



IFAD
INTERNATIONAL FUND FOR AGRICULTURAL DEVELOPMENT
Executive Board – Sixty-Ninth Session
Rome, 3-4 May 2000

REPORT AND RECOMMENDATION OF THE PRESIDENT

TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO THE

REPUBLIC OF BENIN

FOR THE

ROOTS AND TUBERS DEVELOPMENT PROGRAMME



TABLE OF CONTENTS

| | |
|--|------------|
| CURRENCY EQUIVALENTS | III |
| WEIGHTS AND MEASURES | III |
| ABBREVIATIONS AND ACRONYMS | III |
| MAP OF THE PROGRAMME AREA | IV |
| LOAN SUMMARY | V |
| PROGRAMME BRIEF | VI |
| PART I THE ECONOMY, SECTORAL CONTEXT AND IFAD STRATEGY | 1 |
| A. The Economy | 1 |
| B. The Sectoral Context | 2 |
| C. Programme-Related Institutions | 2 |
| D. Lessons Learned from Previous IFAD Experience in Benin | 3 |
| E. IFAD's Strategy for Collaboration with Benin | 4 |
| PART II THE PROGRAMME | 5 |
| A. Programme Area and Target Group | 5 |
| B. Objectives and Scope | 6 |
| C. Components | 6 |
| D. Costs and Financing | 8 |
| E. Procurement, Disbursement, Accounts and Audit | 9 |
| F. Organization and Management | 10 |
| G. Economic Justification | 10 |
| H. Risks | 11 |
| I. Gender Impact | 11 |
| J. Environmental Impact | 12 |
| K. Innovative Features | 12 |
| PART III LEGAL INSTRUMENTS AND AUTHORITY | 12 |
| PART IV RECOMMENDATION | 12 |
| ANNEX | |
| SUMMARY OF IMPORTANT SUPPLEMENTARY ASSURANCES INCLUDED IN THE NEGOTIATED LOAN AGREEMENT | 13 |



APPENDIXES

| | | |
|-------------|---|-----------|
| I. | COUNTRY DATA | 1 |
| II. | PREVIOUS IFAD LOANS TO BENIN | 2 |
| III. | LOGICAL FRAMEWORK | 3 |
| IV. | FLOW OF FUNDS | 6 |
| V. | CÔUTS ET FINANCEMENT (COSTS AND FINANCING) | 7 |
| VI. | ORGANIZATION AND MANAGEMENT | 9 |
| VII. | ECONOMIC AND FINANCIAL ANALYSIS | 14 |



CURRENCY EQUIVALENTS

| | | |
|---------------|---|-----------------|
| Currency Unit | = | CFA Franc (XOF) |
| USD 1.00 | = | XOF 673.330 |
| XOF 1.00 | = | USD 0.001472 |

WEIGHTS AND MEASURES

| | | |
|----------------------------------|---|--------------------------------------|
| 1 kilogram (kg) | = | 2.204 pounds (lb) |
| 1 000 kg | = | 1 metric tonne (t) |
| 1 kilometre (km) | = | 0.62 miles (mi) |
| 1 metre (m) | = | 1.09 yards (yd) |
| 1 square metre (m ²) | = | 10.76 square feet (ft ²) |
| 1 acre (ac) | = | 0.405 ha |
| 1 hectare (ha) | = | 2.47 acres |

ABBREVIATIONS AND ACRONYMS

| | |
|---------|--|
| AWP/B | Annual Programme of Work and Budget |
| BOAD | West African Development Bank |
| CARDER | Centre d'action régional pour le développement rural (Regional Action Centre for Rural Development) |
| DANIDA | Danish International Development Assistance |
| FECECAM | Fédération des caisses d'épargne et de crédit agricole mutuel |
| FSA | Financial Services Association |
| IITA | International Institute of Tropical Agriculture |
| INRAB | Institut national des recherches agricoles du Bénin (National Institute for Agricultural Research) |
| M&E | Monitoring and Evaluation |
| MDR | Ministry of Rural Development |
| MIS | Management Information System |
| MTBDP | Medium-Term Benin Development Plan |
| NGO | Non-Governmental Organization |
| OPA | Organisation professionnelle pour l'agriculture (Professional Agriculture Organization) |
| PAGER | Income-Generating Activities Project |
| PDRT | Roots and Tubers Development Programme |
| PIMM | Programme Implementation and Management Manual |
| PMU | Programme Management Unit |
| PROMIC | Microfinance and Marketing Project |
| R&D | Research and Development |
| R&T | Roots and Tubers |
| UNDP | United Nations Development Programme |

GOVERNMENT OF THE REPUBLIC OF BENIN

Fiscal Year

1 January - 31 December



MAP OF THE PROGRAMME AREA



BENIN



Source: IFAD

The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.



REPUBLIC OF BENIN
ROOTS AND TUBERS DEVELOPMENT PROGRAMME
LOAN SUMMARY

| | |
|---------------------------------------|---|
| INITIATING INSTITUTION: | IFAD |
| BORROWER: | Republic of Benin |
| EXECUTING AGENCY: | Ministry of Rural Development |
| TOTAL PROGRAMME COST: | USD 19.28 million |
| AMOUNT OF IFAD LOAN: | SDR 9.75 million (equivalent to approximately USD 13.11 million) |
| TERMS OF IFAD LOAN: | 40 years, including a grace period of ten years, with a service charge of three fourths of one per cent (0.75%) per annum |
| COFINANCIER: | West African Development Bank (BOAD) |
| AMOUNT OF COFINANCING: | USD 3.90 million |
| TERMS OF COFINANCING: | 17 years, including a grace period of five years, with an interest rate of 3.8% per annum |
| CONTRIBUTION OF BORROWER: | USD 2.20 million |
| CONTRIBUTION OF BENEFICIARIES: | USD 0.07 million |
| APPRAISING INSTITUTION: | IFAD |
| COOPERATING INSTITUTION: | BOAD |



PROGRAMME BRIEF

Who are the beneficiaries? The United Nations Development Programme (UNDP)/Human Development Reports for 1997 and 1998 indicate that 57% of the population of Benin (6.1 million in 1999) are poor or vulnerable to poverty, and that 67% live in rural areas. The incidence and depth of poverty are highest in an area where cotton farming is heavily reliant on landless migrant labour, and in several areas with serious soil fertility problems due to high population densities (290 inhabitants/km²). Roots and tubers (R&T), especially cassava and yam, which account for two thirds of all food produced annually, are very important to the food security and cash earnings of farmers who cannot grow cotton; and they are becoming increasingly important even to cotton growers as world cotton prices fall. Well over 85% of the processing of these crops is done at the village level by women, for whom it is a major source of income. The programme area, covering the four agro-ecological zones most suitable for R&T, also contains 73% of Benin's poor, most of them small farmers and processors. The primary beneficiaries of the programme will be the estimated 200 000 people who rely on small-scale farming, processing and trading for their livelihoods, with women dominating the R&T processing and trading.

Why are they poor? Rural poverty is multidimensional, arising out of people's inability to make the most out of their natural and human resources due to lack of access to markets, microfinance, improved technology, basic infrastructure such as roads and health, education and information. Such constraints are often compounded by weak capacity to cope with a rapidly changing reality that is increasingly influenced by external factors. At two participatory formulation workshops, farmers and processors agreed that access to market was their immediate constraint, but that improved technology and access to microfinance were also essential if they were to be able to respond to market opportunities and, thereby, raise their incomes.

What will the programme do for them? With a view to enhancing the competitiveness of Beninese R&T products from Benin on both national and export markets and ensure that IFAD's target group is not bypassed by the ongoing effort of the Government and partners to diversify export earnings, the programme will facilitate access of resource-poor farmers to proven, environmentally sound technologies thus allowing them to reduce their costs and produce more with less land and labour. For processors/traders, product output, quality and range will be improved through access to small equipment and related training. The latter's ability to respond to markets will be enhanced through training in the use of market/price information and promotion of marketing associations with village-level stores. The programme will also empower local communities and beneficiary groups to define their own needs and participate in programme implementation to ensure that investments are sustainable and lead to direct benefits at the grass-roots level. In addition, the IFAD-financed Income-Generating Activities Project (PAGER) and Microfinance and Marketing Project (PROMIC) will complement the programme by improving the market values of R&T and providing access to microfinance.

How will the beneficiaries participate in the programme? Beneficiary participation started during formulation and appraisal, with two participatory formulation workshops covering all six departments of the country. The design envisages a fully participatory, client-led approach, integrated within the community as a whole, with implementers acting as advisors rather than developers. The latter will assist communities and groups of farmers and processors to identify, plan, execute and evaluate their own development solutions. The programme will promote farmer-to-farmer visits and farmer networking that could enhance ownership and cross-fertilization of knowledge among different regions. At the end of each year, beneficiaries will be encouraged to participate in annual consultations with programme staff and implementing partners in order to take stock of achievements during the year and propose improvement plans for the next one.



**REPORT AND RECOMMENDATION OF THE PRESIDENT OF IFAD
TO THE EXECUTIVE BOARD ON A PROPOSED LOAN TO THE
REPUBLIC OF BENIN
FOR THE
ROOTS AND TUBERS DEVELOPMENT PROGRAMME**

I submit the following Report and Recommendation on a proposed loan to the Republic of Benin for SDR 9.75 million (equivalent to approximately USD 13.11 million) on highly concessional terms to help finance the Roots and Tubers Development Programme. The loan will have a term of 40 years, including a grace period of ten years, with a service charge of three fourths of one per cent (0.75%) per annum. It will be administered by the West African Development Bank (BOAD) as IFAD's cooperating institution.

PART I - THE ECONOMY, SECTORAL CONTEXT AND IFAD STRATEGY¹

A. The Economy

1. **Macroeconomic context.** Benin covers an area of 112 620 km² and has a population of 6.1 million, growing at about 3% per annum. Over 65% of the population is rural. Efforts to introduce macroeconomic reforms have been fairly successful since the Government launched the first of three structural adjustment programmes and economic liberalization in the late 1980s. Economic growth has been restored, with gross domestic product (GDP) improving from the negative rates of 1986-89 to an average of 4.5% in 1990-95; real per capita GDP rising by 1.7% per year; and public spending on salaries dropping from 61% in 1991 to 43% in 1994. The banking system has been restructured, the budget has been balanced since 1991, and inflation has dropped from a peak of 54% in 1994 to 3% in 1998. While the incentive framework is now more conducive to private investment and growth, the macroeconomic situation is far from stable and the economy is very vulnerable to the performance of a single crop – cotton – that accounts for over 85% of export earnings. Benin's macroeconomic situation is strongly influenced by its membership in the West African Economic and Monetary Union and by its formal, and especially informal, trade relations with neighbouring countries such as Nigeria, with which it has a long and largely uncontrolled border.

2. **Poverty profile.** Benin has made progress in improving social conditions, its ranking on the UNDP/Human Development Index having risen from 155th to 145th out of 173 countries since 1990. However, poverty remains widespread, especially among farm families. One third of the country's population is classified as poor and a further 24% as vulnerable to poverty. The prevalence of poverty is highest in the centre where 47% of the population is classified as poor, yet this sparsely-populated area accounts for only 16% of the total poor. Over 60% of the country's rural poor live in the south, where vulnerability to hunger is linked to rising land pressures and steadily declining soil fertility. An impressive 73% of the total population is illiterate, the proportion rising to over 95% for rural women in the north. Although food supplies are generally sufficient, over one third (36%) of children under the age of five are malnourished, mainly owing to poor feeding practices.

¹ See Appendix I for additional information.



B. The Sectoral Context

3. Agriculture remains the driving force of economic growth, accounting for 37% of GDP, 85% of internally generated export earnings (mostly cotton) and 70% of employment. Production is mainly rainfed (less than 10 000 ha are irrigated) but diversified due to a broad range of agroecological conditions. Almost one third of all farm families have too little land and the vast majority still use traditional, low-productivity practices that are having increasingly negative effects as farmers try to boost their incomes. Use of animal draught is common in the north, where tree cover is light and the climate is suitable for cotton. The area under cotton expanded from 122 800 ha in 1990 to almost 360 000 ha in 1996, and production tripled. Although it generates cash for small farmers, this expansion gives rise to concern because of its environmental implications. The remaining two thirds of the country have not benefited from cotton earnings. The recent crisis, marked by dropping cotton world prices and a poor harvest in 1999, highlights the risks, both for the farmers and the national economy, of relying so heavily on one crop.

