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RWANDA DAP SUBSTITUTE

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SUMMARY

Rwanda is one of the two or three poorest countries in the world. Designated by the United Nations as one of the countries to receive special consideration from international donors, Rwanda's economy would deteriorate rapidly without external economic assistance. The absence of any exploitable mineral resources, limited arable land, difficult access to the sea, an acute shortage of administrative and technical capacity and rapid growth of an already too large population have combined with other human and natural constraints to sharply limit prospects for the country's economic development. Despite strenuous efforts of the present government to mobilize effectively the available resources, both indigenous and foreign, the inexorable growth of the population is likely to bring about a gradual deterioration in the already-low quality of life for the average Rwandan over the next two decades. Nonetheless, foreign assistance contributions which are expected to average about $25 to 30 million per year should permit some marked improvements in the economic infrastructure of the country, while enabling the Government of Rwanda (GOR) to cope with the day to day demands of its struggling economy.

In this context, the US contribution to Rwanda should provide economic assistance at a level which will confirm the interest of the US in the development efforts of the GOR. At the same time, we can demonstrate support for a serious minded government whose moderate stance on international issues stands in some contrast to her more radical neighbors. The preeminent roles of Belgium, the European Development Fund (FED) and the international agencies and institutions in promoting Rwanda's economic development would continue to be acknowledged and encouraged.

The US efforts would be directed toward the agricultural sector with particular emphasis on activities which can serve as catalysts for other programs, or to create necessary linkages between key projects. A level of about $500,000 per year is considered sufficient to accomplish these objectives.

Specifically, it is proposed that AID implement the four projects now planned for FY 1975 (Food Storage and Marketing, the Catholic Relief Services project for the reduction of food waste, rehabilitation of the Kigali water treatment plant and the training of Rwandan participants), and that projects providing for the preservation of important watershed areas and for seed multiplication activities be designed for FY 1976. In FY 1977 and beyond, projects now just getting underway/through the sponsorship of other donors will have progressed far enough to warrant US budgetary support for the GOR through an agricultural sector grant. Such support will enable the Rwandans to fulfill commitments to projects funded by other donors and to enhance them with programs of their own. Together with the monetary contribution, the US would provide planning assistance and access to US expertise in those disciplines in which the US has a comparative advantage.

A. Setting

Rwanda is a small, land-locked country bordered by Uganda, Tanzania, Burundi and Zaire. In area it is about the size of the state of Maryland. The country rises from rolling plains in the east, passes through a hilly plateau area in the center averaging 6,000 feet, to mountainous areas in the west and north. Rainfall is generally ample and soils are good with about 70 percent of the land area suitable for cultivation or raising livestock. There are no known mineral resources.

Rwanda's population is slightly over four million and is growing at an estimated three percent per year. It is the most densely populated country on the continent of Africa with an average density of about 400 persons per square mile, over 90 percent of whom live in the rural areas on individual farms, not in villages. This intense pressure on the land makes famine a constant threat and malnutrition is considered to be the major health problem. Only about 25 percent of the population over 15 years of age is literate.

Ninety percent of Rwanda's population belong to the Hutu tribe, who until 1959 were subject to the Tutsis. The Tutsis established a semi-feudal system based on kingship and virtual Hutu serfdom nearly 600 years ago and ruled in that fashion until they were overthrown by the Hutus in 1959. Subsequently, the Hutu party won a UN supervised referendum in 1961, and formed the Government which was to lead them to independence from Belgium in July 1962. (Belgium had been appointed by the UN to be the administering authority in Rwanda following World Was II.) The government in place at the time of independence held power until mid-1973, when increasing corruption and regional, ethnic and ideological differences resulted in a military coup led by Major General Juvenal Habyarimana. The Habyarimana Government has dissolved the National Assembly and abolished political activity. The Government is run through a military Committee for Peace and National Unity. Some initial efforts are underway to reintroduce elections at the communal level.

B. The Economy

In Rwanda, agriculture for all practical purposes is the economy. Every economic activity (except mining) in the country is dependent on, or related directly to the success or failure of agriculture. Consequently, in this paper, the economy and the agricultural sector are considered to be virtually synonomous, with the advantages, constraints, prospects, etc., for both being largely identical.

1. Present Economic Situation

Per capita income in Rwanda was estimated in 1973 at $63, which is among the lowest in the world. The Gross Domestic Product (GDP) of $245 million was composed of 63 percent from agriculture (down from 76 percent in 1964), 25 percent (up from 16 percent in 1964) from tertiary activities, including government services, and small percentages from mining and manufacturing. The contribution

of non-monitized or subsistence activities was still over 40 percent of GDP in 1972. Capital investment, which reached about 10 percent of GDP in 1973, has been financed primarily by foreign assistance because national savings have remained at a very low level (three percent). Since independence, recurrent expenditures have exceeded recurrent revenues by about 10 percent in every year except 1970 when a surplus was realized. All deficits and any contributions to the development budget have been financed by borrowing from the banking system or from the Office des Cultures Industrielles du Rwanda (OCIR), Rwanda's coffee marketing organization. The GOR's development budget was only $3.7 million in fiscal 1974, but it does not reflect foreign assistance funds which are provided for capital investment.

