



General Assembly

Distr.
GENERAL

A/36/269
25 September 1981

ORIGINAL: ENGLISH

Thirty sixth session
Agenda item 72 (b)

SPECIAL ECONOMIC AND DISASTER RELIEF ASSISTANCE

Special economic assistance to Benin

Report of the Secretary-General

1. In its resolution 35/88 of 5 December 1980, the General Assembly requested the Secretary-General, inter alia, to take steps to re-evaluate the specific economic problems encountered by Benin and, in consultation with the Government, to establish an international programme of assistance to meet the specific economic and development needs of the country. The Secretary-General was further requested to report on the matter to the Assembly at its thirty-sixth session.
2. In pursuance of the resolution, the Secretary-General arranged for an interagency mission to visit Benin in May 1981 to consult with the Government. The mission's report, which is annexed hereto, provides information on the economic, financial and social situation of the country. It describes Benin's immediate needs for humanitarian assistance, as well as its critical requirements to strengthen its infrastructure and promote its development. The report also provides details of individual projects recommended for international assistance, together with estimated costs.

ANNEX

Report of the mission to Benin

(4-12 May 1981)

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I. INTRODUCTION

1. An interagency mission led by the Under-Secretary-General for Special Political Questions visited Benin from 4 to 12 May 1981. During its stay, it was given an audience by the President. Colonel Mathieu Kerekou, and it had several meetings with the Minister for Foreign Affairs, Planning, Rural Development, Transport and Communications, Public Works, Construction and Housing, State Farms, Livestock and Fisheries, Labour and Social Affairs, Public Health and Education, as well as senior officials in the administration. At the conclusion of the visit, a meeting was held with members of the diplomatic corps accredited to Benin.
2. The mission wishes to place on record its appreciation of the assistance and full co-operation it received from the Government of Benin in providing information necessary for the mission's work. The mission also acknowledges with appreciation the assistance it received from the Resident Representative of the United Nations Development Programme (UNDP) in Cotonou.

II. BACKGROUND

A. Physical characteristics

1. Geography

3. The People's Republic of Benin, covering an area of 112,622 sq. km in the equatorial zone of West Africa, extends about 700 km. from north to south and 125 km from east to west in the southern region and 325 km in the north. The country is bounded on the south by the Atlantic Ocean (the Gulf of Benin), on the west by Togo, on the north by the Upper Volta and the Niger and on the east by Nigeria (see map in the appendix to the present document).

2. Population

4. According to the general census of population and housing carried out in 1979, the inhabitants number 3.3 million, of whom 80 per cent were living in the rural areas. General unemployment and underemployment in the rural areas has led to a growing influx into the urban areas, exacerbating the problem of unemployment and overcrowding. Out of a total working population of 1.5 million, some 61,000 persons are employed in the modern sector; close to one half of these are in the Government's employ.

B. Factors affecting development

Obstacles to development

5. On achieving independence on 1 August 1960, Benin inherited an economy which was by all standards extremely weak and under-developed. It lacked an adequate

economic and social infrastructure from which to launch a programme of development. Furthermore, it did not have the capital resources with which to finance its development. Agricultural production was confined primarily to oil palm, cotton and groundnuts. Until recently, the country suffered from a lack of known mineral resources. The Republic has been classified by the United Nations as one of the least developed among developing countries, as well as one of the countries most affected by the world economic crisis.

6. This difficult situation was compounded by the political instability and regional disunity which marked the first 12 years of independence.

7. Since the present Government took office in 1972, major institutional and administrative changes have taken place in Benin. In a short period of time, the country changed from a market economy with extensive private ownership to a planned economy in which many services and production processes were nationalized. These changes necessitated considerable reorganization and, in some areas, resulted in temporary setbacks in output.

8. Moreover, because of its weak infrastructure, Benin has not been able to draw full advantage from the opportunities afforded by favourable economic developments in the region.

9. In recent years, Benin's difficulties have been exacerbated by external economic factors, principally the rising costs of imported fuel and manufactured goods and the weakening of the country's export markets. These developments have resulted in a sharp deterioration of Benin's terms of trade. a/

10. Climatic conditions have also had a negative impact on Benin's economy. Severe drought in the crop year 1976/1977 adversely affected agricultural production, food consumption and the livestock industry. It has taken well over three years for palm-tree cultivation to recover fully from the effects of this devastating drought. In May 1981, the Governing Council of the United Nations Environment Programme (UNEP) decided to include Benin among the countries eligible to receive assistance through the United Nations Sudano-Sahelian Office in implementing the Plan of Action to Combat Desertification (A/CONF.74/36, chap. I).

11. Benin's modest development plans received a setback in 1977 when the Government was obliged to divert scarce resources to meet security needs following an armed attempt by an external force to overthrow the Government. The details of these incidents, together with an assessment of the economic impact therefrom, are

a/ Terms of trade (1970 = 100)

<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>
98.6	79.3	94.8	92.0	73.6	68.7	78.0	77.3

contained in the report of the Security Council Special Mission to the People's Republic of Benin established under resolution 404 (1977) b/ and the report of the Secretary-General of 29 September 1978 on assistance to Benin. c/

12. A problem which affects all sectors of the economy is the lack of basic statistical data. This constitutes a constraint on the Government's ability to plan effectively for the country's economic and social development.

Measures taken to improve the situation

13. Since assuming office, the Government has taken measures to strengthen Benin's physical and social infrastructure. These include improvements to the country's roads, port facilities, educational system and health services. Indeed, the focus of the projects drawn up by the mission, in consultation with the Government, is on infrastructure.

14. Some diversification of the country's productive base has also been achieved. Although Benin suffers from a general lack of mineral resources exploitation, the Government has plans for the commercial exploitation of limestone and marble and an initial study on petroleum production has been completed.

15. On the institutional side, the Government is aware of the problems that have beset public enterprises and is aiming to improve their performance. In this connexion, the Government will soon embark on a programme to improve the quality of management at the middle and upper levels. A new ministry - Ministry of State and Para-Statal Enterprises - has been set up. Moreover, a public commission, headed by Benin's President, has recently carried out an evaluation of each parastatal organization. The Commission's report is to be studied by the Central Committee.

16. On the administrative side, the Government has been progressively carrying out a programme of decentralization. It has also instituted a modest programme to strengthen the country's statistical services.

17. The Government's objectives, strategy and development policy, as well as a 10-year Plan of Action, are contained in a document entitled "Programme national de développement économique et social pour la décennie 1980-1990". Copies are available from the Government.

b/ Official Records of the Security Council, Thirty-second Year, Special Supplement No. 3 (S/12294/Rev.1).

c/ Ibid., Thirty-third Year, Supplement for July, August and September 1978, document S/12873.

III. ECONOMY AND FINANCES d/

A. Government budget

1. Recurrent budget

18. By adopting a policy of tight control on expenditures, the Government of Benin has attained balance or surplus in the recurrent budget since the early 1970s. The recurrent budget in 1979 amounted CFAF 26.86 billion e/, of which 59 per cent was for salaries, 34 per cent for general administration and 7 per cent for materials. Revenue is derived primarily from import duties and income taxes.

19. The strict application of wage restraint in the public sector over a period of years, in the face of rising price levels, has resulted in a serious decline in the real wages of Benin's public servants, with consequent adverse effects on the administration. In 1980, a general increase in the salaries of civil servants was effected - the first since 1966. The increased payments are not expected to give rise to a budgetary deficit.

2. Investment programme

20. Benin's development programme in recent years has been carried out within the context of a State Plan of Economic and Social Development, 1977-1980. However, since the Plan has not yet been fully implemented, it will continue to be used as the basis for investment in 1981. The planned investment expenditures for 1979-1981 were as follows (in billions of CFAF): 1979, 73.5; 1980, 77.0; 1981, 84.2.

21. The average rate of implementation of the Plan over the period 1977-1980 was about 46.9 per cent. The Government stressed that, since about 80 per cent of the investment budget is financed with external assistance, its ability to implement an investment programme is highly dependent on the adequacy, continuity and predictability of these resources.

22. Another difficulty is the requirement by donors that the recipient Government meet partially or wholly the local costs of assisted projects. The Government indicated that it would be helpful if donors would waive that requirement.

d/ All of the economic and financial data shown in this report were supplied by the Government of Benin.

e/ Benin belongs in the franc zone and the national unit of currency is the Communauté financière africaine franc (CFAF). At the time of the mission's visit, the exchange rate of the CFAF against the United States dollar was CFAF 250 = \$US 1.00

23. A further constraint on development is the lack of financial resources to meet the recurrent costs associated with some projects. It would be of considerable assistance if donors would meet recurrent costs of assisted projects, at least for an initial period, and especially in the case of those projects which will become self-sustaining.