4. Food crops such as cassava, maize, yam, groundnut and beans have always been major sources of cash for farmers in the non-cotton zones, especially smallholders and women. Production surged after the CFA Franc was devalued in January 1994, with maize and cassava becoming staples throughout the region, especially among the poor. Until recently, food crops had largely been ignored by the technical services. Anxious to diversify export earnings, the Government has identified cassava as a promising option for export to Europe as animal feed. Private operators seeking to enter this market failed due to the high cost of raw materials as a result of the competition exercised by local processors supplying strong markets for products like *gari* (cassava), as well as dried roots and chips for human consumption. Throughout the country and the region, trading in R&Ts is closely intertwined with that of maize and other cereals.

5. **The roots and tubers (R&T) subsector.** Cassava and yam are the pillars of household food security as well as a source of cash in their production areas, and the recent surge in output is fuelling substantial, albeit undocumented, exports to neighbouring countries. In 1997-98, cassava accounted for 57% of the area under R&T, yam for 40%, and sweet potato for 3%. In 1998-99, Benin produced an estimated 1.96 million tonnes of cassava and 1.5 million tonnes of yam. These increases were achieved by expanding the planted area. There is considerable scope for productivity improvements at the farm level: soil-fertility improvements, improved planting materials, improved low-input packages, integrated pest management, etc. Storage and processing are major constraints, due to the bulky and highly perishable nature of R&T. Although cassava can be stored several months in the ground, it becomes unusable only a few days after it has been cropped. Local processing is cost-effective due to lower transport costs. Both growers and processors of R&T have repeatedly demonstrated their willingness to respond to market opportunities, but their productivities are low. The main constraints are lack of knowledge and credit, as well as weak absorptive capacity of poorly-equipped locally-based processors, poor roads, lack of storage, lack of information (e.g. on markets), and unremunerative prices. Women are very active economically: they process and trade R&T throughout the country, and represent 95% of all processors of those products.

C. Programme-Related Institutions

6. Agricultural policy has evolved from a highly interventionist approach in the 1980s to a major reduction of the direct role of the Government in agriculture marketing and processing. The role of public agencies is being limited to monitoring, supervision, evaluation and to providing an enabling legislative framework for agricultural growth and rural development. Major emphasis is placed on reinforcing producer organization and local grass-roots development administration capacity. Since the introduction of liberalization measures in the recent past, a strong local grass-roots dynamic for group formation and self-help supported by non-governmental organizations (NGOs) may be observed in the rural areas. The latter are involved in a variety of activities such as training, extension, support to agricultural production and processing, health and nutrition, environmental protection,



microfinance, literacy services and communal infrastructure. The short history of the NGOs in Benin, the reasons which have led to their creation and the speed of their geographical expansion, are indications of their positive role in promoting rural development activities. Nevertheless, many NGOs suffer from shortcomings, which can be summarized as follows: (i) weak capacity to manage funds and control expenditure; (ii) limited capacity to formulate projects and action programmes; and (iii) several NGOs compete among themselves, and sometimes tend to create duplications in the field. Despite these shortcomings, NGOs can play a positive role in promoting grass-roots development since they have closer contacts with the rural population than government institutions. Some international NGOs have started to train local NGOs in different areas of rural development programmes.

7. The Ministry of Rural Development (MDR) is responsible for overall agricultural policy, livestock, fisheries, forestry, as well as agricultural extension and research activities. It has undergone a process of reorganization, including a review and redefinition of its role and mandate, in order to be more responsive to its clients. Field-level dissemination and coordination of agricultural policies are the responsibility of six Regional Action Centres for Rural Development (CARDER), extending the MDR to each department of the country. The latter was also restructured by transferring extension, marketing, and input distribution activities to Professional Agriculture Organizations (OPAs) under an apex structure at three levels, i.e. sub-prefecture (77), region (six) and federal (one). This network is the main recipient of the transfer of rural development functions.

8. The agricultural extension services were reorganized in order to improve extension service system delivery, with a major role to be played by OPAs and NGOs at the community level. Other government agencies with functional authority, that will interface with the programme, include research, which falls under the National Institute for Agricultural Research (INRAB) in charge of primary research for crop development in Benin. Current INRAB activities in R&T include crop improvement, agronomy, integrated pest management and soil fertility. INRAB is assisted by the International Institute for Tropical Agriculture (IITA), which will be further associated with the proposed programme (paragraph 22).

9. The rural microfinance sector has been restructured also, after a long period of unsuccessful experiences with direct credit- and state-controlled financial institutions. The financial sector now has five private commercial banks, a credit union network (*Fédération des caisses d'épargne et de crédit agricole mutuel* (FECECAM)), one donor (Global 2000)-supported savings and credit network, and some Government-run credit schemes channelled through the regional administration (CARDER). The commercial banks and FECECAM are expanding their networks in the provinces, albeit slowly due to reasons related to costs and risks. The existing microfinance sector covers about 25% of the demand and tends to focus on short-term lending, mainly to the cotton sector. The most important network, i.e. FECECAM, has substantial liquidity reserves but fears the risks of medium-term lending, especially to small-scale producers. To fill the gap on the microfinance supply side, demand from resource-poor households is met by informal services (including moneylenders, rotating savings and credit associations) and recently – since 1997 – by IFAD and the Danish International Development Assistance (DANIDA) through the establishment of village banks called financial services associations (FSAs) which are complementary to the major FECECAM network. Fifty FSAs are already operational and about another 200 are to be fostered in Benin by the year 2004, within the context of the two ongoing IFAD-initiated projects.

D. Lessons Learned from Previous IFAD Experience in Benin

10. Since 1981, IFAD has financed six projects in Benin for a total of USD 66 million. Four projects are closed (Atacora Province Rural Development Project; Second Atacora Rural Development Project; Borgou Province Rural Development Project; and Second Borgou Rural Development Project). PAGER became effective in 1997 and PROMIC in 1998. Reflecting IFAD's mandate, all projects focus upon the alleviation of rural poverty and on household food security,



empowerment of small farmers and especially women, through support to income-generating activities, credit and training. Lessons learned from design and project implementation are reflected in the design of the more recent programmes. Increasing emphasis has been placed on strengthening the capacity of small rural producers to participate in identifying their own needs and constraints and in searching for adequate solutions, as well as assuring responsibility for the implementation and management of the resulting development activities. Involving the community as a whole in the planning, implementation, monitoring and evaluation (M&E), group promotion and targeting not only enhances transparency and participation, but also generates important spin-off benefits by building up local capacity to undertake development efforts; the poor and vulnerable elements of the local society need microfinance and knowledge, including literacy, in order to optimize their economic activities. Marketing considerations should guide all efforts to promote economic development, and sustainable microfinance services are critical to support village investment opportunities. Of particular significance to the programme is the establishment of a lean management unit operating through carefully screened NGOs as services providers. The experience of PAGER and PROMIC confirms the cost-effectiveness of subcontracting field responsibilities to the private sector, including NGOs. Another important lesson is that targeting the application of cut-off criteria for the purpose of excluding non-target individuals or households has proved to be problematic. One way to avoid leakages of programme benefits to the non-poor is geographical targeting, whereby a programme focuses on the physical areas where the vast majority of the population is poor. This approach is feasible in Benin, where there is substantial uniformity of poverty within rural communities and where poverty is perceived as a phenomenon that affects the community as a whole and must therefore be addressed collectively.

E. IFAD's Strategy for Collaboration with Benin

Benin's Policy for Poverty Eradication

11. The Government's development objectives are outlined in the five-year Medium-Term Benin Development Plan (MTBDP), 1997-2001. The overriding concern is for an improved quality of life to be achieved through the realization of development objectives of poverty alleviation, social equity and sustainable development. The key elements of the MTBDP are: (i) emphasis on human resources development to ensure that the poor are sufficiently healthy and literate to take advantage of the new opportunities arising from growth; (ii) enhanced capacity to deliver basic social services to the poor, especially in the areas of health, family planning, nutrition, basic education, safe water and sanitation, improvement of smallholders' access to technology, improvement of rural infrastructure, and development of microfinance for resource rural poor as an effective tool to combat rural poverty; and (iii) decentralization of responsibilities for implementing development programmes, in particular for the economically-disadvantaged rural population. The strategy also considers policies regarding the role of rural women in development as an explicit recognition of the important role they play in the economy.

The Poverty Eradication Activities of Major Donors

12. Over the last 15 years, Benin has benefited from the assistance of major donors for many rural development projects. Almost 90% of the financing from external aid, and the destination of that assistance, concerns integrated rural development projects and livestock projects with implications for the forests. The projects implemented under the CARDER have not encouraged the emergence of new actors in development – farmers' organizations – most activities being undertaken by professionals with limited participation of the intended beneficiaries. Since 1990, actors at the field level have been gradually brought into the project preparation and implementation process. With the implementation of the World Bank Agricultural Services Restructuring Project, it has been possible to reorganize the services of the MDR, launch the National Agricultural Extension Programme, and transfer power and responsibilities to private operators and farmers' organizations. Presently, other donors are involved



in poverty-eradication programmes. These are: (i) the DANIDA-funded support to rural development, which has both a private and a public sector component; (ii) the World Bank-financed Local Initiatives for Food Security Project, which involves funding local infrastructure, credit and women's groups through NGOs; (iii) the *Caisse française de développement's* Rural Road Rehabilitation Project in the northern regions; and (iv) the FECECAM Rehabilitation Programme supported by the World Bank, IFAD and the French Cooperation.

IFAD's Strategy in Benin

13. The medium-term operational IFAD strategy to Benin aims at supporting the country's policy for poverty eradication (paragraph 11) and includes six major thrusts: (i) to continue to focus on rural poverty alleviation and the means by which the poor can be reached efficiently and effectively; (ii) to continue to focus on smallholder food production; (iii) to strengthen microfinance and rural financial intermediation with particular focus on women's empowerment both economically, in terms of their share in the household revenue, and organizationally, in terms of decision-making power; (iv) to maintain close collaboration with major donors and NGOs and provide institutional support to the Government's decentralization process; (v) to strengthen the prospects for farm and non-farm income-generating activities; and (vi) to continue to place emphasis on beneficiary participation at various stages, by strengthening the capacity and competency of farmers and women through functional literacy, management, and accounting training programmes.

Programme Rationale

14. Soils and climate in about half the area covered by Benin are suitable for R&T and these crops already account for two thirds of the annual output of food, most of it grown by small and very small farmers. About half the crop is consumed locally; the rest is processed and put on the market. While the small farmers' bargaining power is weak, R&Ts already play an important role in the household economy. Sales are rising steadily in response to growing urban markets, and informal exports to nearby countries are developing rapidly. However, the small-scale operators rarely have the knowledge of markets and prices needed to maximize their earnings. A potential for the development of exportable cassava products was identified by the Government in early 1999 and is part of its strategy to diversify export earnings. If properly assisted and organized, smallholder farmers and women could capture a sizeable share of this market and thereby generate positive effects on their incomes. Development of R&T crops has important equity implications since production, processing, and marketing are largely undertaken by smallholders. These points form the basic rationale of the programme, which will contribute to rural poverty reduction, diversification of national export earnings, grass-roots capacity development and, finally, better synergies and impact with ongoing rural poverty alleviation programmes.

PART II - THE PROGRAMME

A. Programme Area and Target Group

15. The proposed programme is national in scope, although support to production and processing will be limited to agro-ecological zones where conditions are suitable for R&T: (i) West Atacora, where IFAD has been operating since 1981; (ii) the central cotton zone covering North Zou and South Borgou; (iii) South Borgou food crop zone; and (iv) the extremely fertile, but degraded, soils called *terres de barre* in the south. The total area is heavily affected by poverty, accounting for 73% of the country's population classed as poor. It also accounts for 72% of the country's territory, 64% of the total population and 47% of the rural population. The overall area can be divided into two sub-areas that are suitable for cassava and yam, respectively. Sweet potato and western potatoes are important sources of food and cash for particularly vulnerable populations in limited areas.

