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MADAGASCAR

NOTE ON THE PROGRAMME OF SURVEYS
of the Statistical & Social and Economic
Research Service, for which the
Assistance of the Fonds d'Aide et de Co-operation
(Aid and Co-operation Fund) is Sought

(Submitted by the Government of Madagascar)

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The surveys proposed by the Statistical and Social and Economic Research Service are mainly basic surveys covering the whole territory of Madagascar which fit into the general statistical development plan for Africa and without which any attempt at rational planning is liable to be fruitless if not dangerous.

Some of the basic surveys in this programme are conducted with the Statistical Service's own resources; others - which are the subject of this note - can only be carried out with funds from abroad.

1. POPULATION SURVEY

1 - 1. Description

In the course of this survey the Statistical and Social and Economic Research Service intends to conduct an exhaustive population census in Madagascar's urban communes. But the survey will not take in the 6 provincial capitals, where censuses were carried out in 1959. It was, in fact, the latter operation that, by showing such wide differences between the census results and traditional administrative estimates, substantially confirmed doubts on the value of earlier data. Moreover, the said administrative estimates do not and cannot give any information on the population's main demographic characteristics (age, family situation, profession, family structure, length of residence etc.) or on the residential unit - without which data no sound demographic study is possible.

An exhaustive population census in the urban centres was therefore found to be necessary, the rural population being studied by different methods (see "survey of villages").

In a first stage the selection made was the 20 urban communes not yet covered by the census, with the addition of the town of Vohémar, which is likely to develop as a port.

1 - 2. Planning of operations

The census will spread over some three weeks in each centre. As the officer-in-charge of all operations will have to travel, the census can be conducted simultaneously only in communes of the same stratum. Hence operations will be staggered over the whole of 1961, mechanical processing being done progressively (for each complete commune) as returns come in.

1 - 3. Facilities needed

The main facility needed will be staff: on average, one enumerator per 3,000 inhabitants, one inspector per commune (two in large centres like Antsirable) to supervise the local census and, at central level, an official of the Statistical Service in charge of the whole operation.

The enumerators and inspectors will be recruited locally for the duration of the census. They will require approximately one week's training from an official of the Statistical Service.

The total staff needed will be 23 inspectors and 84 enumerators.

1 - 4. Cost

The cost of these censuses is estimated at 2.5 million francs CFA, broken down as follows:

	Frs. CFA
23 inspectors at 15,000	350,000
84 enumerators at 10,000	850,000
Miscellaneous forms	250,000

	Frs. CFA
Miscellaneous supplies (ball-point pens, clip-boards etc.)	200,000
Coding	200,000
Punch-hole cards	200,000
Travel	50,000

1 - 5. Financing

The census operations will be financed by the Fonds d'Aide et de Co-opération under FAC Agreement No. 39/C/60/N of 21 October 1960-Project 218/D/60/VI/N/Ia, paragraph (a).

2. FAMILY BUDGETS SURVEY

2 - 1. Description

This survey, which is essential for the preparation of Madagascar's nutrition balance-sheet and assessment of standards of living in the various social categories, will be conducted by separate sampling:

in urban areas, and
in the countryside.

Since in towns the subsistence sector is generally less important than the monetary sector, whereas in the country the reverse is usually the case, two different methods will have to be used.

The survey will be specially designed to produce the data required for the study of:

the compilation of nutrition balance-sheets;
the elasticity-of-demand problem;
problems connected with economic accounting; and
the working out of price indices.

2 - 2. Planning of operations

To be of practical use, the survey must cover a period of 12 months.

As a practical training course in family budgets and consumption surveys is to be held in Togo from 23 July to 24 September 1961, dealing with the methods used in such surveys, it would seem preferable not to begin the Madagascar survey until the last quarter of 1961.

A period of 6 months thereafter is earmarked for the processing and interpretation of returns.

2 - 3. Facilities needed

The main facility needed will be staff: 40 investigators for the urban survey (of 3,000 families in 19 towns) and 25 for the rural survey (of 4,500 families in 600 villages), under the orders of 7 inspectors (1 per stratum). Both investigators and inspectors will be recruited and trained locally.

As on-the-spot supervision of the survey will demand a considerable amount of travel, provision has been made for one runabout vehicle (Jeep) per inspector, which will entail recruitment of chauffeurs for driving and maintenance.