B. Balance of payments

24. The fragility of Benin's economy is reflected in its balance of payments, which is characterized by a very large deficit in merchandise trade. A summary of the external accounts for the years 1976 and 1977 is shown in table 1. Although finalized balance-of-payments figures for more recent years were not available to the mission, the Government's provisional estimates indicate that the over-all account will be in deficit as follows:

	<u>1978</u>	<u>1979</u>	<u>1980</u>
(millions of CFAF)	-1,504	-5,500	-1,800
(in millions of \$US) <u>a/</u>	-6.7	-25.9	-8.5

a/ The conversion rates used are: 1978, CFAF 225 = \$US 1.00; 1979-1980, CFAF 212 = \$US 1.00.

25. Related to Benin's long borders with neighbouring countries is a problem of unrecorded trade. Since unrecorded exports and re-exports constitute a substantial part of Benin's external trade, it is difficult to assess certain trade flows. However, shortfalls in export earnings in recent years opened the way for payments under the STABEX scheme of the European Economic Community amounting to CFAF 1,145 million in 1978, CFAF 955 million in 1979 and CFAF 1,802 million in 1980.

26. Imports of petroleum weigh heavily on the import account: the decline from 163,800 tonnes imported in 1975 to 105,100 tonnes in 1980 was accompanied by a rise in cost from \$19.6 million to \$40.1 million. Should the development of offshore petroleum deposits prove economical, this would eventually be favourable to Benin's balance of payments. However, in the short term, the import of heavy equipment for oil exploitation and the expenses of technical expertise recruited from overseas will have a decidedly negative impact on the balance of payments.

Table 1
Balance of payments, 1976-1977

	<u>1976</u> (millions of CFAF)	<u>1977</u> (millions of CFAF)
Merchandise trade <u>a/</u>	-26 500.0	-32 000.0
A. <u>Balance of goods and services</u>	-24 014.4	-31 013.6
Private transfers <u>b/</u>	4 695.2	6 373.5
Public transfers	6 712.8	14 098.8
B. <u>Total transfers</u>	<u>11 408.0</u>	<u>20 472.3</u>
C. <u>Non-monetary capital</u>	<u>8 144.0</u>	<u>7 148.0</u>
D. <u>Errors and omissions</u>	<u>8 001.9</u>	<u>6 849.3</u>
<u>Balance</u>	<u>3 539.5</u>	<u>3 456.0</u>
Assets and liabilities of financial institutions <u>c/</u>	-2 279	-3 390
Special drawing rights	50	88
Change in reserves (- = increase)	-1 311	-154

Sources: "National Programme of Economic and Social Development 1980-1990"
 and data supplied by the Government.

a/ Imports c.i.f., exports f.o.b.

b/ Includes remittances of migrant workers.

c/ A minus sign (-) denotes an increase in assets or a decrease in liabilities.

C. External debt

27. As at year-end 1979, Benin had contracted foreign loans amounting to CFAF 60,447.2 million (\$285.1 million). Interest payments on these loans will amount to CFAF 13,518.5 million (\$63.8 million). The composition of the debt is shown in table 2.

28. During 1980, Benin's external indebtedness increased appreciably. Part of the increase was attributed to the financing of petroleum exploitation. By the end of 1980, external loans amounting to CFAF 105,328.7 million (\$496.8 million) were outstanding. Interest payments on this amount over coming years will total CFAF 22,476.2 million (\$106.0 million). In addition, service charges and commissions amounting to about CFAF 4,059.7 million (\$19.1 million) were incurred in raising the loans. Thus, Benin's total external indebtedness as at 31 December 1980 amounted to CFAF 131,864.6 million (\$622 million).

Table 2

External debt (millions of CFAF)

<u>As at 31 December 1979</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
State debt	44,686.9	8,662.7	53,349.6
State enterprises	19,716.3	5,636.7	25,353.0
Cancelled debt <u>a/</u>	-3,956.0	-780.9	-4,736.9
TOTAL	60,447.2	13,518.5	73,965.7
<u>As at 31 December 1980</u>	<u>Principal</u>	<u>Interest and other charges</u>	<u>Total</u>
	105,328.7	22,476.2)	131,864.6
		4,059.7 <u>b/</u>)	
TOTAL	105,328.7	26,535.9	131,864.6

a/ Debt cancelled by the Federal Republic of Germany.

b/ Provision for charges and commissions incurred during mobilization of loans.

/...

29. It will be noted that interest payments represent a substantial proportion of the total external indebtedness. The mission was informed that the Government had been obliged to contract some of its long-term loans at interest rates as high as 6 to 7 per cent per annum. To alleviate the debt burden, it would be most helpful if, wherever possible, donors would provide assistance on a grant basis, or at least on very concessional terms.

D. Investment Code

30. The Investment Code which came into law in Benin in 1972 is currently under revision. The Government expects soon to be in a position to provide detailed information on the provisions of the new Code.

IV. SUMMARY OF RECOMMENDED PROGRAMME OF ASSISTANCE

31. In consultation with the Government, the mission identified a number of projects and programmes for which international financing and other types of assistance are sought. The recommended programme of assistance is directed primarily to strengthening the country's physical and social infrastructure and its modest but growing industrial sector. It includes also an urgent programme for health and food assistance.

32. The programme has been classified under two categories. Under Category I, a sum of \$64.2 million is required for urgent infrastructure and development projects, together with a sum of \$20.8 million to meet the cost of health programmes and food aid. Under Category II, assistance amounting to \$64.4 million is required to meet medium- and long-term development needs. A summary of the programme and the financial assistance sought, classified by sector and by category, is provided in table 3 below.

33. Moreover, in view of Benin's weak financial situation, donors are invited: (a) to provide assistance on grant terms, wherever possible, or at least on highly concessional terms; (b) to give sympathetic consideration to helping meet local costs of assisted projects; and (c) to cover, for an initial period, the recurrent costs, especially in the case of projects which will become self-sustaining.

34. The development projects which were brought to the attention of the mission will form part of the total list of projects to be submitted by Benin to the United Nations Conference on the Least Developed Countries to be held in Paris from 1 to 14 September 1981. Details of individual projects in the special assistance programme are provided below.

Table 3

Summary of recommended programme of assistance

	<u>Total</u>	<u>Category I</u>	<u>Category II</u>
		(US dollars)	
I. <u>Development</u>			
A. Rural development	41 326 852	16 346 852	24 980 000
B. Transport	26 210 000	16 210 000	10 000 000
C. Water	30 050 000	11 650 000	18 400 000
D. Industry/construction	5 950 000	2 550 000	3 400 000
E. Human resources	24 990 000	17 400 000	7 590 000
TOTAL	<u>128 526 852</u>	<u>64 156 852</u>	<u>64 370 000</u>
II. <u>Health and food needs</u>			
Health	2 980 000	2 980 000	
Food	17 800 000	17 800 000	
TOTAL	<u>20 780 000</u>	<u>20 780 000</u>	
GRAND TOTAL	<u>149 306 852</u>	<u>84 936 852</u>	<u>64 370 000</u>

Table 3 (continued)

I. Development assistance needs

No.	Project title	Funds requested (US dollars)		
		Total	Category I	Category II
<u>A. Rural development</u>				
A-1	National Seed-Multiplication Plan (Phase I)	2 951 000		
-	National Office; Phase 1		1 364 000	
-	National Seed-Multiplication Centre	1 587 000		
	National Seed-Multiplication Plan (Phase II)	12 254 000		
-	National Office (Phase 2)			760 000
-	Provincial delegations			4 956 000
-	Reinforcement of rural seed-multiplication farms			6 538 000
A-2	Construction of buildings to house agricultural research laboratories	2 457 000	2 457 000	
A-3	Assistance to the food crops research programme	529 000	529 000	
A-4	Parakou veterinary diagnostic laboratory	1 642 000	1 642 000	
A-5	Development and improvement of sheep rearing	1 338 000	1 338 000	
A-6	Improvement of livestock product marketing	320 000	320 000	
A-7	Charcoal production enterprise	1 609 000	1 609 000	
A-8	Permanent monitoring of the forest cover	1 099 800	1 099 800	

Table 3 (continued)

No.	Project title	Funds requested (US dollars)		
		Total	Category I	Category II
A-9	Strengthening of SONIAH and development of Benin's water resources (preliminary phase)	1 367 000	1 367 000	
A-10	Agricultural survey and establishment of a permanent system of agricultural statistics	3 034 052	3 034 052	
A-11	Equipment of agricultural research and technical assistance laboratories	3 021 000		
-	Food technology			1 029 000
-	Zoo technical and veterinary research			1 185 000
-	Rural economies and sociology			807 000
A-12	Okpara Ranch	5 072 000		5 072 000
A-13	Equipment for Niger River Basin fishermen	850 000		850 000
A-14	Assistance to the national plant production service	1 140 000		1 140 000
A-15	Assistance in family economics	2 643 000		2 643 000
	<u>Total</u>	<u>41 326 852</u>	<u>16 346 852</u>	<u>24 980 000</u>
B. <u>Transport</u>				
T-1	Comprehensive transport plan	600 000	600 000	
T-2	New exit road in Cotonou	7 680 000	7 680 000	
T-3	Bridges on the Mono and Sazue rivers	10 000 000		10 000 000