16. The target group includes 330 000 households in the programme area, representing approximately 2.8 million people. It is composed of near-landless households, women and youths,



small farmers, processors and traders. Women are very active and dominate the processing and trade of R&T; the programme will target its assistance to this specific segment, to ensure that they benefit effectively from it.

17. **Targeting mechanisms.** Most of the programme's actions with regard to crop production will be self-targeting because the scale of direct benefits will be kept to levels that are attractive for the poor, but of marginal interest to the relatively better-off. In areas with large numbers of (near) landless farmers, larger landholders will be eligible if willing to give their tenants (borrowers, sharecroppers) long-term security of access to their fields as an incentive to carry out the soil fertility protection/improvement works. Priority will be given to women who do not yet belong to a registered group. The vulnerable women and men will be identified and mobilized by the local authority designated by the village to represent it in its dealings with the programme, and its decisions will be systematically ratified at village-wide meetings. All training will be provided at the village level so that beneficiaries, especially women, can benefit directly.

B. Objectives and Scope

18. The programme's overall development goal will be to help alleviate poverty through sustainable increases in the cash incomes of poor and/or vulnerable rural households by enhancing productivities at all stages of R&T production, from farming to marketing. This objective is in line with the highest priorities of the Government and has high operational priority for IFAD and the donor community with which the programme will establish close collaboration. The programme's specific objectives are to: (i) raise the productivity of R&T-growing by smallholder farmers, using environmentally sound and sustainable practices, including improved and resistant R&T varieties, integrated pest management, and improved soil fertility methods; (ii) remove a major bottleneck to production increases by boosting the output of local women's processing groups and encouraging them to form marketing associations with other village-based groups; and (iii) strengthen local capability to analyse and resolve constraints related to R&T development.

19. The seven-year programme will be implemented in three phases: (i) a one-year start-up phase for staff recruitment and training, procurement, contracting and surveys; (ii) a two-year pilot phase dedicated to testing, in the first 96 communities; and (iii) a four-year full-development phase. A mid-term review in Project Year 3 will provide a basis for adjusting the approach and activities.

C. Components

20. The objectives of the programme will be pursued by implementing three components under the auspices of a programme management unit (PMU): (i) support to enhancing the productivity of R&T; (ii) support to the primary processing and marketing of R&T; and (iii) support to local institutions, including a community investment fund, feeder road rehabilitation and access to microfinance.

Enhancing the Productivity of R&T

21. R&T, especially cassava and yam, have been identified as promising alternatives to cotton, both as a source of export earnings and as a cash crop for farmers. Cassava, yam, sweet potato and even western potato are critically important to the food security and cash incomes of resource-poor farmers, who are familiar with these crops but whose traditional practices are low-yielding and environmentally unsound. While some work has been done on cassava, the other crops have received little attention. The aim of this component is to improve the productivity of R&T-growing through promotion of soil fertility, use of pest management methods and improved planting materials.

22. The soil-fertility works will include de-stumping, nitrogen-fixing trees, and green manuring as well as limited erosion control (e.g. in West Atacora). Improved low-input practices will be extended mainly through demonstrations on farmers' fields. Farmers groups will be encouraged to solicit credit from microfinance institutions in order to grow planting materials and improve soil fertility and



technical practices. The programme's field staff will assist in preparing credit requests and support management of funds. As medium-term credit needs will be important, a guarantee fund will be established. Two research stations with the expertise and installations to produce improved planting materials will receive additional equipment and funds for the production of foundation materials of proven cassava varieties. Three MDR seed farms and the Department of Agriculture will be similarly assisted to undertake the bulking-up of cuttings and the certification and delivery of the first batches of cuttings to the farmers' groups, respectively. Performances will be closely monitored with a view to determining whether or not the production of planting materials can become an income-generating activity in a context where planting materials are normally given away. Provision is also made for targeted research and development (R&D) aimed at generating usable results during the lifetime of the programme (varietal tests, trials of improved practices, completion of the collections of local and foreign varieties) and for the establishment of a partnership with IITA in order to transfer expertise and support applied research in the programme on aspects such as releasing improved planting materials of yam and cassava, developing and managing collection of cultivars, extending integrated pest management, and testing improved production systems for R&T.

Processing, Storage and Marketing

23. Processing in small-scale, locally supplied workshops is the most cost-effective way of handling bulky raw materials such as R&T, especially cassava. Crop processing and trading are dominated by rural women, whose low absorption capacity can block production increases. These women need labour-saving equipment, training, credit, storage facilities and information knowledge. The aim of this component is to: (i) eliminate a major bottleneck to the production of R&T; and (ii) increase the value-added, and hence the cash incomes, of rural women. The programme will constantly ensure that the group learns to do things by itself (cost-benefit analysis, calculations of credit needs, negotiations with microfinance institutions and traders, storekeeping organization, bookkeeping). Beneficiary training in technical and managerial skills will be provided at the village level and will include follow-up on training in real situations.

24. Provision is made for support to processing and marketing, including measures aimed at enhancing the bargaining power of small-scale processors (e.g. through independent access to information on products, prices, quantities and quality; promotion of inter-village marketing associations able to fill large orders and lobby for better prices; identification of new products, especially for expanding urban markets; construction of storage facilities; establishment of small-scale processing units; R&D on small-scale technologies; establishment of stand-by stocks of suitable equipment to reduce waiting time; and a series of market studies to complement the current R&T market knowledge). Processing groups will be assisted and trained to mobilize savings and to solicit credit through microfinance institutions in order to finance their planned development.

Support to Local Institutions

25. This component aims at assisting communities and groups to: build up their organizational planning and monitoring capacities for implementing their own development priorities; enhance their access to technical and social services; gain access to microfinance and the Community Development Fund; remove critical infrastructural blockages; and promote participatory communication processes for information dissemination and awareness-raising. The programme will support the promotion of groups that will be involved in the development of R&T, including production, processing and marketing. They will receive specific training in all aspects, including management and technical matters. Up to ten operational zones will be set up for the duration of the programme, with the participation of NGOs, which will assign facilitators living in the villages. The training "package" envisaged under this component interacts with other programme components, as well as with projects such as PAGER and PROMIC. Therefore, this strategic component will link up closely with them. Rural roads will receive special attention since they are essential for providing market opportunities in areas that have good potential for R&T but are so far excluded from active transactions with larger

markets. BOAD as cofinancier will mainly focus on this aspect, and interventions will be programmed through beneficiary participation. About 260 km of rural roads will be improved, with the works carried out entirely by private contractors.

26. The three components will be coordinated by a PMU to be set up in Cotonou, with two regional offices covering the southern region and the northern region, respectively. The PMU will be responsible for planning, coordination and supervision. It will identify the implementing partners, draw up partnership contracts, and monitor them.

D. Costs and Financing

27. The total cost of the programme, including duties and taxes, is estimated at USD 19.28 million over seven years, of which USD 3.84 million, or about 20%, is in foreign exchange. Duties and taxes are estimated at USD 1.96 million. Price and physical contingencies are estimated at USD 1.03 million and USD 0.71 million, equivalent respectively to 6% and 4% of the base cost. The programme will be financed by IFAD, BOAD, the Government and the beneficiaries. The IFAD loan of USD 13.11 million will finance 68% of the total costs, including contingencies. The BOAD loan will finance USD 3.90 million (20.2%) of the amount allocated for each component. The Government will finance USD 2.20 million (11.4%), representing its share of salaries and indemnities, plus duties and taxes. The beneficiaries will finance USD 0.07 million (4%). The programme costs and financing plan are detailed in Tables 1 and 2 below.

TABLE 1: SUMMARY OF PROGRAMME COSTS^a
(USD '000)

| Components | Local | Foreign | Total | % of Foreign Exchange | % of Base Costs |
|-----------------------------------|---------------|----------------|---------------|--------------------------------------|----------------------------|
| Productivity of R&T | 3 225 | 590 | 3 816 | 15 | 22 |
| Processing, storage and marketing | 835 | 452 | 1 287 | 35 | 7 |
| Support to local institutions | 7 423 | 1 607 | 9 030 | 18 | 51 |
| Organization and management | 2 546 | 873 | 3 418 | 26 | 19 |
| Total base costs | 14 029 | 3 522 | 17 551 | 20 | 100 |
| Physical contingencies | 594 | 117 | 711 | 16 | 4 |
| Price contingencies | 829 | 197 | 1 026 | 19 | 6 |
| Total Programme costs | 15 452 | 3 836 | 19 288 | 20 | 110 |

^a Discrepancies in totals are due to rounding up.

TABLE 2: FINANCING PLAN^a
(USD '000)

| Components | IFAD | | BOAD | | Government | | Beneficiaries | | Total | | For. Exch. | Local (Excl. Taxes) | Duties and Taxes |
|-----------------------------------|---------------|-----------|--------------|-----------|--------------|-----------|---------------|------------|---------------|--------------|--------------|---------------------|------------------|
| | Amt. | % | Amt. | % | Amt. | % | Amt. | % | Amt. | % | | | |
| Productivity of R&T | 2 869 | 68 | 856 | 20 | 523 | 12 | - | - | 4 248 | 22 | 619 | 3 138 | 492 |
| Processing, storage and marketing | 936 | 66 | 279 | 20 | 197 | 14 | - | - | 1 413 | 7 | 482 | 750 | 181 |
| Support to local institutions | 6 897 | 70 | 2 053 | 21 | 902 | 9 | 71 | 0.7 | 9 924 | 52 | 1 800 | 7 248 | 877 |
| Organization and management | 2 411 | 65 | 716 | 19 | 576 | 16 | - | - | 3 703 | 19 | 936 | 2 354 | 414 |
| Total | 13 110 | 68 | 3 900 | 20 | 2 200 | 11 | 70 | 0.4 | 19 288 | 100.0 | 3 836 | 13 489 | 1 962 |

^aDiscrepancies in totals are due to rounding up.

E. Procurement, Disbursement, Accounts and Audit

28. **Procurement** will be in accordance with IFAD's guidelines. Equipment, materials and vehicles will be purchased in bulk as far as possible. Contracts for vehicles will be subject to International Competitive Bidding (ICB) procedures. Contracts for goods and equipment exceeding USD 50 000, up to a total of USD 100 000, will be subject to Local Competitive Bidding (LCB) procedures. For contracts valued at less than USD 50 000 but more than USD 10 000, prudent shopping based on at least three quotations will apply. Procurements for less than USD 10 000 will be made by direct purchase from local suppliers. The civil works, being in scattered locations, are unlikely to be attractive to international bidders. Contracts for over USD 50 000 will be subject to LCB procedures, while those for less than USD 50 000 will be subject to prudent shopping with quotations from at least three suppliers. Consultancy contracts will be awarded following internationally-acceptable standards, with terms of reference, qualifications and conditions of service satisfactory to IFAD.

29. **Disbursements** for vehicles, equipment and consultant services will be fully documented. Those for civil works, local training and operating costs, salaries and local contractors will be made against certified Statements of Expenditures (SOEs). Documentation for withdrawals under SOE will be retained by the programme for inspection during supervision missions. A special account for the programme will be opened in a commercial bank in Cotonou, or public treasury, on terms and conditions acceptable to IFAD. An initial amount of XOF 500 million will be deposited into the special account, upon effectiveness and submission of withdrawal application to IFAD. Replenishment of the special account will follow established IFAD procedures. In addition, a programme account with an initial deposit of XOF 22 million will be opened in the public treasury in Cotonou for receipt and disbursement of the Borrower's counterpart funds. The proposed programme will be included in the Programme Investment Priority of the Government to ensure that it is adequately and timely funded by the Government of Benin. The programme will have an implementation period of seven years from the date of effectiveness.