Vehicles will not be provided for investigators, but their expenses for travel between villages surveyed will be refunded. (Investigators will normally change villages every two weeks).

2 - 4. Cost

The cost of the survey is estimated at 17 million francs CFA, broken down as follows:

	FRS. CFA
7 inspectors at 30,000	2,520,000
65 investigators at 10,000	7,800,000
7 vehicles at 700,000	4,900,000
7 chauffeurs at 120,000	840,000
Petrol	200,000
Travel	200,000
Forms and miscellaneous supplies	300,000
Coding	100,000
Punch-hole cards	140,000

2 - 5 Financing

This survey will be financed by the Fonds d'Aide et de Co-opération under FAC Agreement No.39/C/60/N of 21 October 1960 - Project 218/D/60/VI/N/Ia, paragraph (a).

3. AGRICULTURAL SURVEYS

3 - 1. Description

Very little is known of either agricultural holdings or agricultural production in Madagascar, although agriculture plays a predominant role in national income formation. It is therefore of vital importance to obtain a clearer picture of the facts by conducting a sound agricultural survey.

Three types of survey designed to depict several aspects of rural life are contemplated under this heading:

- 3 - 11. Survey of villages, the purpose of which is to study:
- the composition of the rural population;
 - the subdivision of land by use;
 - the breakdown of main crops;
 - livestock;

agricultural and household equipment;
housing, conveniences and sanitation.

- 3 - 12. Survey of holdings, which comes under the World Survey of Agriculture recommended by FAO and the purpose of which is to study:
- the structure of farm holdings;
 - tenure;
 - subdivision of land within the holding;
 - equipment and implements;
 - livestock;
 - areas under cultivation;
 - agricultural manpower.

This survey does not overlap with the preceding one but fits in with it, though problems are viewed from a different angle. It will cover 3,000 holdings and will be conducted: by sampling in the case of small and medium holdings (within the village under the other survey); and by exhaustive census in the case of large holdings.

3 - 13. Survey of yields (production)

This survey is complementary to the foregoing, but is to be conducted separately, as it is technically preferable to carry it out above village (and a fortiori holding) level and, again, if the two surveys can be carried out within the prescribed time-limits, a survey of yields must necessarily cover several consecutive crop-years to bring out the effects of weather conditions.

This survey which has already begun for rice in the Province of Tananarive and in the Morondava - Mahabo region, is to be extended to cover:

the entire territory, and
the main crops.

3 - 2. Planning of operations

3 - 21. The "village" survey will begin in April 1961, the first quarter of the year being devoted to preparations and the recruitment and training of investigators and inspectors. It will cover 1,000 villages, 125 of which have already been surveyed in the Province of Tananarive. It will last about one year and the processing and analysis of the returns will take six months.

2 - 22. The "holding" survey will run concurrently with the above-mentioned survey, sample holdings being selected in the villages studied.

The time taken for the operation and the processing and analysis of returns will be the same as for the "village" survey.

2 - 23. The "yield (production)" survey will also begin in April 1961. It is planned to spread over several consecutive years, returns being processed each year.

3 - 3. Facilities needed

Again the main facilities needed will be staff and vehicles for the many journeys the inspectors will have to make. The staff will be the same for the three surveys contemplated; at central level, Mr. Babillot, who has been recruited on contract by Technical Assistance; and, at each stratum level, an inspector to be recruited locally if possible and, otherwise, with the help of "BDPA".

For the "village" and "holding" surveys 180 investigators will cover the 750 villages still to be surveyed and the 3,000 holdings

to be investigated.

For the "yield (production)" survey 200 investigators will be required to collect the necessary returns for all the strata.

3 - 4. Cost

3-41 & 3-42. - The "village" and "holding" surveys will be conducted by the same staff, comprising 140 investigators divided into teams under 2 - 8 inspectors. The total cost is estimated at 32.5 million francs CFA, broken-down as follows:

	Frs. CFA
1 officer-in-charge at central level	4,800,000
8 inspectors at 50,000	4,800,000
140 investigators at 10,000	16,800,000
8 vehicles at 700,000	5,600,000
8 chauffeurs at 10,000	960,000
Petrol	400,000
Travel	340,000
Aerial photographs	2,400,000
Forms and miscellaneous supplies	600,000
coding	400,000
Punch-hole cards	200,000

3-43. The "yield (production)" survey, although conducted and supervised by the officers in charge of the above-mentioned surveys, must be carried out by investigators who are experts in this technique. The latter will be recruited and trained locally; they will probably number some 200.