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Table 3 (continued)

No.	Project title	Funds requested (US dollars)		
		Total	Category I	Category II
T-4	Rehabilitation and improvement of 100 km. of railway track between Cotonou and Savé	7 930 000	7 930 000	
	<u>Total</u>	26 210 000	16 210 000	10 000 000
	<u>C. Water</u>			
W-1	Potable water supply for villages	10 000 000	6 000 000	4 000 000
W-2	Urban water development	19 200 000	4 800 000	14 400 000
W-3	Strengthening of the national hydrometric network	850 000	850 000	
	<u>Total</u>	30 050 000	11 650 000	18 400 000
	<u>D. Industry/Construction</u>			
	<u>1. Agro-industries</u>			
I-1	Industrial production of soluble flour from yams	1 600 000	150 000	1 450 000
I-2	Production of gari and tapioca from manioc	1 000 000	400 000	600 000
I-3	Strengthening of COBEMAG	350 000	350 000	
	<u>Subtotal</u>	2 950 000	900 000	2 050 000
	<u>2. Building materials and construction industries</u>			
C-1	Research and development of materials used in construction	950 000	250 000	700 000
C-2	Analysis of the current housing situation and proposals for a construction and housing policy	400 000	400 000	

Table 3 (continued)

No.	Project title	Funds requested (US dollars)		
		Total	Category I	Category II
C-3	Preparation of town plans for six district capitals	650 000		650 000
C-4	Photographic mapping survey of the national territory	1 000 000	1 000 000	
	<u>Subtotal</u>	3 000 000	1 650 000	1 350 000
	<u>Total</u>	5 950 000	2 550 000	3 400 000
E. <u>Human resources development</u>				
1. <u>Education</u>				
E-1	Construction of 200 primary schools	5 200 000	2 600 000	2 600 000
E-2	Secondary school laboratories (30)	1 200 000	1 200 000	
E-3	Secondary school workshops (30)	300 000	300 000	
E-4	Two university student hostels	7 500 000	7 500 000	
E-5	University classrooms (1 unit module)	450 000	450 000	
E-6	University library	600 000	600 000	
E-7	Agricultural polytechnic	840 000		840 000
	<u>Subtotal</u>	16 090 000	12 650 000	3 440 000
2. <u>Planning and training</u>				
P-1	Household budget survey	2 000 000	2 000 000	
P-2	Human resources planning	1 500 000		1 500 000
P-3	Training of management personnel for State enterprises (3 years)	1 500 000	750 000	750 000
	<u>Subtotal</u>	5 000 000	2 750 000	2 250 000

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Table 3 (continued)

No.	Project title	Funds requested (US dollars)		
		Total	Category I	Category II
<u>3. Labour-intensive employment</u>				
L-1	Labour-intensive public works	3 900 000	2 000 000	1 900 000
	TOTAL	24 990 000	17 400 000	7 590 000
	<u>Total development assistance needs</u>	<u>128 526 852</u>	<u>64 156 852</u>	<u>64 370 000</u>
<u>II. Health and food needs</u>				
<u>A. Health</u>				
H-1	Village health units (training of personnel and medicines)	370 000	370 000	
H-2	Anti-malaria campaign (3 years)	435 000	435 000	
H-3	Extension of the vaccination and immunization programme	130 000	130 000	
H-4	Construction and equipment of 60 communal health centres	1 500 000	1 500 000	
H-5	Additional equipment for hospitals	225 000	225 000	
H-6	Training of paramedical personnel and extended facilities	320 000	320 000	
	<u>Subtotal</u>	<u>2 980 000</u>	<u>2 980 000</u>	
<u>B. Food</u>				
F-1	Feeding of hospital patients (3 years)	1 000 000	1 000 000	
F-2	Assistance to nursing mothers and infants (3 years)	4 500 000	4 500 000	
F-3	Feeding of children in schools (school canteens - 3 years)	4 500 000	4 500 000	

Table 3 (continued)

No.	Project title	Funds requested (US dollars)		
		Total	Category I	Category II
F-4	Community development projects (3 years):	2 500 000	2 500 000	
	Development of areas where onchocerciasis has been eradicated			
	Ouémé Valley			
	Mono Valley			
F-5	Budget support:	4 800 000	4 800 000	
	Equipment of co-operatives and building of shops (\$1,400,000)			
	Funds for the development of village social infrastructures (maternity facilities, clinics, schools, etc.) (\$1,400,000)			
	Funds for the purchase of building materials for community development (\$2,000,000)			
F-6	Financing of cost of transporting food supplies for World Food Programme (WFP) projects	500 000	500 000	
	<u>Subtotal</u>	17 800 000	17 800 000	
	<u>Total (health and food)</u>	20 780 000	20 780 000	
	GRAND TOTAL OF RECOMMENDED PROGRAMME	149 306 852	84 936 852	64 370 000

V. DEVELOPMENT ASSISTANCE NEEDS

A. Agriculture, livestock, forestry and fisheries

35. Agriculture, stock raising, forestry and fisheries together account for approximately 45 per cent of Benin's gross domestic product (GDP). Exports of agriculture products - mainly oil seeds, cotton, cocoa and coffee - account for about 70 per cent of Benin's trade exports.

Agriculture

36. The pattern of agricultural production in Benin is related to the three climatic zones into which the territory falls: a humid equatorial climate in the southern coastal region, a classical tropical climate in the central region and a dry Sudano-Sahelian type of climate in the north.

37. The agricultural land in the south is densely populated and the overworked soil is undergoing a process of degradation. The region is suitable for the cultivation of a variety of crops. Export crops include coffee, cocoa, palm oil and coconuts, while food crops include maize, manioc, yams and rice. In the central and northern parts of the country, conditions are suitable for industrial crops - mainly cotton and peanuts - which require a dry season.

38. At present only a small portion of Benin's arable land of about 9 million hectares is under cultivation. However, the yields from the cultivated acreage could be increased appreciably through a radical change in current farming practices. Some extension of the acreage under cultivation would be possible - notably in areas recently cleared of onchocerciasis and in areas where agricultural water projects can be implemented. Furthermore, savannah land in the northern and central parts of the country could be used for stock raising.

39. The lack of adequate statistics makes it difficult to identify a definite pattern in the development of agricultural production in Benin. However, there are indications that production of most cash crops, with the exception of peanuts, is decreasing or at least encountering difficulties. Production of food crops appears to be increasing, but only slightly, and probably not sufficiently to meet the population's growing needs.

Fisheries

40. The potential of both sea and river fishing is considerable. It is estimated that, in 1975, the catch amounted to 8.4 kilos per capita, an amount greater than the per capita production of meat. However, the equipment needed for sea fishing is no longer adequate and the catch has been declining considerably in recent years. Inland fishing has also encountered some difficulties.

Stock raising

41. The number of livestock is estimated to be as follows: cattle, 717,000; sheep, 855,000; goats, 825,000; pigs, 450,000. Over the past 10 years, the annual growth rate for livestock has been more than 4 per cent. Even so, annual production of meat - which is estimated at 12,000 tons - is insufficient to meet the country's needs, which are estimated at 19,000 tons annually. The average per capita consumption of meat appears to have fallen off considerably. Although this may be due in part to the growth in population, an important factor has been the suspension since 1975 of imports of sheep following the 1972-1975 drought in the Sahel.

42. In its policy to develop stock raising, the Government gives priority to the following measures: improved use of pasture lands; eradicating tsetse flies; preserving, improving and developing breeds of cattle which are resistant to trypanosomiasis - there are already such breeds in the country; improved veterinary care; training and instruction of stock breeders; improved marketing methods; and development of new stock-raising or mixed agricultural systems.

Recommended projects

A-1 National seed plan

43. Since the use of selected high-yield seed is of particular importance for the modernization of Benin's agriculture, it is essential that the necessary structures be established at the national and the provincial level.

44. A number of specialized seed firms have already started operating with international assistance. However, additional assistance is required for the establishment of the organization and control structures. The following funding is required:

	<u>(US dollars)</u>
Technical assistance personnel	6,091,940
Training	1,010,730
Equipment and operation	8,102,612
Total	<u>15,205,000</u>

45. The Government plans to proceed with the programme in two phases. As an urgent project to be implemented in the short-term, funding of \$1,364,000 is sought for the National Office (Phase I) and \$1,587,000 for the National Seed-

Multiplication Centre. The remainder of the funds - \$12,254,000 - is sought for implementation in the medium term (Phase II) as follows:

	<u>(US dollars)</u>
National office, phase II	760,000
Provincial delegations	4,956,000
Reinforcement of rural seed- multiplication farms	<u>6,538,000</u>
Total	<u>12,254,000</u>

Short-term projects (A-2 to A-10)

A-2 Construction of buildings to house the agronomical research laboratories

46. The objective is to construct a national agronomical research centre to house four laboratories in the vicinity of the National University of Benin. The areas of specialization will be crop protection, zoo-technical and veterinary-technical, food technology, and rural economics and sociology.