30. **Accounts and audit.** All implementing agencies involved in the programme will keep separate accounts of expenditures for their activities funded through the programme. The financial controller within the PMU will ensure that all accounts are kept in accordance with prevailing government practices, which are acceptable to IFAD, and prepare six-monthly consolidated statements of accounts as an integral part of the programme's management information system (MIS). These consolidated statements will be submitted to IFAD. The consolidated annual accounts will be audited by an independent auditor acceptable to IFAD. All implementing agencies will grant the auditor access to



the accounts for the component(s) they implement. The audited accounts and the auditor's report, the latter with a separate opinion on the SOEs, will be forwarded to IFAD not later than six months after the end of each fiscal year.

F. Organization and Management

31. The overall organization and management of the programme has been designed with a strong participatory approach. Beneficiary participation was initiated during formulation by organizing two participatory formulation workshops. A strong participatory approach is built into the proposed implementation mechanisms, which are designed to enable the beneficiaries and their groups to make their own decisions after collecting and analysing the available information and consulting qualified specialists and advisors. Programme implementation will be supported by a lean PMU, under the aegis of the MDR. The PMU will be staffed with a small team of highly-qualified officers, recruited through transparent and competitive procedures, working from a national head office at Cotonou and two regional offices at Parakou and Abomey-Bohicon for the northern and southern regions, respectively. The PMU will have financial and administrative autonomy and its main tasks will be to: (i) prepare the Annual Programme of Work and Budget (AWP/B) and authorize expenditure; (ii) select and contract implementing agencies; (iii) carry out regular field supervision and M&E of field activities; and (iv) provide regular reports on programme implementation.

Reporting, Monitoring and Evaluation

32. All implementing agencies and partners will prepare quarterly progress reports, which the PMU will use to prepare six-monthly progress reports for submission to IFAD. The reports will contain an assessment of the state of programme implementation, including the financial status. Performances will be compared to the targets laid down in the appraisal report and the AWP/Bs. The data will be input into the MIS to be established at programme start-up. The MIS will monitor the efficiency of delivery of programme benefits to beneficiaries and the performances of implementers. Evaluations will be of three sorts: participatory, internal and external. Beneficiaries will be encouraged to analyse the implications of their involvement in the programme and the results of these exercises will be presented at annual participatory evaluation workshops.

G. Economic Justification

33. **Production, marketing and prices.** The use of improved, healthy and disease-free planting materials, improved biological control and improved husbandry practices are the main factors which will increase yields of R&T and lead to an incremental annual production of 167 670 t of cassava, 67 440 t of yam and 9 000 t of sweet potatoes. Produce prices generally follow market movements; however, R&T production varies considerably from region to region and between planting and harvest periods. The incremental production will not have a negative effect on farmgate prices, given the subregional and international market potential.

34. **Benefits and beneficiaries.** An estimated 15 000 farmers belonging to 1 224 groups in 408 villages will acquire technical and managerial skills. They and their families represent a total population of over 130 000 persons. Production of R&T is expected to double without significant increases in planted area, and without endangering soil fertility. The sedentarization of yam-rowing will reduce the rate of land clearing. Having reduced their unit costs of production, farmers will be able to lower their prices. Post-harvest losses will be reduced and incomes will increase. Up to 408 processor groups, with a total membership of almost 10 000 rural women, will also be assisted to increase their incomes by an average of XOF 32 000 per year/person. Returns to their labour will be higher than XOF 1 000 per day, which compares favourably with rural labour rates. Incremental incomes will rise to about XOF 37 000 per member.

35. The most important unquantifiable benefit relates to the empowerment of beneficiaries, including women, and the strengthening of local institutions. Up to 1 224 farmer groups and



408 processing groups in 408 villages will be fully in charge of their own development, with spin-off benefits to surrounding villages. Subject Matter Specialists and animators will acquire marketable skills in the provision of appreciated services. At least one third of the group members will acquire reading and writing skills and some measure of proficiency in French. At least one third of the literate group members will learn managerial and accounting skills. These benefits will enhance the chances of sustainability of the development support provided through the programme.

36. **Economic viability.** The economic analysis of the programme is based on the following assumptions: (i) a programme life of 20 years; (ii) an investment period of seven years; and (iii) all prices expressed in constant January 2000 terms. All investment and recurrent costs have been considered. Many of the benefits are difficult to quantify and thus the economic analysis is based only on the incremental outputs of R&T. No account is taken of the benefits from road works or infrastructural developments. Under these assumptions, the economic rate of return (ERR) of the programme is quite robust at 14%: a rise in costs by 10% reduces it to 13%, a reduction of benefits by 10% reduces it to 12.8% and the two factors together reduce it to 11.8%. A one-year delay in the flow of benefits results in an ERR of 12.7%. A reduction of incremental production by 50% would reduce the ERR to 6.5%.

H. Risks

37. Possible difficulties and risks that could be encountered during implementation have been taken into account in designing the programme's components. The implementation approach calls for full participation by the beneficiaries in their own development. This requires intensive training, which might delay implementation. This risk has been predicted, and the first year is entirely devoted to awareness-building, training and dialogue with the rural communities and other partners in the programme. Another risk is associated with the limited knowledge of domestic and export markets, mainly for cassava. The various studies carried out in the last years need to be re-examined, taking into consideration the new steady trend of the market for cassava and yam products for human consumption throughout West and Central Africa, as well as the world market for cassava animal feed. This risk is addressed by several provisions: (i) a comprehensive study of the international markets for R&T from Benin; (ii) making Benin's products more competitive by reducing their cost and improving quality and packaging; (iii) close monitoring of markets and prices and wide diffusion of this information to producers, along with training in using it; (iv) increasing the bargaining power of the target group by helping them set up marketing associations and storage facilities at the village level, so that they can slot their products into the food-crop marketing network presently being set up; and (v) pacing the development of programme actions aimed at developing R&T to market conditions. Another risk is that implementation may be slow, early in the programme, particularly for the multiplication and uptake of the improved planting materials. This issue has been minimized by making provisions for R&D and contracts with IITA for technical backstopping and follow-up. Targeting is also at risk, as IFAD's experience has shown how easy it is for implementers to overlook its target group. This risk will be addressed by: (i) ensuring that the types of support to be provided are attractive to the target group, but only marginally to the relatively better-off (e.g. small-scale equipment, low-cost practices, village-level training), (ii) involving the communities in identifying and mobilizing the more vulnerable segments of their population, and (iii) relying on full transparency and peer pressure rather than external controls.

I. Gender Impact

38. Women are expected to fully participate and benefit from the programme, both as farmers and especially as processors and traders. The support to processing and trading, which is specifically geared towards them, will reach almost 10 000 women directly, with the benefits of better knowledge and information spreading to all the women in the 408 targeted villages.



J. Environmental Impact

39. The programme will have a direct positive impact on the environment through the soil fertility protection and/or restoration works. The proposed intensification measures will not involve large amounts of fertilizer or chemicals, but rather improvements to cropping practices and biological methods. The sedentarization of yam cultivation will make a major contribution towards protecting natural resources. Although small in scale, the processing units should dispose safely of toxic and smelly effluents. For this reason, the programme is classed as category B, which calls for an environmental impact analysis prior to the siting of processing units and the inclusion of environmental concerns in M&E.

K. Innovative Features

40. A major root cause of poverty is the lack of information and knowledge necessary for decision-making, and access to needed services. These constraints, which conform to one of IFAD's corporate thrusts, are addressed by giving prominence to market knowledge, animation, information, education and communication. Other innovative features include: (i) the emphasis on enhancing security of access to land as an incentive for making the recommended soil fertility/protection investments (paragraph 17); (ii) the adoption of an advisory services approach as an alternative to public services; and (iii) the programme's linkage to other R&T programmes developed by IFAD in Nigeria and Ghana, through memoranda of understanding, networking, exchanges of visits, as well as the undertaking of a regional market study on cassava and the organization of workshops. Finally, the programme will establish a strong partnership with IITA and smooth the way to link up with and complement the technical assistance grants provided by IFAD to IITA to assist in the dissemination of improved cassava and yam technologies.

PART III - LEGAL INSTRUMENTS AND AUTHORITY

41. A loan agreement between the Republic of Benin and IFAD constitutes the legal instrument for extending the proposed loan to the Borrower. A summary of the important supplementary assurances included in the negotiated loan agreement is attached as an annex.

42. The Republic of Benin is empowered under its laws to borrow from IFAD.

43. I am satisfied that the proposed loan will comply with the Agreement Establishing IFAD.

PART IV - RECOMMENDATION

44. I recommend that the Executive Board approve the proposed loan in terms of the following resolution:

RESOLVED: that the Fund shall make a loan to the Republic of Benin in various currencies in an amount equivalent to nine million seven hundred and fifty thousand Special Drawing Rights (SDR 9 750 000) to mature on and prior to 15 March 2040 and to bear a service charge of three fourths of one per cent (0.75%) per annum, and to be upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented to the Executive Board in this Report and Recommendation of the President.

Fawzi H. Al-Sultan
President

SUMMARY OF IMPORTANT SUPPLEMENTARY ASSURANCES INCLUDED IN THE NEGOTIATED LOAN AGREEMENT

(Loan negotiations concluded on 13 April 2000)

1. For the purpose of implementing the programme, the Government of the Republic of Benin (the Government) shall make the proceeds of the loan available to the lead programme agency in accordance with the AWP/Bs and customary national procedures for development assistance.
2. Over and above the loan funds mentioned in paragraph 1 above, and as required, the Government shall make available to the lead programme agency, and to all parties involved in the implementation of the programme, the funds, facilities, services and other resources required for the execution of the programme, as stipulated in the loan agreement. The Government shall, during the course of programme implementation, provide the lead programme agency with counterpart funds in CFA francs equivalent to USD 2 200 000, in accordance with customary national procedures for development assistance. An amount of CFAF 22 000 000, to cover requirements during the first year of implementation, shall be transferred into the Programme Account before such time as the loan becomes effective. The Government shall replenish the Programme Account on a six-monthly basis to enable the programme to honour its financial commitments. Once the loan has been declared effective, the counterpart funds shall be registered under the Public Investment Programme.
3. The seven-year programme will be implemented in three successive phases: (i) a one-year start-up phase dedicated to staff recruitment and training, procurement, contracting and surveys; (ii) a two-year pilot phase; and (iii) a four-year full development phase. A joint mid-term evaluation (MTE) will be conducted jointly by the lead programme agency and IFAD at the end of the pilot phase. The MTE will be initiated in each programme area by means of a participatory evaluation seminar attended by representatives of communities covered by the programme, service providers operating in the areas of intervention and other stakeholders. Before each seminar, the villages will select representatives to attend on their behalf. In preparing for the MTE, the M&E officer attached to the PMU will prepare a progress report for discussion during the course of a national seminar involving all parties involved in the development of the R&T subsector.
4. The programme will be cofinanced by BOAD on a *pari passu* basis. However, as soon as the IFAD loan has been declared effective and for a maximum period of 12 months, IFAD shall meet all expenses attributable to BOAD. The amounts thereby defrayed by IFAD shall be reimbursed by BOAD, in accordance with the percentage of the expenses to be financed by BOAD, immediately following declaration of the effectiveness of the BOAD loan.
5. National, international, public or private organizations will be contracted to implement the programme components, and the PMU will take the necessary steps to ensure regular M&E and auditing both of programme activities and of the partner institutions. Prior to signature, all partnership agreements will be submitted to IFAD for approval.
6. As part of maintaining sound environmental practices as required by the General Conditions, the Government shall maintain appropriate pest management practices under the programme. To that end, the Government shall ensure that pesticides procured under the programme do not include any pesticide either proscribed by the International Code of Conduct on the Distribution and Use of Pesticides of the Food and Agriculture Organization of the United Nations, as amended from time to time, or listed in Tables 1 (Extremely Hazardous) and 2 (Highly Hazardous) of the World Health Organization's Recommended Classification of Pesticides by Hazard and Classification 1996-97, as amended from time to time.