The cost of the survey is estimated for the first year at 25 million francs CFA, broken down as follows:

	Frs. CFA
200 investigators at 10,000	24,000,000
Forms and miscellaneous supplies	500,000
Travel	200,000
Coding	150,000
Punch-hole cards	150,000

To the above must be added a further sum of 4.8 million francs for subsequent years, representing the emoluments for one year of the officers recruited for the earlier surveys.

3 - 5. Financing

3-51 & 3-52. - The "village" and "holding" surveys will be financed by FAC under Agreement No.39/C/60/N of 21 October 1960, Project 218/D/60/VI/Ia paragraph (b).

3-53. No proposal has yet been made for the financing of the "yield (production)" survey.

4. ROAD TRAFFIC SURVEYS

4 - 1. Description

The Statistical and Social and Economic Research Service has already conducted a road traffic survey in the Province of Tananarive from the dual angle of utilization of the road network and internal movements of goods. The present proposal concerns the extension of this survey to the other Provinces of Madagascar. It should meet the needs of both the Public Works Department and the Statistical

Service as regards improving the "Transport" account in the national economic accounts.

4 - 2. Planning of operations

This survey is to spread over one whole year. It can begin as soon as the Statistical Service has the necessary funds at its disposal. The processing, interpretation and publication of the returns will take six months more.

4 - 3. Facilities needed

The main facility needed will be field staff, since the agricultural survey inspectors can supervise the traffic survey as they travel around. In view of the fact that a survey has already been conducted in the Province of Tananarive, this one will cover only the five other Provinces.

About 200 checking points are proposed, requiring the services of 50 enumerators.

4 - 4. Cost

The total cost is estimated at 9 million francs CFA, broken down as follows:

	Frs. CFA
50 enumerators at 10,000	6,000,000
200 shelters at 10,000	2,000,000
Forms and miscellaneous supplies	500,000
Coding	200,000
Punch-hole cards	300,000

4 - 5. Financing

The following provision is made in article 5 of FAC Agreement No.39/C/60/N of 21 October 1960:

Project 224/D/60/VI/N/II, paragraph (a) - a credit of 1,320,000 New Francs for road traffic studies.

As there is a special item under this heading providing for a traffic survey on main roads, the 9 million francs CFA budgeted above should be easy to obtain under this credit.

5. PROCESSING OF SURVEY RETURNS

The cost of processing returns, based on that of processing those obtained under the above programme as well as those obtained by the various study companies, can be met out of the normal operating funds of the Statistical Service. However, there will be a double bottleneck: (1) in the coding of questionnaires (this may be overcome by recruiting additional coders, the cost of whom is provided for in the above surveys), and (2) in the actual processing itself, especially in the essential calculations (which can be overcome if the Statistical Service can have another calculating machine).

The most interesting machine is IBM calculator No.609 B1 supplemented by 16 programme stages and 36 memory positions. It would thus comprise: 32 programme stages, 48 input memories, 36 output memories and 36 operating memories, and would handle 12,000 cards per hour.

The cost of hiring the machine would amount to 209,550 Frs. CFA per month, or 2.5 million francs CFA per year.

In the first year there would be an initial additional outlay of 1.2 million francs CFA. Given the great possibilities of this calculator and the substantial services it can render, this expenditure does not seem excessive and is the more justifiable in that the present mechanical processing equipment of the Service cannot cope with all the processing required within the prescribed time-limits.

In view of the existing delivery times (14 months plus 2 months for forwarding), which must absolutely be reduced, FAC will have to take an early decision on the subject.

S u r v e y	Staff required		D u r a t i o n		Cost (in million francs CFA)	Financing
	Supervisory	Field	Operation	Processing & Interpretation		
1. Population	23	84	Mar.-Oct. '61	Dec. '61	2.5	settled
2. Family budgets	7	65	October '61 - September '62	Mar. '63	17	settled
3. Agricultural						
3-1. Villages	8	140	April '61 - March '62	Oct. '62	32.5	settled
3-2. Holdings						
3-3. Yields	p.m.	200	April '61	Oct. '62	25	applied for
4. Road Traffic	p.m.	50	April '61 March '62	Oct. '62	9	transferred
5. Processing						
1st block					3.7	applied for
Later blocks					2.5	applied for