47. The work would be carried out over a two-year period and the estimated cost of construction is \$2,457,000.

A-3 Assistance to the food crops research programme

48. Through this project the Government hopes to increase national agricultural production so as to meet the population's food needs and the demands of the agro-industries. This would be achieved through improving crop varieties and farming techniques and by providing a phyto-sanitary protection. The crops involved are corn, rice, sorghum, peanuts and niévé.

49. The research programme covers a three-year period and funding in the amount of \$529,000 is sought for equipment and operation.

A-4 Parakou diagnostic laboratory

50. The objective of the project is to help increase livestock productivity by improved prevention and control of animal diseases.

51. The Government is planning to establish at Parakou in the Borgou Province (the main stock-raising area) a veterinary diagnostic laboratory. The laboratory would provide diagnosis, identify new centres of contagious diseases, draw up a list of diseases included among the natural fauna, determine the incidence of trypanosomiasis and the extent of tsetse fly infestation and help to train counterpart personnel.

52. The following types of expatriate expertise are required: one veterinary microbiologist; one veterinary parasitologist; one associate expert immunologist and short-term consultants. Three local veterinarians and a number of skilled and unskilled workers will also be needed.

53. The amount of financing sought to maintain the project for three years is \$1,647,500.

A-5 Development and improvement of sheep farming

54. The objective is to increase the production of mutton as an alternative to beef and to make sheep farming - currently a very small-scale and precarious occupation - economically profitable.

55. The measures planned are:

(a) Establishment of two regional sheep-rearing centres appropriately staffed, each having approximately 250 hectares and a breeder flock of 1,500 ewes and 75 rams;

(b) Establishment of a sheep-farming training centre;

(c) Establishment of 50 flocks, each comprising 200 ewes, to be tended by village co-operatives;

(d) Establishment of 150 private flocks, each comprising 70 ewes.

56. Technical assistance is to be provided by a team from the Food and Agriculture Organization of the United Nations (FAO) and an associate expert in sheep farming.

57. The estimated cost of the project over a four-year period is \$1,338,000.

A-6 Improvement in the marketing of livestock products

58. The project aims at improving trading channels and thus promoting the production and profitability of livestock.

59. The Government wishes to undertake the following measures:

(a) Establishment of a mobile shop so as to provide stock breeders with needed produce (veterinary products, food supplements, stock-raising equipment, consumer goods);

(b) Development of cattle and sheep tracks by establishing watering places and pens;

(c) Establishment of a large pen in Parakou.

60. One consultant specializing in the marketing of livestock products is required. Technical assistance will be provided by FAO.

61. The estimated cost of the project over a two-year period is \$320,000.

A-7 Charcoal production enterprise

62. Because of the overexploitation of forests near populated areas in southern Benin, it is becoming necessary to go further afield to obtain supplies of fire wood and its price has risen rapidly. If urban consumption of firewood continues at its present level, it is estimated that, in 15 years' time, there will be a shortfall of more than 1 million cubic metres. In the circumstances, there is an urgent need for a controlled charcoal industry.

63. The Government proposes to establish a project in Lama forest. The goal would be to produce 5,400 tons of charcoal annually. Six types of activity are involved: establishment and maintenance of road infrastructure, forestry exploitation, carbonization, transport and marketing of charcoal, reforestation, and general services.

64. Personnel requirements are: one forestry engineer for five years and one forester for four years at a total estimated cost of \$170,000. Equipment and operating costs are estimated at \$1,439,000 (taking account of the income which is expected to accrue as of the second year).

65. The feasibility of the project has been studied; its financial profitability, excluding technical assistance, is estimated at 13 per cent. Furthermore, the project would create employment for 407 people.

A-8 Permanent monitoring of the forest cover

66. The objective is to lay the basis for a conservation strategy for the nation's forests by means of a programme of ecological monitoring, and improved knowledge of forest ecology.

67. The activities would be carried out within the framework of an interstate programme of work drawn up at the Regional Remote Sensing Centre at Ouagadougou (Upper Volta). It includes a cartographical component based, in part, on digital processing of data obtained by remote sensing and, in part, on field service, as well as a socio-economic component based on surveys of the rural population to determine their attitudes towards the national forests.

68. The estimated costs are:

	<u>(US dollars)</u>
12 man/months of consultancy (spread over three years including travel expenses)	105,000
Equipment	392,000
Operation	<u>602,000</u>
Total	<u>1,099,000</u>

69. Technical assistance presently being provided by FAO is expected to terminate at the end of 1981. A request has been submitted to the United Nations Sudano-Sahelian Office to finance subsequent activities.

A-9 Strengthening of SONIAH and development of Benin's water resources (preliminary phase)

70. The Société Nationale d'Irrigation et d'Aménagement Hydro-agricole (SONIAH) is a State company charged with rural water development which, while responsible to the Ministry of Rural Development and Co-operative Action, is financially autonomous. It has received assistance from UNDP and FAO. Unfortunately, in recent years, the company has encountered a number of financial, administrative and logistical constraints and now requires increased assistance in the areas of organization and management.

71. The Société urgently needs assistance to improve its internal organization and management, and the effectiveness of its technical services, and to draw up a master plan for the development of the Niger valley.

72. The estimated costs are:

	<u>(US dollars)</u>
118 man/months of consultants in economics, management, rural engineering, mechanics	817,000
Equipment, training and operation	300,000
Master plan for the development of the Niger valley	<u>250,000</u>
Total	<u>1,367,000</u>

A-10 Agricultural survey and establishment of a permanent system of agricultural statistics

73. The collection and compiling of agricultural statistics in Benin is still at an elementary stage. The proposed project will have two principal objectives:

(a) The carrying out over a three-year period of a national agricultural census in accordance with FAO guidelines;

(b) The establishment of a permanent system for the collection of current agricultural statistics.

74. Funding of \$3,034,052 is sought for the project. The Government will meet local costs in the amount of \$812,000. A detailed project document has been prepared.

Medium and long-term projects (A-11 to A-15)

A-11 Equipment of agricultural research and technical assistance laboratories

(a) Food technology

75. The objective is to establish a national food technology laboratory which will work on problems of conservation, processing, packaging, etc.

76. The estimated cost of the project is \$1,029,000. This includes the services of a project manager (chemist) and five associate experts, a training component and equipment.

(b) Zoo-technical and veterinary research

77. The Government would like to establish a zoo-technical and veterinary research unit which would support animal husbandry development programmes. The unit would also help to train stock breeders.

78. The specific activities of the unit would include the gathering of basic data; research on possible pasturelands and watering places; detailed study of existing methods of herd management and studies of the potential of local breeds and their resistance to trypanosomiasis in conjunction with the International Livestock Centre for Africa.

79. The following technical assistance is required:

	<u>(US dollars)</u>
Advisers <u>a/</u> 108 man/months	779,136
Consultants 12 man/months	90,900
Evaluation mission	8,200
Equipment and operation	306,764
Total	<u>1,185,000</u>

a/ Principal technical adviser, veterinarian, agricultural and pastoral adviser, three associate experts.

(c) Rural economics and sociology

80. The proposed laboratory would be capable of carrying out studies and surveys on the agronomical, economic and sociological conditions of agricultural farming systems in order to meet rural planning and economic policy needs. The project will cover a three-year period and it is hoped that, by the time of its completion, the laboratory will be entirely managed by nationals. Funding is required for the following:

	<u>(US dollars)</u>
Technical assistance <u>a/</u> 54 man/months	237,000
Associate experts in accounting and sociology	
Equipment and operation	570,000
Total	<u>807,000</u>

a/ Experts in farm management, marketing and possibly rural sociology.

A-12 Okpara ranch

81. The objective is to increase the production of beef and the number of draught animals.

82. The specific operations planned under the project, which is expected to cover a four-year period, comprise the following:

(a) Development of a 37,000-hectare farm by establishing 32 "pasture units" of approximately 1,000 hectares each. Each unit will be divided into four fenced lots which will be used in rotation as natural pasture lands;

(b) Provision of agricultural machinery needed for growing fodder crops;

(c) Establishment of five breeder herds of the Borgou consisting of 250 cows and 25 bulls each;

(d) Raising of 5,500 bullocks annually for use as draught animals.

83. The project will be directed by the Société Nationale pour le Développement des Ressources Animales. Technical assistance is to be provided by FAO. Funding in the amount of \$5,072,000 is sought for this project.

A-13 Equipment for Niger river basin fishermen

84. The Government would like to reverse the sudden decline in fishing which occurred during the 1960s on the Benin portion of the Niger river by providing new impetus to small-scale fishing.

85. This project would provide the following: training and provision of 35 teams of national fishermen; the community exploitation of fish holes; establishment of six pilot centres - Malanville (two), Memey, Dogo, Karimama and Mosey; provision of the centres with canning facilities; organization of a marketing network.