7. The Government shall exempt, by decree of the Minister for Finance, all taxes and duties on all goods and services financed by the loan. All taxes on salaries shall be met by the Government from the proceeds of the counterpart funds that the Government is expected to provide.
8. The Government shall insure all programme personnel against health and accident risks, in accordance with current national laws pertaining to working conditions.
9. All things being equal, the Government undertakes to give priority to women candidates for appointments to vacant positions under the programme.
10. The following are specified as conditions precedent to effectiveness of the loan:
 - (a) the PMU and the steering committee shall have been constituted by the Minister for Rural Development, the texts of the relevant decrees having been submitted to IFAD for approval prior to their emission;
 - (b) all programme staff shall have been selected on the basis of recruitment procedures open to candidates from the private and public sectors;
 - (c) the Programme Account shall have been opened and the counterpart funds for the first year of the programme shall have been deposited therein; and
 - (d) a favourable legal opinion, issued by the Supreme Court and acceptable in both form and substance, shall have been delivered by the Government to IFAD.

APPENDIX I

COUNTRY DATA

| BENIN | | | |
|--|------------------------------|--|--------------------|
| Land area (km² thousand) 1996 1/ | 111 | GNP per capita (USD) 1997 2/ | 380 |
| Total population (million) 1997 1/ | 5.8 | Average annual real rate of growth of GNP per capita, 1990-97 2/ | 1.7 |
| Population density (people per km²) 1996 1/ | 51 | Average annual rate of inflation, 1990-97 2/ | 10.6 |
| Local currency | CFA Franc BCEAO (XOF) | Exchange rate: USD 1 = | XOF 673.330 |
| Social Indicators | | Economic Indicators | |
| Population (average annual population growth rate), 1980-97 1/ | 3.0 | GDP (USD million), 1997 1/ | 2 141 |
| Crude birth rate (per thousand people), 1997 1/ | 43 | Average annual rate of growth of GDP 1/, 1980-90 | 2.9 |
| Crude death rate (per thousand people), 1997 1/ | 13 | 1990-97 | 4.5 |
| Infant mortality rate (per thousand live births), 1997 1/ | 88 | Sectoral distribution of GDP, 1997 1/ | |
| Life expectancy at birth (years), 1997 1/ | 53 | % agriculture | 38 |
| Number of rural poor (million) (approximate) 1/ | n.a. | % industry | 14 |
| Poor as % of total rural population 1/ | n.a. | % manufacturing | 8 |
| Total labour force (million), 1997 1/ | 2.6 | % services | 48 |
| Female labour force as % of total, 1997 1/ | 48 | Consumption, 1997 1/ | |
| Education | | General government consumption (as % of GDP) | 10 |
| Primary school gross enrolment (% of relevant age group), 1996 1/ | 78 | Private consumption (as % of GDP) | 79 |
| Adult literacy rate (% of total population), 1995 3/ | 37 | Gross domestic savings (as % of GDP) | 11 |
| Nutrition | | Balance of Payments (USD million) | |
| Daily calorie supply per capita, 1995 3/ | 2 386 | Merchandise exports, 1997 1/ | 289 |
| Index of daily calorie supply per capita (industrial countries=100), 1995 3/ | 76 | Merchandise imports, 1997 1/ | 962 |
| Prevalence of child malnutrition (height for age % of children under 5), 1992-97 1/ | 25 | Balance of merchandise trade | - 673 |
| Prevalence of child malnutrition (weight for age % of children under 5), 1992-97 1/ | 29 | Current account balances (USD million) | |
| Health | | before official transfers, 1997 1/ | - 196 |
| Health expenditure, total (as % of GDP), 1990-97 1/ | n.a. | after official transfers, 1997 1/ | n.a. |
| Physicians (per thousand people), 1990-97 1/ | 0.08 | Foreign direct investment, 1997 1/ | 3 |
| Percentage population without access to safe water, 1990-96 3/ | 50 | Government Finance | |
| Percentage population without access to health services, 1990-95 3/ | 82 | Overall budget surplus/deficit (including grants) (as % of GDP), 1996 1/ | n.a. |
| Percentage population without access to sanitation, 1990-96 3/ | 80 | Total expenditure (% of GDP), 1996 1/ | n.a. |
| Agriculture and Food | | Total external debt (USD million), 1997 1/ | 1 624 |
| Food imports as percentage of total merchandise imports, 1997 1/ | n.a. | Present value of debt (as % of GNP), 1997 1/ | 46 |
| Fertilizer consumption (hundreds of grams per ha of arable land), 1995-97 1/ | 214 | Total debt service (% of exports of goods and services), 1997 1/ | 9.1 |
| Food production index (1989-91=100), 1995-97 1/ | 129.5 | Nominal lending rate of banks, 1997 1/ | n.a. |
| Land Use | | Nominal deposit rate of banks, 1997 1/ | n.a. |
| Arable land as % of land area, 1996 1/ | 12.9 | | |
| Forest area (km ² thousand), 1995 1/ | 46 | | |
| Forest area as % of total land area, 1995 1/ | 41.8 | | |
| Irrigated land as % of cropland, 1994-96 1/ | 0.5 | | |
| n.a. not available. | | | |
| Figures in italics indicate data that are for years or periods other than those specified. | | | |
| 1/ World Bank, <i>World Development Report</i> , 1999 | | | |
| 2/ World Bank, <i>Atlas</i> , 1999 | | | |
| 3/ UNDP, <i>Human Development Report</i> , 1998 | | | |

PREVIOUS IFAD LOANS TO BENIN

| Project Name | Initiating Institution | Cooperating Institution | Board Approval | Loan Effectiveness | Current Closing Date | Approved Loan/Grant Amount (SDR) | Disbursement (as % of approved amount) |
|---|------------------------|-------------------------|----------------|--------------------|----------------------|----------------------------------|--|
| Borgou Province Rural Development Project (061-BE) | World Bank: IDA | World Bank: IDA | 22 Apr 81 | 09 Mar 82 | 30 Jun 89 | 11 000 000 | 92.5% |
| Atacora Province Rural Development Project (101-BE) | IFAD | World Bank: IDA | 14 Sep 82 | 23 Jun 83 | 31 Dec 90 | 8 250 000 | 99.3% |
| Second Borgou Rural Development Project (210-BE) | World Bank: IDA | World Bank: IDA | 02 Dec 87 | 06 Dec 88 | 31 Dec 94 | 7 950 000 | 83.7% |
| Second Atacora Rural Development Project (289-BE) | IFAD | UNOPS | 11 Dec 91 | 30 Sep 92 | 31 Dec 99 | 6 250 000 | 94.6% |
| Income-Generating Activities Project (399-BJ) | IFAD | UNOPS | 06 Dec 95 | 13 Mar 97 | 30 Jun 04 | 8 050 000 | 25.8% |
| Microfinance and Marketing Project (470-BJ) | IFAD | IFAD | 22 Apr 98 | 04 May 99 | 30 Jun 05 | 9 150 000 | 06.6% |

Lending terms = Highly concessional for all loans



LOGICAL FRAMEWORK

| NARRATIVE SUMMARY | OBJECTIVELY VERIFIABLE INDICATORS | MEANS OF VERIFICATION | IMPORTANT ASSUMPTIONS/RISKS |
|--|--|--|---|
| <p>Development objectives. Enhance, in a sustainable manner, income, well-being, and ownership of resource-poor households and women</p> | <ul style="list-style-type: none"> •Increased production and income of beneficiaries •Improved access to technical services and microfinance •Enhanced beneficiary decision-making processes and strong ownership | <ul style="list-style-type: none"> •National statistics •Participatory evaluations, studies, and surveys | <ul style="list-style-type: none"> •Programme must be fully funded and counterpart funds released on time |
| <p>I. Productivity of R&T growing is sustainably improved Expected outputs:</p> <ul style="list-style-type: none"> •Soil fertility is protected and/or restored •Proven improved cropping packages are available and made available •Strong uptake by farmers generates significant benefits through reduced unit costs •Negative environmental impact of R&T growing is reduced | <ul style="list-style-type: none"> •Evolution of soil fertility •Inputs packages developed/used •Production and unit costs •Farm family incomes and living conditions •Effects on environment | <ul style="list-style-type: none"> •Annual reports •Activity reports from services providers •Agricultural statistics •M&E and surveys (farming systems, prices, etc. •Participatory evaluations •Supervision missions •Mid-term review (MTR) | <ul style="list-style-type: none"> •Proven fertilizer packages for tests can be defined in PY 1 and must be accessible to smallholders in different agro-ecological zones |
| <p>II. Processing, storage, and marketing Expected outputs:</p> <ul style="list-style-type: none"> •Small-scale mechanization more accessible to target group •Beneficiary mastery of technical and managerial skills of R&T processing and storage •Target group is better informed and able to exploit comparative advantages •Gari* produced by target group is more competitive due to greater throughput, better quality and lower production costs •Target group enjoys higher incomes and work is less laborious | <ul style="list-style-type: none"> •No. and types of equipment •Incremental throughputs and incomes •Evolution of quality, costs and prices •Performance of marketing system •Target group share of market openings •Product range | <ul style="list-style-type: none"> •Activity reports from services providers •Agricultural and trade statistics •M&E surveys (quality, price bargaining, product diversification) •Participatory evaluations •Supervision missions •MTR | <ul style="list-style-type: none"> •Adequate training, equipment and credit |
| <p>III. Local institutions Expected outputs:</p> <ul style="list-style-type: none"> •Better information allows beneficiary groups to take informed decisions on R&T development and improve nutrition •A corps of village trainers is in place to deliver literacy and technical/managerial training on a self-sustaining basis •Beneficiaries use credit appropriately, and fully understand the procedures •Infrastructures needed for R&T development are available (collective and group) •Selected villages enjoy improved access roads •Development of the R&T subsector is adequately guided and monitored | <ul style="list-style-type: none"> •No. of groups fostered, organized and functioning by type and gender •No. of villagers trained as trainers by gender and type of training •No. of village-level trainers holding courses by type and gender •Loans taken out, repayments, use of the guarantee/risk funds •No. and type of infrastructures built •No. of villages with improved access | <ul style="list-style-type: none"> •Activity reports from services providers •M&E surveys •Participatory evaluations •Statistics on use of credit •Supervision missions •MTR | <ul style="list-style-type: none"> •Linkages need to be established with other ongoing programmes •No conflict with traditional village institutions and producer organizations |

* By-product of cassava



| NARRATIVE SUMMARY | OBJECTIVELY VERIFIABLE INDICATORS | MEANS OF VERIFICATION | IMPORTANT ASSUMPTIONS/RISKS |
|--|---|--|--|
| <p>ACTIVITIES</p> <p>I. Enhancing the productivity of R&T</p> <ul style="list-style-type: none"> - Strengthen capabilities to deliver advisory services and training - Provision of appropriate planting materials - Research-development: <ul style="list-style-type: none"> • Contract existing services to undertake varietal selection and multiplication of cassava and yam; trials on improved soil fertility management and environmentally-sound farming practices; trials on production of mini-setts • Provide funds to complete, evaluate and conserve the collection of local varieties • Provide funds for R&D programmes • Pursue collaboration with IITA and establish other types of collaboration as appropriate <p>II. Processing, storage and marketing</p> <ul style="list-style-type: none"> - Strengthen capacities to deliver advisory services and training - Make equipment available to beneficiary processing groups - Research-development: <ul style="list-style-type: none"> • Test/develop technologies for grating cassava • Test/develop technologies for cutting R&T into chips • Carry out research aimed at diversifying product range • Test/develop improved storage techniques for R&T - Marketing: <ul style="list-style-type: none"> • Carry out study of national and export markets • Promote improved storage as means of enhancing bargaining power • Improve the dissemination of information on markets and prices • Foster village marketing associations • Foster an interprofessional association to improve coordination between producers, processors, traders and exporters | <ul style="list-style-type: none"> - Activities of advisors - Areas covered /no. of farmers - Evolution yields, outputs, unit costs - Evolution /impact of inputs use - Evolution of farming systems - Environmental impact - Areas dedicated to production of planting materials by type - Range of improved varieties - R&D means/efforts dedicated to programme-related work - Varieties identified, proven and used - Uptake of R&D recommendations by farmers - Exchanges/collaboration with IITA - Beneficiary R&D needs addressed <ul style="list-style-type: none"> - Activities of advisors - Equipment purchased and used - Evolution of outputs (volumes, qualities, product range, sales prices and margins) by gender, type, etc. - Results obtained and uptake - R&D themes identified by beneficiaries addressed - Market study - Storage capacity - Evolution of prices - Range of products - Number of village marketing associations fostered and functioning | <ul style="list-style-type: none"> - Annual reports - Surveys (MTR) - M/E surveys - Supervision missions <ul style="list-style-type: none"> - Reports from services providers - M&E surveys (activities carried on by advisors, uptake of advice, equipment purchases and deliveries, use, etc.) - Reports from research, R&D and pre-extension operators - Annual evaluations - Activity reports - Information system on R&T - Reports on markets and prices - Monitoring of markets | <ul style="list-style-type: none"> - Appropriate and proven inputs packages will be available in PY 1 and accessible in different agro-ecological zones - MDR's three seed farms will be available to operate as contractual producers of foundation and planting materials - Activities of related research programmes will be properly coordinated <ul style="list-style-type: none"> - Activities of related research programmes are coordinated - Identification of needs is carried out in participatory manner |

