Programme are set out in Annexure VI. The projected gross expenditure over the period ending 31st March, 1968, is £12,481,000 arrived at as follows:—

Subsidies	..	..	..	..	£2,990,000
Administration	..	..	..	..	£491,000
Internal Marketing	..	..	..	..	£500,000
Agricultural Credit—					
Recoveries and Interest	..	..	..	..	£3,500,000
New Money	..	..	..	..	£5,000,000
					£8,500,000
					£12,481,000

22. The projected expenditure on subsidies of £2,990,000 will be reduced by appropriations-in-aid from the Dairy Industry Development, Farm Mechanisation and Farm Housing Schemes estimated at £433,000, resulting in a net estimated expenditure on the Programme of £12,048,000. This does not include the funds for Crop Development (cocoa, coffee, citrus plants, etc.) and miscellaneous development projects for which separate provisions are made in the 1963/64 Estimates. These projects will be continued and the necessary funds will be provided separately in the annual Estimates as at present. Also provided separately is the anticipated requirement for meeting losses sustained by the Marketing Corporation on its operations.

23. A provision of £2,405,000 has been made in the 1963/64 Capital Head of Estimates of this Ministry for financing the Programme, made up as under:—

Dairy Industry—Development of	..	..	..	..	£163,000
Hill Farming	..	..	..	..	40,000
Farm Mechanisation	..	..	..	..	75,000
Farm Water Supplies	..	..	..	..	35,000
Farm Buildings	..	..	..	..	35,000
Fish Farming	..	..	..	..	2,000
Minor Irrigation	..	..	..	..	5,000
Group Facilities—Capital Aid	..	..	..	..	5,000
Fertiliser Demonstration	..	..	..	..	5,000
Farm Housing	..	..	..	..	60,000
Agricultural Development Schemes—Residual	..	..	..	..	280,000
					Total Subsidies
					£705,000
Administration	..	..	..	..	91,000
Internal Marketing	..	..	..	..	200,000
Agricultural Credit Revolving Fund	..	..	..	..	1,409,000
					£2,405,000

23. A resolution will be moved by the Minister of Agriculture and Lands seeking approval of the proposals outlined in this Ministry Paper.

Ministry of Agriculture and Lands,
22nd May, 1963.

M.P. No. A0700.

ANNEXURE I

DAIRY INDUSTRY DEVELOPMENT SCHEME

INTRODUCTION

It is generally conceded that Jamaica is admirably suited to the rearing of livestock. The main natural disadvantage in relation to agriculture lies in the rugged topography of the bulk of our agricultural lands as a consequence of which there is always a constant danger of erosion. This problem emphasises the importance of cattle rearing in our agriculture since grass cover is recognised as being one of the most efficient means of protecting sloping land against erosion.

2. Over the years, Government has placed considerable importance on the development of the cattle industry in Jamaica, and has provided research services in the fields of Cattle Breeding, Nutrition, Pasture Management, Artificial Insemination and Veterinary Medicine, day to day clinical work on disease prevention and control in the many herds throughout the island and general advisory work amongst farmers. In addition a large number of special projects have been designed for improvement of the dairy industry. These include the sale of male and female stock from the Government herd, establishment of livestock improvement centres where pedigreed bulls are available for service, a subsidised sire scheme, a loan bull scheme, a milk recording scheme and a cattle appraisal and registration scheme.

3. Under the Farm Development Scheme which ran from October, 1955 to September, 1960 subsidies and loans on a generous scale were provided for a number of items of particular interest to the cattle industry. Up to the end of March, 1960, total expenditure on subsidies under the Farm Development Scheme was £1,155,053. Of this expenditure Pasture Improvement accounted for £436,460, Farm Water Supplies £233,339 and Farm Buildings £136,732—a large proportion of this expenditure was related to the beef cattle industry.

The Agricultural Development Programme which was introduced towards the end of 1960 also made generous provisions for assistance by way of grants and loans for farm water supplies, farm buildings, a dairy calf subsidy, and an approved dairy subsidy. The total amount spent on subsidies on these items from the inception of the scheme to the 31st March, 1963, was £466,749.

4. In spite of the considerable investment of capital in the cattle industry, only in the beef sector of the industry has production increased significantly although conditions in Jamaica are ideally suitable for the development of the dairy industry from the point of view of the carrying capacity of our pastures; the high production potential of our cattle; the suitability of the enterprise for small-scale development; and a potential local market of considerable magnitude.

5. The island's total milk production is estimated at somewhere between 8 and 10 million gallons per annum and over the last ten years there has been relatively little change in production. There is an assured outlet at the condensery for about 7½ million gallons of milk annually but deliveries to the plant is of the order of 2½ million gallons per annum only, which the Company has to supplement with imported milk substitutes in order to meet our demand for condensed milk; furthermore the requirements of the fresh milk market in the Corporate Area are far from being met and the island is still importing annually dairy products valued at approximately £2 million.

The Dairy Industry Development Scheme

6. In view of the foregoing it is considered appropriate that assistance to the cattle industry should now be directed principally to the expansion of the dairy industry and the Dairy Industry Development Scheme is accordingly designed to provide assistance on a wide base for rapid expansion of production in this industry—the aim being to increase production from the present level of 10 million gallons of milk per annum to 30 million gallons per annum by 1973.

7. In order to achieve this target it will be necessary to—
- (a) continue the provision of capital by means of loans and subsidies;
 - (b) undertake an intensive educational programme to improve the standards of husbandry of dairy farmers;
 - (c) secure the introduction into the industry of a substantial number of additional cows;
 - (d) train a corps of potential dairy farmers who will be eligible for allotments on the settlements proposed at (e) below;
 - (e) establish new land settlements in areas suitable for dairy production to be subdivided into medium-sized farms: (10–30 acres).

It might be mentioned that the Jamaica Milk Products Ltd. has recently launched a development programme designed to assist a selected number of dairy farmers to improve their herds, pastures and general facilities and hence their output of good quality milk. The programme provides for interest-free loans and other incentives over periods from 12 months to 2 years. It is understood that 65 farms are to be included in the scheme, and that the scheme should cost between £30,000 and £40,000 in interest-free loans and direct financial assistance.

Provisions of the Scheme

8. The Scheme provides assistance as under:—

I. Loans

Loans will be available through the Agricultural Credit Board to assist farmers to purchase high quality dairy animals and for other development purposes.

II. Subsidies

- (a) Pasture Improvement: 50% of the cost of establishment up to a maximum of £10 per acre and a maximum of 25 acres per farmer. Assistance will be restricted to farmers who are engaged in the dairy industry or who propose to engage in that industry.