86. Funding in the amount of \$850,000 is sought for equipment and operational costs.

87. It is recommended that the proposed project be preceded by two preliminary studies, namely, an analysis of how fish migration patterns have been disrupted by the building of the Akossombo Dam and an economic study of the project, including the expected increase in the catch and the ways and means by which it is to be marketed.

A-14 Assistance to the national plant protection service

88. The service currently receives support from a UNDP/FAO project which is scheduled to be completed towards the end of 1981. It is planned to extend the

project until the end of 1982 after which it will, in principle, be continued with the assistance of the Federal Republic of Germany. For the interim period, the following assistance is required:

	<u>(US dollars)</u>
Principal technical adviser 36 man/months)	
)	
Plant health specialists 48 man/months)	433,700
)	
Consultants 4 man/months)	
Training	122,100
Equipment and miscellaneous	584,200
Total	<u>1,140,000</u>

A-15 Assistance in family economics (advancement of women)

89. The objective is to promote the development of new structures which will enhance the value of work carried out by the women in the rural economy and to train national personnel capable of providing leadership at all levels.

90. The project would include studies dealing with the sectors in which the role of women is predominant (food crops, raising of small livestock, market gardening, canning, processing, food preparation and marketing of agriculture and fisheries production and the establishment of co-operatives).

91. The following assistance is required:

	<u>(US dollars)</u>
Technical assistance personnel (143 man/months)	786,000
Equipment, operation, training	1,857,000
Total	<u>2,643,000</u>

B. Transport

92. The transport system of Benin comprises 7,266 km of roads, 577 km of railways, a deep-water seaport and an international airport at Cotonou. The focal point of the entire system is the capital of the country, Cotonou.

93. The railroad system of the country consists of three lines: namely, (i) Cotonou-Parakou line, 438 km; (ii) Cotonou-Segboroué line, 34 km; (iii) Cotonou-Pobé line, 107 km. The northern line - Cotonou to Parakou - is part of the "Benin Route" and it is primarily used for transit trade from the Port of Cotonou to Niger. The "Benin Route" trade constitutes the country's second largest economic activity, after agriculture.

94. Cotonou has an airstrip of 2,400 metres, suitable for jet planes, and adequate airport facilities. In 1980, the airport handled 5,605 tonnes of cargo and 104,520 passengers, transit included. Ongoing works will make the airport accessible for large carriers such as the Boeing 747.

95. Considerable emphasis is being laid by the Government on the development of transport infrastructure, and several important projects are in the process of study/execution with external assistance.

96. However, the country lacks a comprehensive and integrated transport plan. The need is especially evident in the road sector, in which a number of projects have been undertaken without comprehensive planning.

T-1 Comprehensive transport planning

97. Benin is in need of an over-all national transport plan covering investment in the various modes of transport, phasing of the programme, the identification of projects, priority rating, constraints, institutional framework and the co-ordination of the various forms of transport so as to maximize the effectiveness of the sector.

98. This project, which is recommended for early implementation, envisages the appointment of consultants to undertake the preparation of a "Comprehensive Transport Plan", including all modes of transport, within a period of about two years. It would also entail acquiring the services of a transport expert to advise, inter alia, on the terms of reference of the study.

99. The cost of the project is expected to be \$US 600,000, excluding the services of a transport expert who could be provided under the United Nations technical assistance programme.

Roads

100. The road system of the country comprises 894 km of bituminous roads, 2,693 km of gravel roads and 3,679 km of partially improved earth roads and tracks. The

transport plying these roads carry about 70 per cent of all freight and 90 per cent of all domestic passenger traffic. However, shortage of equipment, poor maintenance of machinery and insufficiency of funds hamper adequate maintenance of the road system.

T-2 New exit at Cotonou

101. The project envisages the construction of a high-speed road which will cross the city of Cotonou from the second bridge to the west exit. The project consists of two sections of equal length, the first starting from the bridge and following the existing track, and the second, the west exit. An economic feasibility study has been carried out.

102. The estimated cost of the project is CFAF 1,920 million (\$7.68 million). Studies of the project's cost/benefits have indicated considerable savings in the wear and tear of vehicles, replacement costs and travelling time, as well as accelerated traffic flow.

T-3 Bridges on the Mono and Sazue rivers

103. The project envisages the construction of two bridges across the Mono and Sazue rivers at the Cotonou-Togo Highway to replace existing ones, which are not designed to take heavy vehicles. The economic and engineering studies of the two bridges are expected to be completed within a few months.

104. At this time, the estimated cost of the work, including foundation investigation, topographic studies, engineering and construction, is approximately \$10 million.

Railways

105. The Government has under consideration a proposal for the extension of the railline from Parakou to Niamey (Niger).

106. The following project is recommended for international assistance:

T-4 Rehabilitation of the Cotonou-Savé Railway Link (100 km)

107. International assistance is required for the purchase of railway materials for the reconstruction of a part of the existing railway connecting Cotonou with Savé. This project would become part of the ongoing rehabilitation programme of the entire Cotonou-Savé portion of rail track to facilitate the movement of transit traffic to and from the Niger and match the increased handling capacity which will result from ongoing port development.

108. It is expected that the Niger's continued economic growth will generate additional cargo traffic for the north-south line, so as to double its volume to reach about 500,000 tonnes annually by 1991. However, without over-all rehabilitation, the Cotonou-Parakou railroad cannot accomplish its role in Benin's economic strategy.

109. Under the ongoing programme, the Organisation commune Benin-Niger de fer et de transports (OCBN) has already improved a stretch of 162 km from its own resources during the past 12 years and only 100 km remain to be improved between Cotonou and Savé. Technical studies have been carried out and joint financing has been obtained for part of the 262 km track.

110. An amount of \$7.93 million is now required for the purchase of materials. The OCBN would meet the local cost of the construction, which is expected to be completed in 15 to 18 months.

C. Water

111. The situation in the urban and rural areas of Benin with regard to supplies of potable water is far from satisfactory and requires urgent attention.

112. It is estimated that only 42 per cent of the urban population has access to a potable water supply system - 24 per cent being supplied in their homes and 18 per cent getting their water from public stand pipes. Over the next 10 years the Government plans to provide 84 district headquarters towns with supplies of potable water. Studies are already in progress and have been completed for 24 districts. A project to supply potable water to the principal town in each of these districts is included in the recommended programme of assistance.

113. In rural areas, only 16 per cent of the population is adequately served. For the most part, the people living in Benin's 2,800 villages have to search for water, involving travel over long distances. Very often, available water is contaminated, giving rise to parasitic diseases of various kinds. Again, many water points dry up during the dry season, adding to the hardships of the people of the area. In recent years, villagers in drought-affected areas were able to obtain only five litres of water per person per day.

114. It is the Government's objective to provide the rural population with a supply of not less than 25 litres per person per day of potable water by tapping ground-water supplies through wells and boreholes. In the short-term, the aim is to establish in each village a permanent water point which can supply the rural population with at least 10 litres of water per person per day and to increase the amount gradually so as to achieve the desired objectives. This will necessitate the provision of 6,000 additional water points; currently there are only 600. The Government is planning to construct 2,400 water points at an estimated cost of CFAF 12 billion (approximately \$50 million) over the next 10 years under the International Drinking Water Supply and Sanitation Decade. A number of international agencies have already indicated their willingness to finance 793 wells at a cost of \$US 16.52 million. The Government wishes to embark immediately on the construction of additional 400 wells which would enable it to deal with various crises areas.

115. The third water project in the recommended programme is one to reorganize the existing hydrological services in the country and strengthen the hydrometric network.

Recommended projects

W-1 Village water supply programme

116. The objective is to provide 400 drinking wells in Mono, Atlantique, Ouémé and the southern part of Zou province and equip these with pumps.

117. The project also includes the training of technical personnel and the provision of equipment for the Directorate of Hydraulics. The project would be executed under the control and guidance of the Direction de l'Hydraulique, which would also prepare the technical details.

118. A comprehensive system for operation and maintenance has been evolved and the necessary stock of spare parts will be maintained. The programme already in progress under the United Nations Children's Fund (UNICEF) would provide the necessary experience for any modification in approach or techniques for drilling.

119. The cost of the project is estimated at CFAF 2,500 million or approximately \$US 10 million, of which \$6 million is included under Category I and \$4 million under Category II.

W-2 Urban water supply scheme

120. This project entails the supply of drinking water to 24 district headquarters towns, of which 6 are proposed under the short-term programme and 18 under the long-term programme.

121. During the 10-year period up to 1990, the Government plans to provide the 84 district headquarters towns in the Republic with potable drinking water. Studies are already in progress and have been completed for 24 districts. It is expected that necessary details for a further 21 districts will be available in the near future.

122. The estimated cost for the provision of drinking water to 24 district towns would be CFAF 4,800 million (\$19.2 million). The Government wishes to proceed with the projects in six districts at a cost of \$4.8 million. The project covers the central source of supply, storage and distribution system - main as well as supply connexions.