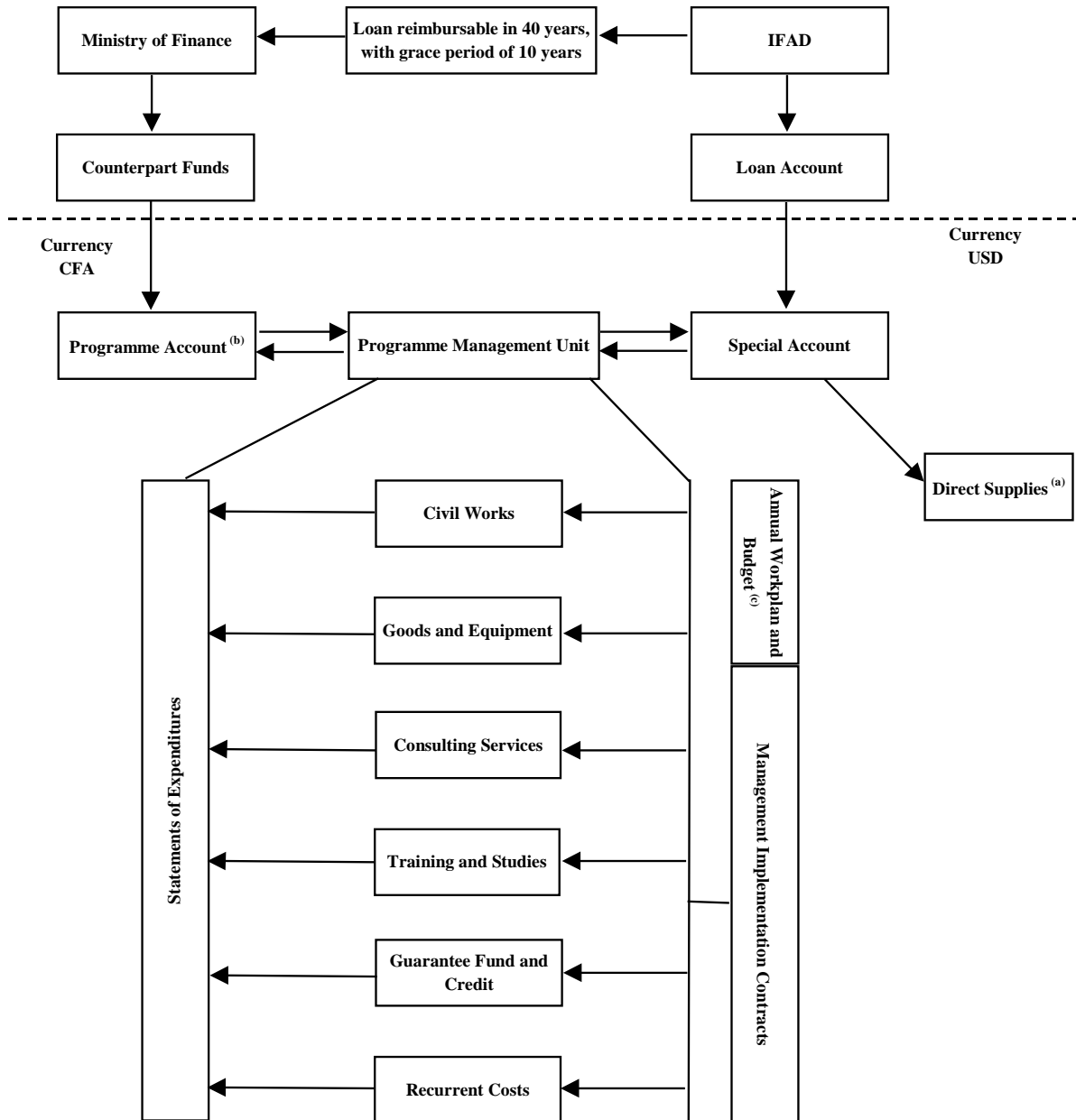




| NARRATIVE SUMMARY | OBJECTIVELY VERIFIABLE INDICATORS | MEANS OF VERIFICATION | IMPORTANT ASSUMPTIONS/RISKS |
|---|---|--|---|
| <p>III Support to local institutions</p> <ul style="list-style-type: none"> - Strengthening of capacity to provide advisory services: <ul style="list-style-type: none"> • Select services providers to take charge of operational zones • Upgrade their skills, especially those of field animators • Conduct participatory formulation of village plans for R&T development - Capacity building at village level: <ul style="list-style-type: none"> • Train village youths as trainers in literacy and technical/managerial skills • Engage specialists to adapt teaching materials to programme needs • Pay village trainers to hold courses for members of beneficiary groups • Organize intervillage exchange visits - Community Fund for Investments related to R&T development <ul style="list-style-type: none"> • Finance construction of village level infrastructures (e.g. water, paths, storage) • Finance construction of infrastructures for beneficiary groups (e.g. equipment shelters, storage) - Roads to open up enclaved areas: <ul style="list-style-type: none"> • Preparation of annual road-works programmes • Rehabilitate/maintain village paths and tracks • Purchase and distribute sets of maintenance tools - Improving group access to microfinance: <ul style="list-style-type: none"> • Guarantee/risk fund • Standby provision for a credit line | <ul style="list-style-type: none"> - No. and type of services providers and field animators - Performance of services providers and animators - Number of villages with action plan - Village trainers trained and holding courses, by type of course and gender - Group members in training, by type of course, gender and results - Teaching aids - Exchange visits - Calls made on FICRET resources - No. and type of investments financed - Beneficiary participation - Management provisions - Villages with improved access - No. of km rehabilitated /maintained - Sets of tools distributed - Guarantee/risk fund is established - Credit line is established | <ul style="list-style-type: none"> - Annual reports - M&E - MTR - Supervision missions | <ul style="list-style-type: none"> - Services providers, especially NGOs, accept and comply with requirement to submit detailed reports and accounts - National roads maintenance fund will cover the roads improved through the programme - The existing resources of financial partners are adequate to meet short-term credit needs, but might not be enough for medium-term credit |



FLOW OF FUNDS



Notes:

- (a) Suppliers paid from Special Account;
- (b) Programme Account for local counterpart funds;
- (c) Disbursement based on annual work programme, budget, and associated implementation contracts.

CÔUTS ET FINANCEMENT

Dépenses par composantes – y compris provisions pour aléas
(USD '000)

| | Productivité des racines et tubercules | Transformation et commercialisation | Institutions de base | Organisation et gestion | Total |
|--|--|-------------------------------------|----------------------|-------------------------|----------|
| I. Coûts d'investissement | | | | | |
| A. Construction | | | | | |
| Pistes de désenclavement | - | - | 2 568.9 | - | 2 568.9 |
| Bâtiments administratifs | - | - | - | 206.6 | 206.6 |
| Sous-total | - | - | 2 568.9 | 206.6 | 2 775.5 |
| B. Moyens de transport et équipements | | | | | |
| Moyens de transport | 221.2 | 201.2 | 487.6 | 457.3 | 1 367.3 |
| Équipements | 355.1 | 41.7 | 6.9 | 192.9 | 596.7 |
| Sous-total | 576.4 | 242.8 | 494.5 | 650.2 | 1 963.9 |
| C. Assistance technique | | | | | |
| Assistance technique internationale | 164.9 | 145.6 | 64.8 | 215.7 | 591.0 |
| Assistance technique nationale | - | - | - | 103.0 | 103.0 |
| Sous-total | 164.9 | 145.6 | 64.8 | 318.7 | 694.0 |
| D. Etudes et formation | | | | | |
| Études | - | 106.1 | - | 467.6 | 573.6 |
| Formation | 208.7 | 62.4 | 1 593.8 | 200.2 | 2 065.2 |
| Sous-total | 208.7 | 168.5 | 1 593.8 | 667.8 | 2 638.8 |
| E. Contrat prestation de services | 2 424.6 | 537.0 | 2 443.8 | 280.5 | 5 685.9 |
| F. Intrants agricoles | 517.7 | - | - | - | 517.7 |
| G. Fonds de garantie/risque et provision pour crédit | - | - | 1 813.3 | - | 1 813.3 |
| H. Fonds d'investissement villageois | - | - | 714.0 | - | 714.0 |
| Total Coûts d'investissement | 3 892.3 | 1 093.9 | 9 693.2 | 2 123.8 | 16 803.2 |
| II. Dépenses renouvelables | | | | | |
| A. Salaires et indemnités | 181.7 | 92.6 | 138.4 | 970.2 | 1 383.0 |
| B. Entretien et fonctionnement | | | | | |
| Entretien des constructions | - | - | - | 29.3 | 29.3 |
| Entretien des véhicules | 162.1 | 217.0 | 91.2 | 364.3 | 834.6 |
| Entretien des équipements | 12.3 | 9.2 | 1.3 | 65.1 | 87.9 |
| Services annuels | - | - | - | 150.3 | 150.3 |
| Sous-total | 174.4 | 226.2 | 92.5 | 609.0 | 1 102.1 |
| Total Dépenses renouvelables | 356.1 | 318.8 | 230.9 | 1 579.2 | 2 485.1 |
| COÛTS TOTAL DU PROGRAMME | 4 248.4 | 1 412.7 | 9 924.1 | 3 703.1 | 19 288.3 |



**Décaissements par financeurs
(USD '000)**

| | FIDA | | BOAD | | Bénéficiaires | | Gouvernement | | Total | | For. Exch. | Local (Excl. Taxes) | Duties & Taxes |
|---|-----------------|-------------|----------------|-------------|---------------|------------|----------------|-------------|-----------------|--------------|----------------|---------------------|----------------|
| | Amount | % | Amount | % | Amount | % | Amount | % | Amount | % | | | |
| A. Genie civil | 1 816.6 | 65.5 | 542.6 | 19.6 | - | - | 416.3 | 15.0 | 2 775.5 | 14.4 | 606.8 | 1 752.4 | 416.3 |
| B. Moyens de transport et équipements | 1 211.7 | 61.7 | 361.9 | 18.4 | - | - | 390.3 | 19.9 | 1 963.9 | 10.2 | 1 364.8 | 208.8 | 390.3 |
| C. Assistance technique | | | | | | | | | | | | | |
| Assistance technique internationale | 438.1 | 74.1 | 130.9 | 22.1 | - | - | 22.0 | 3.7 | 591.0 | 3.1 | 444.2 | 124.7 | 22.0 |
| Assistance technique nationale | 72.3 | 70.2 | 21.6 | 21.0 | - | - | 9.1 | 8.8 | 103.0 | 0.5 | - | 93.9 | 9.1 |
| Sous-total | 510.4 | 73.5 | 152.5 | 22.0 | - | - | 31.1 | 4.5 | 694.0 | 3.6 | 444.2 | 218.6 | 31.1 |
| D. Contrats prestation de services | 3 721.4 | 65.5 | 1 111.6 | 19.6 | - | - | 852.9 | 15.0 | 5 685.9 | 29.5 | 498.1 | 4 334.9 | 852.9 |
| E. Etudes | 375.4 | 65.5 | 112.1 | 19.6 | - | - | 86.0 | 15.0 | 573.6 | 3.0 | 53.0 | 434.5 | 86.0 |
| F. Formation | 1 574.1 | 76.2 | 470.2 | 22.8 | - | - | 20.9 | 1.0 | 2 065.2 | 10.7 | 392.6 | 1 651.7 | 20.9 |
| G. Intrants agricoles | 398.7 | 77.0 | 119.1 | 23.0 | - | - | 0.0 | - | 517.7 | 2.7 | - | 517.7 | - |
| H. Fonds de garantie/risque | 626.3 | 77.0 | 187.1 | 23.0 | - | - | - | - | 813.3 | 4.2 | - | 813.3 | - |
| I. Provision pour crédit | 770.0 | 77.0 | 230.0 | 23.0 | - | - | 0.0 | - | 1 000.0 | 5.2 | - | 1 000.0 | - |
| J. Fonds d'investissement communautaire | 499.8 | 70.0 | 142.8 | 20.0 | 71.4 | 10.0 | -0.0 | -0.0 | 714.0 | 3.7 | - | 714.0 | - |
| K. Salaires additionnels | 732.3 | 62.0 | 212.6 | 18.0 | - | - | 236.2 | 20.0 | 1 181.1 | 6.1 | - | 1 181.1 | - |
| L. Indemnités | 155.4 | 77.0 | 46.4 | 23.0 | - | - | 0.0 | - | 201.9 | 1.0 | - | 201.9 | - |
| M. Fonctionnement | 721.3 | 65.5 | 215.5 | 19.6 | - | - | 165.3 | 15.0 | 1 102.1 | 5.7 | 476.7 | 460.1 | 165.3 |
| Total | 13 113.4 | 68.0 | 3 904.4 | 20.2 | 71.4 | 0.4 | 2 199.1 | 11.4 | 19 288.3 | 100.0 | 3 836.2 | 13 489.2 | 1 962.9 |