123. The remaining districts will be covered by the longer-term programme (Category II) at a cost of \$14.4 million.

W-3 Strengthening of the national hydrometric network

124. The objective of this project - recommended under Category I - is to reorganize the existing hydrological services in the country and strengthen the hydrometric network. It encompasses data processing, improvement of techniques, and training of engineers and hydrologists at various levels.

125. The project, which would take two years to complete, is estimated to cost CFAF 204 million (\$850,000), as follows:

	<u>(CFAF)</u>
Cost of equipment	77,000,000
Data processing	5,000,000
Expert advisory services and training	67,000,000
Project infrastructure	25,000,000
Functioning cost	<u>30,000,000</u>
Total	<u>204,000,000 or \$850,000</u>

D. Industry and construction

1. Agro-food industries

126. Until recently, industry in Benin was developed mainly on the basis of the exploitation of export crops: the oils and fats industry based on palm, palmetto and ground-nut production, the textile industry based on cotton production, and the beverage and farinaceous products (pasta and noodles) sectors. These industries represent approximately 80 per cent of the national industrial added value. However, projects for the production of tomato concentrate, for maize processing and for a sugar production complex with an annual capacity of 4,000 metric tons are well on their way to completion.

127. Industrial processing has not yet extended to two of Benin's basic food crops - yams (annual production in 1978, 643,000 tonnes) and manioc (721,000 tonnes). Although these crops constitute an important part of the population's food requirements, in their unprocessed state they are vulnerable to climatic conditions, inadequate storage facilities and delivery systems. The following two projects are designed to assure a regular supply of processed products for both urban and rural dwellers, in line with the Government's strategy of achieving food security and raising nutritional levels.

I-1 Industrial production of soluble flour from yams

128. The project is for the construction of a pilot plant for the processing of flour from yams. A technical and economic pre-feasibility study has already been carried out.

129. The execution of a complete feasibility study (market analysis, sales and production testing) among consumers, an agronomic-hydrological and soils study and an engineering pre-study are to be financed from the national budget.

130. Under the proposed scheme, the pilot project would be established in the Zou region, where much of the national production of yams is to be found. Funding is required for the execution of definitive project studies in 1982 at a cost of CFAF 24 million and for the construction of the pilot plant in 1983. The total funding required is \$1.6 million, of which \$150,000 is included under Category I and \$1,450,000 under Category II. The plant would be State-owned and is expected to create jobs for about 50 people.

I-2 Production of gari and tapioca from manioc

131. The project is included in Benin's National Development Plan. A pre-feasibility study concluded that the industrialization of manioc is economically feasible in Benin for two by-products: gari and starch. The project would establish a plant for the production of gari and tapioca which would process 50 tons of fresh manioc roots per day and have an annual production of approximately 28,000 tons. The plant would be established at Zoungoune in the Savalu district of the Zou region. A feasibility study and hydrological and hydrogeological studies have been completed.

132. The financing required amounts to \$1 million, of which \$400,000 is under Category I and \$600,000 is under Category II.

2. Agricultural equipment

133. An agricultural equipment co-operative (COBEMAG) was established at Parakou in 1974 to develop the use of draught animals and livestock production. It brings together in a co-operative 650 craftsmen engaged in the manufacture and repair of agricultural implements for use with draught animals, and farm carts. To date, 9,000 multipurpose implements have been produced. The production unit comprises a central workshop at Parakou and 19 "sector workshops" throughout the country. The current turnover is around CFAF 100 million (\$400,000). In order to respond to current needs, COBEMAG wishes to increase its production potential and to upgrade the qualifications of its staff with respect to manufacturing and management. The following project is therefore recommended:

I-3 Strengthening of Benin Agricultural Equipment Co-operatives (COBEMAG)

134. The objective of the project is to provide technical assistance to COBEMAG at the design stage, to extend the range of items produced and to provide technical training for its staff.

135. Two experts and three United Nations volunteers will be required to study and launch new products, involve local staff in design and manufacture, and upgrade

management and staff training. The project, which is recommended under Category I, involves the following costs:

	<u>(US dollars)</u>
Experts and volunteers	250,000
Training	40,000
Equipment and miscellaneous	60,000
Total	<u>350,000</u>

3. Building materials and building industries sector

136. Until recently, the building materials and building industries sector was represented in Benin by two companies: Société des Ciments du Benin (SCB), which operates a 250,000-ton clinker pulverization unit which came into operation in 1970, and the Céramique Industrielle du Bénin (CIB) producing ceramic sanitaryware.

137. A second pulverization plant - the Société Nationale des Ciments (SONACI) - has recently been set up at Cotonou, with a capacity of 200,000 tonnes. A cement works has been established at Onigbolo under a joint venture of Benin and Nigeria. The projected capacity is 500,000 tonnes per year, 60 per cent of which is intended for the Nigerian market. The project is expected to go into production in late 1982 and will be the largest industrial project in Benin.

138. However, there are multiple requirements in Benin for other building materials and components. These could be met from local resources since the soil of Benin is rich in a large number of mineral deposits (clay, limestone, marble, China clay). The following project is therefore recommended:

C-1 Research and development of materials used in construction

139. The project is for the identification, management and development of natural resources with a view to producing essential building materials to meet the country's needs. This project is a follow-up to an ongoing UNDP-financed project on mineral prospecting which has revealed the existence of numerous clay, limestone, sand and gravel layers in Benin, in particular throughout the coastal basin.

140. The estimated cost of the project is \$950,000, of which \$250,000 is included under Category I and \$700,000 under Category II. The estimated costs are:

	<u>(US dollars)</u>
Prospecting and inventory of deposits by teams of experts	750,000
Purchase of test equipment	<u>200,000</u>
Total	<u>950,000</u>

4. Housing

141. The current housing situation in Benin, both in the towns and the rural area, is extremely disquieting. Existing houses are of mediocre quality and the supply of housing is insufficient to meet the growing demands resulting from the high rate of population growth (about 3 per cent per year) and the rapid growth rate of the urban population (over 5 per cent in the major urban centres). This situation has resulted in overcrowding and congestion. The national authorities have included in the Second National Development Plan a priority programme for 1,000 public housing units for workers. The shortage also extends to schools, hospitals, village health units, and other community institutions. The situation calls for an in-depth study of the entire building sector and of the housing sector in particular.

C-2 Analysis of the current housing situation and proposals for a national construction and housing policy

142. The project envisages an in-depth study of the housing and building situation in Benin in order to establish guidelines for a short, medium and long-term housing and building action plan for the Housing and Building Board.

143. The Government is planning to request the competent United Nations organizations to make available a senior expert to carry out a preliminary study at an early date.

144. The project would be carried out over a period two and a half years and \$400,000 would be required to finance it.

5. Town planning

145. The Government wishes to prevent the uncontrolled growth of settlements around urban areas. To this end, assistance is required to enable the authorities to draw up town plans for a number of the country's principal urban centres. The Government has already taken steps in six provincial capitals. However, it needs assistance to deal with the planning needs of the district capitals. The following project is recommended:

/...

C-3 Preparation of town plans for six district capitals

146. The objective is to prepare and develop a town planning master plan for the following six district capitals: Kandi (Borgou), Djougou (Atakora), Savalou (Zou), Come (Mono), Allada (Atlantique) and Pobe (Ouémé). This will involve:

- (a) Aerial photographic coverage of all the areas concerned; f/
- (b) Establishment of topographical data on the basis of aerial photography;
- (c) Preparation of estimates of the future space requirements of the population, broken down by district, and the carrying out of multipurpose surveys among the population and among technical bodies providing amenities;
- (d) Establishment of master plans.

The estimated cost of the project is \$650,000.

6. Photographic coverage of Benin

147. The lack of adequate topographical maps in Benin is a serious handicap to the implementation of many development projects. Available records are based on aerial photography carried out in 1949 on a scale of 1/200,000, which is too small for planning purposes.

148. This project will considerably strengthen the action potential of the National Cartographic Institute of the Ministry of Public Works, whose work forms an essential back-up service for the various authorities engaged in providing amenities for the population.

C-4 Nation-wide photographic coverage

149. The project objectives are as follows:

- (a) Nation-wide photographic coverage on an appropriate scale;
- (b) Preparation of cartographic documentation on the basis of the photographic survey for such purposes as rural water development, agro-pedological projects, town planning and the preparation of a transport master plan.

150. The aerial photographic coverage would be entrusted to a firm of specialists and the estimated cost of the project is \$1 million.

f/ The cost of this component is not included under this project but is part of the following project.

E. Human resources development

1. Education

151. In 1975, the Government of Benin initiated a programme of educational reform in which the main long-term objectives were described as:

(a) Democratization of education through mandatory school attendance for children aged 5 and over and the provision of free education;

(b) Participation by schools in economic and social development through school co-operatives and production units;

(c) Development of national values through the strengthening of folk culture and instruction in reading and writing in the national languages.

152. Since then, a National Institute for Research and Training in Education has been established and a teacher-training college set up in each province. The upgrading of teachers has been accelerated and teaching assignments introduced for graduates and students of secondary schools. However, much more remains to be done, particularly in strengthening the country's educational infrastructure. The following projects are designed to achieve this aim.