ORGANIZATION AND MANAGEMENT

Background and Implementation Strategy

1. The proposals for organization and management take account of: (i) the Government's priorities and policies; (ii) the experience of previous IFAD-financed projects in the country; (iii) the programme's emphasis on helping IFAD's target group to take advantage of the opportunities that will be created through Government's efforts to develop cassava as a major export crop; and (iv) the programme's implementation strategy, which emphasizes genuine beneficiary participation for design, implementation and M&E.

2. Government policy documents and action plans on development recognize that poverty can be alleviated by promoting the private sector, including and especially producers' organizations, and by fostering greater participation by women and civil society (e.g. NGOs, groups, associations and communities) in local development. Indeed, the ongoing decentralization process is designed to enhance grass-roots participation in initiating and managing local development. Recommendations focus on the comparative advantages of the private sector, especially NGOs, as facilitators of local capacity building as they have often demonstrated a greater capacity to "see" the more vulnerable categories of the population, providing them with the services and support (information, sensitization and training, technical and managerial advice, etc.) they need to organize themselves and consolidate their groups and associations.

3. The first four IFAD projects in Benin were implemented by the decentralized arms of MDR, namely, the CARDER at the departmental level. However, their performances were characterized by a lack of responsiveness to IFAD's target group, weak management, poor reporting, failure to use M&E findings, and a general reluctance to contract out any work to organizations or partners better qualified to deliver the required goods and services. Although the CARDER are nominally autonomous bodies within MDR, they often faced budget problems that not only delayed implementation but were often resolved by drawing on project funds. For these reasons, IFAD decided that field activities under PAGER and PROMIC would be carried out by contracted services providers (small- and medium-scale enterprises, consulting firms, NGOs, government agencies with proven capabilities and individuals).

4. The overall organization and management of the programme has been designed with a view to meeting the following specific objectives:

- (a) reducing coordinating costs and enhancing efficiency by: (i) limiting the numbers of directly employed staff, recruiting them after open competitive tender; (ii) engaging them on an annually renewable contractual basis; (iii) making contract renewals subject to annual performance evaluations; (iv) introducing modern management methods and tools; and (v) ensuring that groups and village organizations are empowered through active participation in planning exercises, and implementation;
- (b) reducing implementation costs by: (i) stimulating competition between potential services providers through the organization of open competitive tender, including a pre-qualification phase for which candidates are provided detailed information on the terms of reference and performance-evaluation criteria that will be applied; (ii) signing annual contracts with detailed specifications with regard to the quality and delivery of services, deadlines, etc.; and (iii) hiring outside expertise, as and when necessary, to focus on critically important fields; and



- (c) recommending flexibility and responsiveness to the needs and requests of beneficiaries.

5. In line with the above implementation strategy, the organizational structure proposed for the programme comprises the following levels of responsibility (see organization chart in Appendix VI):

- (a) a supervision level, represented by steering committees at the national and department levels;
- (b) a management level, with a PMU at Cotonou and regional coordination offices at Parakou and Abomey-Bohicon;
- (c) an implementation level, represented by services providers (NGOs, consultants) and partners (e.g. projects and line departments with ongoing complementary activities) contracted by the PMU to carry out the field work with beneficiary groups and villagers;
- (d) a policy-making and lobbying body, the Interprofessional Committee on Roots and Tubers; and
- (e) village-level capabilities to provide essential training and assistance.

6. An Interprofessional Committee on Roots and Tubers will be established to collaborate in policy-making and represent the commercial operators in the national thrust towards developing cassava as an exportable commodity. This body is tentatively defined as being chaired by MRD, with two representatives of MRD (from research-extension and the Produce Price Stabilization Board); one representative each from the Ministries of Commerce, Small/Medium Enterprises and Industries, and Planning and Finance; and two representatives each from the organizations of producers, processors and traders. Occupancy of the chair by an elected president is envisaged. It is felt that the policy-making and lobbying functions should also be separated, with the latter giving rise to independent associations representing the private sector. It is proposed that the programme assure the technical secretariat of the committee for about four years, during which time it can acquire the needed skills and financial resources.

7. A national steering committee (NSC) chaired by the Minister for Rural Development (or his representative) will be established, with elected representatives from the beneficiary organizations (farmers, processors, traders, local authorities) and representatives from the other stakeholders (services providers and partners, including NGOs, private companies and line departments). The NSC will have a consultative role. As a focal point for constructive dialogue between MDR and the stakeholders, its main functions will be to: (i) review and comment on the draft AWP/B prior to finalization and submission to BOAD and IFAD for approval; (ii) review the progress reports with a view to ensuring that the programme's objectives are being pursued; (iii) make recommendations for improvement and advise on matters beyond the competence of the PMU; and (iv) deal with any other matter that may justify its intervention. The same roles and functions will be assured by steering committees at the regional level.

8. Efficiency and flexibility of PMU operations will be assured by giving it full financial and administrative autonomy in the framework of the AWP/Bs. Its main tasks will be to: (i) translate programme design documents into detailed instructions, manuals and plans; (ii) recruit and sign contracts with services providers and partners, and guide/coordinate their inputs; (iii) prepare the AWP/B as envisaged in the design documents; (iv) coordinate programme activities with those of other projects/programmes; (v) manage the proceeds of the IFAD loan and counterpart funds and prepare reimbursement claims; (vi) keep accurate accounts and put in place effective mechanisms for financial and management control and internal M&E; (vii) prepare semestrial and annual progress



reports; and (viii) generally assure the proper and efficient implementation of the programme. The PMU will be a small team of highly-qualified and motivated staff working from a national head office at Cotonou and two regional offices at Parakou and Abomey-Bohicon for the northern and southern regions, respectively.

9. The PMU headquarters will have a coordinator, a financial controller, an administrator assisted by an accountant, an M&E officer with an assistant, three staff in charge of specific components (support to production, support to processing and marketing, and support to local institutions), and adequate support staff. The headquarters will be located in premises constructed on the site where PAGER is at present raising its offices.

10. Each regional branch will have a regional coordinator assisted by a deputy in charge of support to production, as well as an accountant and adequate support staff. The branches will be charged with responsibility for coordinating and backstopping duties with regard to the contracted services providers and partners, and for establishing and maintaining close collaborative relations with relevant public and private-sector stakeholders (CARDER, projects, NGOs, R&D institutions) as well as with ongoing IFAD projects. During the programme's start-up, they will visit the villages that send applications for programme's assistance to provide information and clarifications on the latter's objectives, components and strategy, and on the rights and duties of beneficiaries and their villages. They will return periodically to ensure that these principles are being respected by the implementers. The northern branch will be located at Parakou, on the site where PROMIC will build its offices. The Government will provide an appropriate site for the southern branch at Abomey-Bohicon.

11. All PMU professionals, including the coordinator, will be recruited through open competitive procedures approved by IFAD and engaged on annually-renewable contracts. Preference will be given to candidates with strong management and communication skills, and a business-oriented profile. Gender balance will also be a criterion for evaluating the tenders from prospective services providers and partners.

Programme Management

12. **Annual work programme and budget.** Programme activities will be carried out as envisaged by AWP/Bs to be drawn up by the PMU. A draft based on inputs from all stakeholders, and especially the beneficiaries, will be finalized by the coordinator and submitted to the NSC for approval and comment, and subsequently to IFAD. The format of the AWP/Bs will reflect the content of the logical framework (objectives/results/inputs/activities) and provide details on: (i) the achievements and problems of the previous year; (ii) objectives by component; (iii) descriptions of the activities to be carried out, indicating the quantities, unit costs, financial and human resources, etc.; (iv) a budget broken down by component and subcomponent, by financier and by trimester; (v) the procurement plan; and (vi) monthly activity schedules.

13. **Management procedures.** The PMU will have full financial and administrative autonomy within the framework of the approved AWP/B. A programme implementation and management manual (PIMM) will guide programme staff in their day-to-day management tasks, and will be improved and updated on a regular basis. The programme's accounts will be audited annually by an internationally- and locally-recognized audit firm recruited through ICB and approved by IFAD. The audit firm will also provide support to the financial controller and the coordinator in implementing and consolidating the financial and management control system.

14. **Implementation.** The seven-year programme will be implemented in three phases as follows:

- (a) a start-up phase in PY 1, dedicated to the recruitment and training of staff and services providers, construction of premises, purchases of vehicles and equipment, organization of the start-up and planning workshops, and a series of essential studies (production and



consumption of R&T, market studies, baseline survey). During this phase, the demand for programme support will be awakened by launching an information campaign to inform the general public about the programme, its objectives, its target group and its procedures, beneficiary obligations, etc. Interested communities will complete a form that provides useful data for shortlisting purposes. Final selection will be conditioned by the results of participatory diagnostic studies, some of which will be carried out during this phase;

- (b) a two-year pilot phase (PY 2 and PY 3), during which participatory diagnostic and planning work will be carried out in up to 164 villages (96 in PY 2 and 72 in PY 3), followed by implementation and participatory M&E; an MTR will draw useful lessons for fine-tuning programme targets and design for the remaining four years; and
- (c) a four-year full-development phase (PY 4 to PY 7), during which an additional 244 villages will enter the programme. A process of disengagement will be initiated in PY 7.