Primary schools

E-1 Construction of 200 primary schools

153. It is estimated that the percentage of children of primary school age who actually attend school will have increased from 41.5 per cent in 1975 to 61.3 per cent in 1983. This will create pressures on Benin's weak educational infrastructure.

154. The Government therefore seeks assistance to begin the immediate construction of 200 primary schools of three to five classrooms each with the usual facilities and furnishings. The building programme would be carried out over a three-year period.

155. The cost of the project is estimated at CFAF 1,300 million or \$5.2 million. One-half of this amount, or \$2.6 million, would enable the Government to make a start on the programme.

Secondary-school level

156. The following two projects are recommended for funding under Category I:

E-2 Construction and equipping of 30 laboratories for secondary schools

157. Since the teaching of the sciences calls for adequately equipped laboratories, the Government aims at the eventual construction and equipping of 145 laboratories

throughout the country. Initially, funding is sought for 30 laboratories at a cost of CFAF 10 million (\$40,000) each. Thus, total funding required is CFAF 300 million or \$1.2 million.

E-3 Construction and equipping of 30 secondary school workshops

158. The educational authorities plan to link all levels of education with practical life and the social environment, as well as to develop the practical skills of children and establish the school as a production unit. The plan envisages the eventual establishment of 120 workshops at the secondary school level throughout the country. In the first phase, the Government wishes to set up 30 workshops with international assistance. The cost of the project is as follows:

Construction of 30 workshops	CFAF 45 million (\$180,000)
Equipment for 30 workshops	<u>CFAF 30 million (\$120,000)</u>
Total	CFAF 75 million (\$300,000)

Expansion of University facilities

159. As a result of changes introduced in 1979 which required that school graduates complete a year of national service before entry into the University, the number of students seeking entrance to the University of Benin increased dramatically - from 3,000 in 1979 to 5,000 in 1981. The present teaching and residential facilities at the University are insufficient for the sharply increased number of students. International assistance is required for the following three projects:

E-4 Construction and equipping of two University student hostels

160. The hostels would be located at the University campus of Abomey-Calavi. Residential accommodation at the University is grossly inadequate for the present student body, and the situation will become worse if the number of students grows at the expected rate of 10 per cent for the year. The Government therefore seeks assistance for the immediate construction of two 150-room hostels, with related facilities, at a combined cost of CFAF 1,500 million (\$7.5 million).

E-5 University classrooms (one unit module)

161. The Government seeks assistance for the construction and equipping of a six-classroom unit at the University at the cost of CFAF 113 million or \$450,000.

E-6 Extension of the University library

162. The Government wishes to extend the University library. It would be designed in a manner which would allow further extensions to be made to it as the number of students increased. The estimated cost of construction, furnishings and equipment is \$600,000.

Agricultural polytechnic

E-7 Construction and equipping of an agricultural polytechnical college at Mono

163. An agricultural polytechnical college is urgently required for the province of Mono - a pilot province in the country's agricultural programme. The province is an important producer of palm oil, cotton and rice, is a major stock-rearing area and is the centre of newly-established industries, including oil mills and mineral waters. The school would be established at Lokassa. the estimated costs of the project are:

Construction	CFAF 160 million (\$640,000)
Machines and equipment	<u>CFAF 50 million (\$200,000)</u>
Total	<u>CFAF 210 million (\$840,000)</u>

2. Planning and training

P-1 Household budget survey

164. The Government has already carried out economic and demographic surveys designed to provide up-to-date data vital for social and economic planning. It would like to follow these up now with a survey of household expenditures and consumption. With a proposed sampling ratio of 1/200, the sample survey would cover about 3,000 households. The map-sampling work and preliminary results of the General Population and Housing Census will provide a good basis for selecting samples.

165. The proposed survey would be carried out by the National Institute of Statistics and Economic Analysis. Processing also will be carried out at the Institute, where computer services are available. Expert assistance of 24 man/months will be required to assist the national organizers.

166. The amount of funding sought is CFAF 500 million (\$2 million) under Category I, as follows:

	<u>(Millions of CFAF)</u>	<u>(Millions of US dollars)</u>
Field work	300	1.2
Processing, analysis, publication	<u>200</u>	<u>0.8</u>
Total		<u>2.0</u>

P-2 Human resources planning

167. The objectives are: to improve and develop statistical information and to fill in gaps in existing statistics relating to human resources; to assist the

/...

Ministries concerned in the collection of statistical data and ensure the continuity of the procedures; to propose to the Government appropriate measures for its formulation of a policy designed to make best use of human resources; to initiate and implement socio-demographic and socio-economic studies and, based on their results, carry out analysis; to ensure the training of national cadres; to ensure the preparation of an annual statistical publication on human resources and to ensure its continued publication.

168. The project will be carried out in the period 1983-1986. The estimated costs are:

	<u>(US dollars)</u>
Personnel	1,043,000
Training	139,000
Equipment	160,000
Miscellaneous	<u>158,000</u>
Total	<u>1,500,000</u>

P-3 Training of management personnel for State enterprises (3 years)

169. There is an acute need for trained staff to manage Benin's State enterprises and improve their productive performance. Until such time as the National Economics Institute, established in 1980, produces personnel with management training, the Government would like to carry out a programme of intensive retraining of staff already on the job, using the facilities of the Centre for Administrative Training and Further Training (CEFAP).

170. It is planned to train four staff members from each of 58 State enterprises or offices. The costs involved per year of training would be as follows:

		<u>(Millions of CFAF)</u>	
Planners:			
Training in Benin	58 x CFAF 240,000 =	13.920	
Training abroad	58 x CFAF 760,000 =	44.000	
Executives	174 x CFAF 360,000 =	<u>62.640</u>	
Total cost per year		<u>120.560</u>	(\$482,000)

171. An amount of \$1.5 million is needed to finance the programme for 3 years. One half of this total, i.e. \$750,000, is included under Category I and a further \$750,000 under Category II.

3. Labour-intensive employment

L-1 Labour-intensive public works

172. As part of a special programme, the Government of Benin intends to carry out a number of labour-intensive projects in road building, construction, well and reservoir building, and reforestation. It is planned to create about 1,600 jobs a year for a three-year period.

173. The amount of funding required for the three-year programme is \$3,960,000, of which 60 per cent is for manpower. An amount of \$2 million is included under Category I for immediate initiation of the project. The remaining \$1.9 million is included under Category II.

VI. HEALTH AND FOOD NEEDS

A. Health

174. The health situation in Benin is far from satisfactory. Infectious and parasitic diseases are rife throughout the country. Life expectancy is estimated at 37 to 40 years for men and 40 to 45 years for women. The infant mortality rate is 110 per thousand. Among children up to 14 years of age, malaria is the leading cause of illness. The recommended programme of assistance includes an anti-malaria campaign and the extension of the vaccination and immunization programme. Malnutrition is responsible for numerous infant deaths.

175. To meet the needs of about 3.5 million people, there are 12 hospitals and 47 health centres throughout the country, but these are mostly in a state of poor repair and inadequately equipped. In addition, there are 247 health posts (dispensaries) which provide very limited medical treatment. The Government is more concerned about the situation and requests urgent international assistance to remedy it.

176. The ratio of medical personnel to the population is exceedingly low. In 1979, Benin had one doctor per 20,000 inhabitants, one dental surgeon per 200,000 inhabitants, one nurse for 3,000 inhabitants and one midwife per 3,000 women between the ages of 15 and 49 years of age. The recommended programme includes a project for the training of paramedical personnel.

177. The following six projects are recommended for urgent implementation in the short term:

H-1 Training of personnel and medicines for village health units

178. In 1975 the Government launched a programme to establish 3,400 village health centres throughout the country, run in collaboration with the local authorities. Each village health centre carries a stock of basic essential medicines -

novaguine, aspirin, alcohol, etc., and a standard UNICEF kit for child delivery. Until now, UNICEF has assisted in the training of personnel and the supply of equipment for units already installed.

179. To continue the programme, the Government is seeking assistance to train 4,000 personnel for 1,000 villages at a cost of \$185,000. In addition, medicines and equipment, including 1,000 UNICEF midwifery kits and 1,000 first-aid kits, are needed at a cost of \$185,000. Total funding required is \$370,000.

H-2 Anti-malaria campaign

180. Malaria is rife through the country and is foremost among transmittable diseases. The Government seeks assistance to carry out an anti-malaria programme in rural and urban areas which includes measures of prevention, treatment and, in the urban areas, mosquito control.

181. The first stage of the programme aims at assuring systematic treatment of all suspected cases and the systematic supply of anti-malaria drugs for 1,750,000 children up to the age of 14 years and 700,000 women of child-bearing age. The cost of a three-year programme is \$435,000.

H-3 Extension of the vaccination and immunization programme

182. Infectious diseases, including chicken-pox, poliomyelitis, whooping cough, diphtheria, tuberculosis, cerebro-spinal meningitis and tetanus, are the leading causes of sickness and infant mortality.