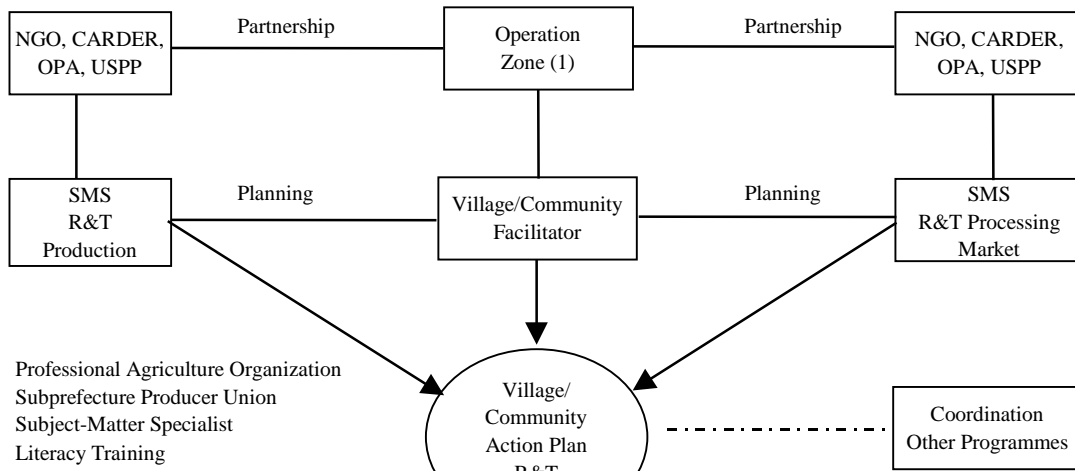
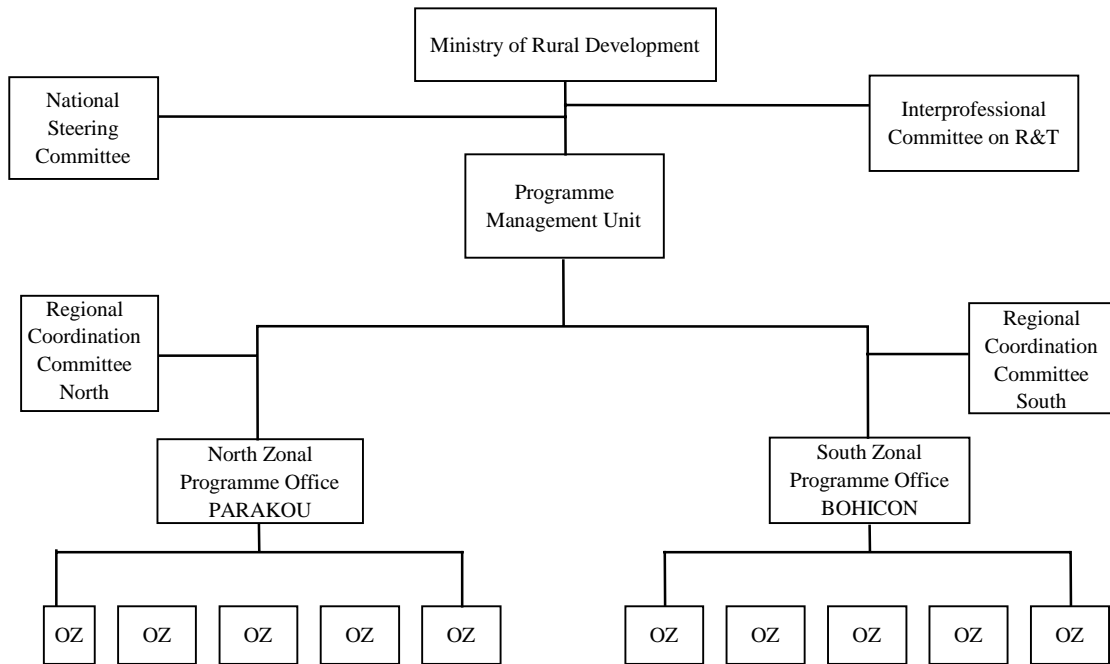
15. **Monitoring and evaluation.** As the programme will rely on contracted services providers and partners to carry out the field work, monitoring of the latter's activities and performances will be of paramount importance. The design of the M&E system, including linkages with the M&E systems of relevant projects and government bodies, and the selection of indicators for delivery control, outputs and outcomes, will be finalized by a specialist after the start-up and programming workshops in PY 1. The information needed for evaluating performances and renewing contracts will be taken from regular reports prepared by all stakeholders, the credibility of which will be spot-checked by PMU staff, especially the regional coordinators, and participatory M&E exercises. The contracts signed with the services providers and partners will specify: (i) timetables for the delivery of goods and services to beneficiaries; (ii) unit costs and quantities; (iii) logistics arrangements to be assured by the PMU and by the contractee, respectively; (iv) delivery indicators (number of groups and memberships by gender and type of activity; days of training by type and gender; number and type of equipment purchased; number and type of loans enabled; follow-up of repayment performances; follow-up of village-level training activities; participatory M&E sessions, etc.); (v) impact indicators (e.g. yields and output increases, size and disposal of incremental incomes, use made of savings of time, land and labour, other proxy indicators of quality-of-life improvements, etc.).

16. **Accounting.** The Programme's accounting systems will be designed to permit full budgetary and cost-accounting control, with the information disaggregated by financiers, by component, by disbursement category and by region, as needed by the end-users (namely PMU, BOAD, IFAD, the Government). The terms of reference and the design of the computerized accounting system and the M&E system will be defined by expeditors financed through IFAD's Special Operations Facility (SOF), whose draft designs will be finalised in PY 1, immediately after loan effectiveness, and using loan funds earmarked for the development of the management systems for the programme. Working relationships between the different stakeholders will be detailed in a PIMM (paragraph 14) prepared before start-up (SOF funding) and finalized after the start-up and programming workshops.

17. **Reporting.** The programme coordinator will be responsible for reporting, using inputs from the three-monthly reports by services providers, partners and regional branches, and the minutes of periodic and annual village- and group-level participatory M&E exercises. Failure to produce the required reports will be a cause for withholding payment, and even termination of contract. Drafts of the six-monthly and annual reports will be prepared by the M&E officer, in a manner that reflects the M&E indicators laid down in the logical framework. The financial controller will provide drafts of the sections on financial and management matters. Tables of aggregated data from the reports of stakeholders and participatory M&E exercises will be included. The six-monthly and annual reports must be distributed to members of the NSC at least three weeks before the latter is called to meeting.

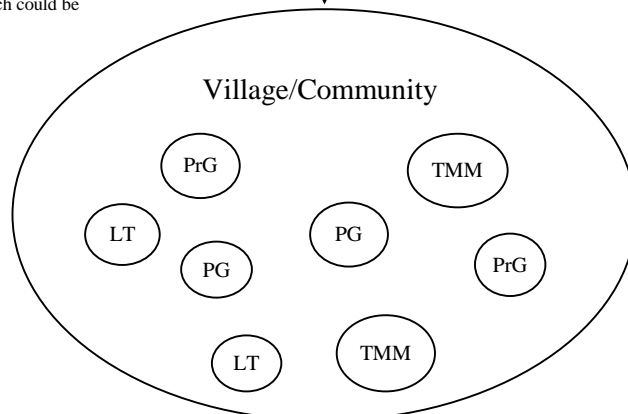


Organizational Chart



- OPA: Professional Agriculture Organization
- USPP: Subprefecture Producer Union
- SMS: Subject-Matter Specialist
- LT: Literacy Training
- PG: Producer Group
- TMM: Trainer Management and Microfinance
- PrG: Processing Group

(1) Run by provider of services which could be NGO, CARDER, OPA or USPP





ECONOMIC AND FINANCIAL ANALYSIS

Financial Analysis

- 1. Marketing and prices.** Apart from cotton, all agricultural input and output prices are freely determined by market forces in Benin. The financial prices used to value incremental production are the market prices as of November 1999. The risk of adverse impact on market prices is addressed in several ways: (i) efforts to promote production increases will be undertaken with a close eye to markets; (ii) the introduction of improved technologies will increase incomes essentially by reducing in-field production costs by 30-52%; (iii) construction of storage facilities at the village level, timely diffusion of information on markets and prices through the media, and training of beneficiaries in negotiation skills will help smooth out seasonal price fluctuations; and (iv) farmer and processing groups will have access to trained local expertise to assist in interpreting markets information.
- 2. Farm models.** The financial analysis is based on four models, i.e. one for each agro-ecological zone. It is anticipated that: (i) yam will be monocropped and cassava will be planted with maize or sorghum; (ii) farmers will apply improved soil fertility management and agroforestry measures to up to 0.5 ha each; (iii) production of cassava per unit land and labour will double over the space of six years and that of yam will increase by 80%; (iv) firewood will become a saleable commodity at the local level (e.g. to *gari*-processing groups). All but one of the crop models will boost incremental incomes by over 100%, with a maximum of 225% being foreseeable in the Central Cotton-Growing Zone, where 47% of the population is classed as poor or vulnerable to poverty. The single exception refers to yam-growing in the same zone, which foresees a 94% increase in income.
- 3.** The yields adopted as the basis for financial and economic analysis are significantly lower than those achieved on research stations. Account is taken of the incremental outputs of maize and firewood, but not of crops that will likely be planted after cassava, to take advantage of residual fertilizer, as already done by cotton growers. Cassava is currently planted the last year before the land is turned to fallow. Further, no account is taken of reductions of post-harvest losses, which currently amount to 10% for cassava and over 30% for yam; and it is assumed that only part of the incremental output of R&T will be processed by the groups benefiting directly from the programme, the rest being sold to other processors or traders, or self-consumed. The analyses can thus be considered very prudent.
- 4. Processing models.** Financial analysis was done for two qualities of cassava-based *gari*, as well as for yam and cassava chips. All products aim at domestic and especially regional markets for human consumption. The assumptions are that: (i) local processing of R&T has real comparative advantages over industrial or even semi-industrial processing due to savings in transport costs; (ii) local processing capacity is a major bottleneck to the production of cassava, which must be treated within three to five days after lifting; (iii) the main advantages of mechanization concern the increase in throughput capacity (from 75 kg per day to 200 kg per hour) and the alleviation of the most laborious stages (grating and extraction). Indeed, as the cost of raw materials represents 70% of total production costs, incremental incomes will be modest at XOF 32 000 per year per woman (account taken of equipment depreciation), rising to XOF 37 000 per year if 15% of the reduction in in-field costs is transferred to the processing group in terms of reduced cost of raw materials.
- 5. Incremental production.** Incremental annual outputs will be achieved mainly by reducing unit requirements of land and labour through the introduction of improved planting materials and cropping practices in the framework of a farming-systems approach that starts with improved soil fertility management practices. The following table presents the estimates of incremental output for almost 15 000 beneficiary farmers (1 224 groups of up to 12 members each).

Incremental Annual Production (indicative)

| | Total Output (tonnes) | | Incremental Output | |
|-----------------|-----------------------|----------------|--------------------|-----|
| | Without Programme | With Programme | Tonnes | % |
| Cassava | 167 670 | 335 340 | 167 670 | 100 |
| Yam | 84 310 | 151 758 | 67 448 | 80 |
| Maize | 23 230 | 32 284 | 9 054 | 39 |
| Firewood | --- | 16 848 | 16 848 | --- |

Economic Analysis

6. Programme benefits are both tangible and intangible. The tangible benefits will include: (i) a significant rise in farmers' incomes, due to a doubling of R&T production associated with significant reductions (by 50%) of unit production costs; (ii) a satisfactory rise in incomes from processing, due to a doubling of the absorption capacity of local women and better prices as a result of enhanced bargaining power and competitiveness on domestic and regional markets; and (iii) enhanced access to locally-based providers of advisory services. By PY 7, a total of almost 15 000 farmers and 10 000 women processors, as well as 1 600 young literates living in 408 villages, will have benefited directly from the programme. Soil fertility management and environmentally-sound cropping practices will have been introduced on up to 32 400 ha of land, much of which is very degraded.

7. The intangible benefits will include: (i) a major contribution to the sustainability of agriculture through the introduction of practices that require less land and labour; (ii) enhanced capacity of local institutions (both groups and community leaderships) to undertake and sustain their own development, starting with R&T production but expanding rapidly to other realms; and (iii) economic and social empowerment of women through enhanced access to information and knowledge through training in literacy, as well as technical and managerial skills.

8. The economic analysis covers a 20-year period. All prices are expressed in constant November 1997 values. All investment costs have been considered, including training and technical assistance, road rehabilitation, community infrastructure and credit. The assumption that yields per hectare will double is credible in view of the extremely low level of current yields on traditionally-farmed fields using unimproved varieties.

9. **Economic rate of return.** Based solely on incremental agricultural production, the ERR is estimated at 14%. Sensitivity analyses show it to be extremely robust.

Sensitivity Analysis

| Assumptions | ERR (%) |
|---|---------|
| Base case | 14.0 |
| 10% increase in costs | 13.0 |
| 10% decrease in benefits | 12.8 |
| Costs up by 10% and benefits down by 10% | 11.8 |
| Benefits down by 25% | 10.9 |
| Benefits down by 50% | 6.5 |