183. The Government would like to carry out an intensive programme of vaccination and immunization throughout the country which would extend to 706,000 children aged 4 and under and to 700,000 women of child-bearing age. The programme will require additional logistical means - transport and refrigeration facilities - and vaccines and small equipment, such as syringes and needles. The amount of funding sought is \$130,000.

H-4 Construction and equipment of 60 community health centres

184. The long-term objective of the Government is to provide each of the country's 510 communes or parishes with basic health facilities. With assistance from the United Nations Capital Development Fund, the Government is presently establishing 82 communal health centres. Funding in the amount of \$1.5 million is sought for the construction and equipping of a further 60 health centres.

H-5 Additional equipment for hospitals

185. With the exception of the hospital located in the capital, most of the hospitals in the public sector are in poor condition and ill-equipped.

186. The Government has drawn up a list of its priorities in this area and would like first to supply hospitals at Parakou, Matitingou, Guidate and Abomey with the

following equipment: 4 generators of 75 kw.; 1,000 minor surgery kits; 4 freezers; 20 stretchers; 20 refrigerators; 12 ventilators; 60 blood pressure cuffs; 200 petrol lamps; 3 dental cabinets; 200 sterilizers (boiling-type). Other arrangements are being made for the repair of the hospital buildings. The estimated cost of the equipment is \$225,000.

H-6 Training of paramedical personnel and extended facilities

187. Under a nursing programme supported by UNICEF and the European Development Fund, scholarships, which include food and lodging, are provided to Benin nationals to study at local training schools. In view of the grave shortage of nurses throughout the country, international assistance is recommended to increase the number of available scholarships and expand training facilities. Eighty scholarships covering a three-year period are sought, of which 20 are for senior level nurses and 60 for assistant nurses and midwives. The estimated funding required is as follows:

	<u>(US dollars)</u>
80 scholarships for three-year programme	220,000
Construction of additional classrooms and equipment	<u>100,000</u>
Total	<u>320,000</u>

B. Food

188. Within the framework of rural development, the Government's food policy aims at (a) satisfying the needs of vulnerable groups (b) helping schools to play a greater part in the rural development programme, and (c) providing support to activities related to economic and social development through food-for-work community programmes.

189. Benin does not have the financial or economic resources to carry out fully these vital programmes, and international assistance in kind is needed to support them. Moreover, food assistance is required to meet shortfalls in Benin's food production and to reduce expenditure on food imports.

190. Another type of food assistance required by Benin is for the replacement of certain essential commodities presently imported commercially, such as wheat, rice, sugar and milk products, to help reduce the trade deficit and the drain of the country's scarce resources.

191. The following six projects are recommended for urgent implementation:

F-1 In-patient hospital feeding

192. The Government requests the resumption of the World Food Programme (WFP) hospital feeding programme which was interrupted in 1980. The Government pointed out that, owing to lack of funds, hospitals were unable to provide in-patients with the necessary food for their sustenance. This had caused considerable hardship, particularly to low-income patients. Based on the average number of days of hospitalization each year - 338,500 - it is estimated that food to the value of \$1 million is needed for a three-year period.

F-2 Nursing mothers and infants

193. Food assistance to the value of \$4.5 million is required over a three-year period to counter malnutrition and to supply protein-rich supplements for maternity clinics and maternal and child health centres, as well as for pre-school children. These needs are in addition to those submitted by the Government to WFP under project Benin 2096.

F-3 School feeding

194. School canteens have been operating for some time in Benin. The creation of school guidance curricula, adapted to rural life, has led to the operation of canteens run by and serving the needs of students.

195. The World Food Programme is contributing to this scheme under a project covering about 35,000 beneficiaries. The Government has submitted a request to WFP to expand the programme in the period 1982-1985 to 56,000 people. The Government now wishes to extend the programme to a further 26,000 beneficiaries in the three-year period starting 1982. Food to the value of \$4.5 million is required.

F-4 Community development

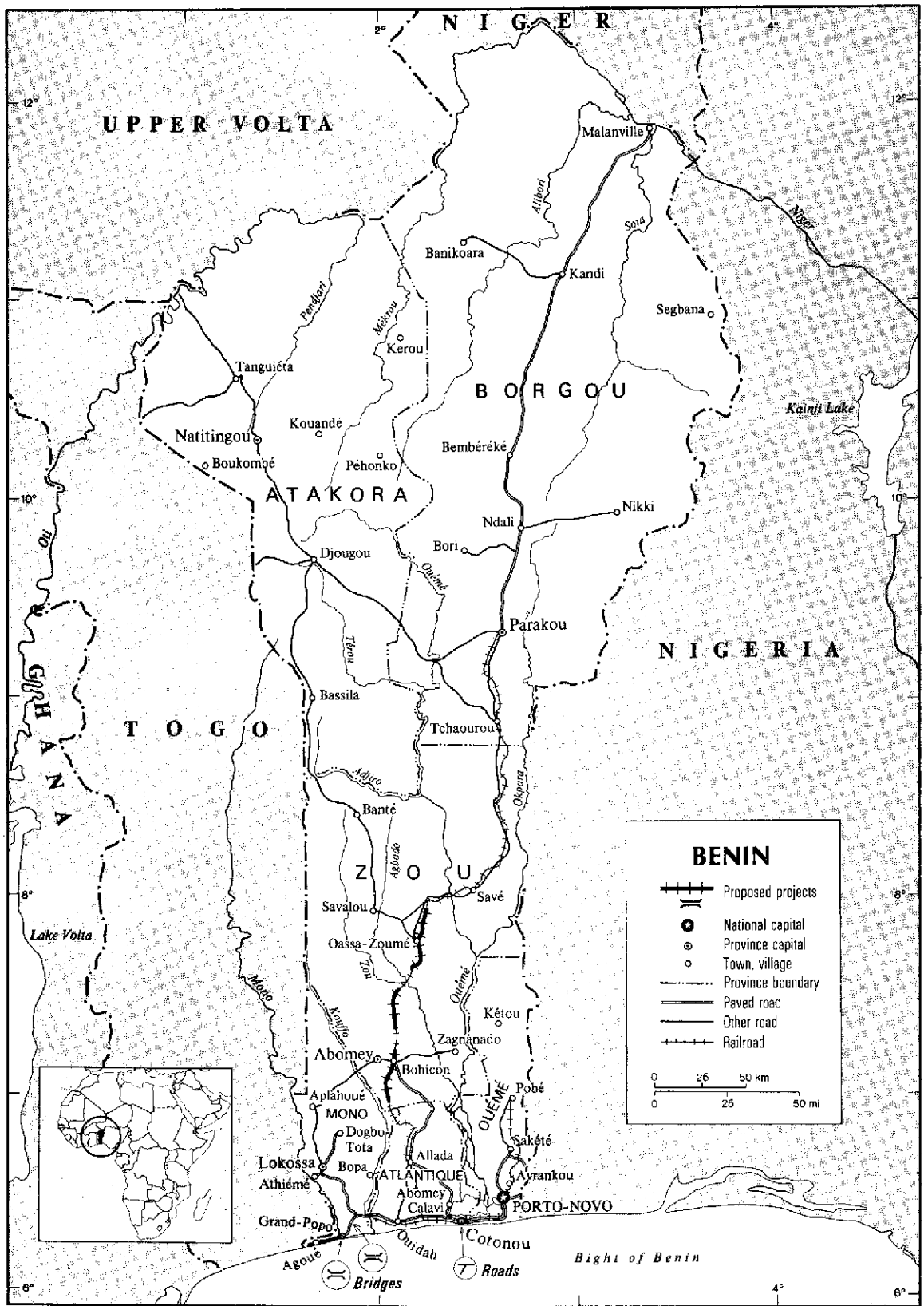
196. Food assistance is needed for food-for-work projects in labour-intensive construction of infrastructures for rural development. Three areas have been identified by the Government as priorities for such activities. These are: (a) the development of areas where onchocerciasis has been eradicated, (b) the Ouémé Valley, and (c) the Mono Valley. Food to the value of \$2.5 million is required for a three-year programme.

F-5 Budget support

197. Benin's imports of maize, rice and wheat in 1980 amounted to \$16 million, sugar imports amounted to \$3.5 million, and imports of milk products amounted to \$1.8 million. In view of the very large deficit in Benin's external trade, food assistance is requested as a contribution towards reducing the deficit. The Government would like to use the proceeds from the sale of the food for the equipping of co-operatives, the development of village social infrastructures - clinics, schools, etc. - the creation of food storage facilities, and the purchase of building materials for community development. Food assistance to the value of \$4.8 million is sought.

F-6 Logistical support

198. To ensure the distribution and effective delivery of food assistance throughout the country, additional assistance will be required to meet the costs of vehicles, spare parts and fuel. It is estimated that \$500,000 will be required.



MAP NO. 3148 UNITED NATIONS
JULY 1981