Rwanda has not experienced balance of payments difficulties since the devaluation of the Rwanda franc in 1966. The bulk of foreign exchange is earned through the export of Arabica coffee which has accounted for half to two-thirds of total exports in recent years. Exports of cassiterite (tin oxide) and wolfram (tungsten ore), tea and pyrethrum account for the remainder. Imports have exceeded exports throughout the post-independence period, but the trade deficit has been offset by transfers and capital inflows.

2. Development Projections

(a) Priorities. Following independence, the GOR prepared a five-year Interim Emergency Plan for the period 1966-1970 (later extended to 1972). The Interim Plan stressed infrastructure development, education and the diversification of agricultural exports and projected a GDP growth rate of five percent per annum. The projected growth rate was achieved although public and private investment from domestic and foreign sources was only two-thirds of the amount targeted. A second Five Year Plan (1972-1976) was completed in early 1973, but it was rejected following the coup of July 1973 as being too ambitious and not sufficiently oriented toward rural development. A truncated plan (1974-1976) prepared in early 1974 was rejected for similar reasons. Consequently, the Ministry of Planning and Natural Resources has prepared a "plan of action" for 1975 together with an outline of the third plan for the period 1976-1981. The third plan should be completed and approved by late 1975 or early 1976.

The third plan, which apparently will reflect IBRD recommendations for an "integrated and balanced" development strategy1/, is expected to give highest priority to food crop and cash crop production within the context of programs aimed at integrated rural development. Emphasis is also likely to be placed on further development of agricultural processing and consumer goods industries.

1/ See IBRD "Recent Economic Development and Prospects of Rwanda" July 24, 1974, Volume 1, p. 30.

The content of education programs will depend on the outcome of the current controversy over the proposed reform of education (discussed below). Health services will probably be expanded with greater stress to be placed on nutrition and preventive health care in general.

(b) Constraints. Rwanda faces a series of severe constraints to achievement of its development objectives. Overpopulation, geographical isolation, absorptive capacity limitations and inadequacy of financial resources are some of the most significant. Specifically,

- Population pressures have pushed the Rwandans to exploit nearly every available hectare of cultivable land, causing serious encroachment into vital watershed areas and posing long term problems of soil erosion and exhaustion. In some circles it is believed that emigration in the near future of up to 40,000 people a year from Rwanda into neighboring countries may be the only logical solution. Even if population control programs were introduced tomorrow, little improvement could be expected before the end of the century when the present population will have grown to about seven million.

- Situated nearly 1,100 miles from the most accessible port, Rwanda's contacts with the world are necessarily limited and the simple cost of transportation of things adds enormously to the cost of development. Fortunately, the sharp rise of petroleum prices has had less effect in Rwanda than in most countries because of the modest scale of development. But, as such activity expands, a disproportionate share of Rwanda's resources will have to be diverted to pay increased shipping costs. (AID's emergency food shipment will cost about $160 a ton to transport it from Mombasa, Kenya to Kigali.)

- Trained and experienced indigenous manpower has been in acutely short supply since independence which sharply curtails the absorptive capacity of the Rwandan economy. This shortage came about in part because most of the skilled Tutsi administrators and technicians were killed or expelled during the Hutu revolution. Primarily, however, the problem is lack of training, particularly on the middle and lower levels. Candidates tend to be poorly prepared and practical experience is lacking.

- Financial resources, paradoxically, are more readily available abroad than at home. This fact is reflected in the primary role foreign donors play in Rwanda's capital development. Under the first Five Year Plan, for example, investment from external resources came much closer to meeting investment targets than did investment from internal resources (64 percent versus 47 percent), even though external resources were expected to cover over 80 percent of total investment. Given Rwanda's low per capita income, and the fact that non-monetized production still accounts for about 40 percent of total output, the shortage of domestic resources will continue to hamper Rwanda's development.

(c) Prospects. In spite of the severity of the problems Rwanda faces, the prospects for a reasonable rate of growth under the third plan, and relatively equitable distribution of the benefits of growth appear to be fairly good. In pursuing an "integrated and balanced" development strategy Rwanda possesses a number of assets, including small size, fair communications, relative ecological homogeneity, a high degree of ethnic and linguistic unity, and generally fertile soil and adequate rainfall. Moreover, there appears to be a recognition within the Rwandan government of the severity of the country's development problems and a willingness to adopt the measures necessary to deal with them.

However, this willingness does not include any kind of population control programs. Some preliminary thought has been given to this subject by the GOR, but emigration is considered the most logical possible solution.

There is some hope that Rwanda's absorptive capacity will expand appreciably in the few years ahead as large numbers of Rwandans now completing university studies in Rwanda or abroad become available.2/ While demand for trained middle and lower-level personnel will probably continue to exceed supply for some time, particularly in agriculture, where lower level output is far below requirements, the relatively shorter training periods required at these levels should mean these shortages can be met within a reasonable period if additional or expanded training facilities are provided.

As for financial resources, it is unlikely the GOR will be able to generate significant recurrent budget surpluses during the present decade. However, domestic savings should increase as a percentage of the GDP permitting continued non-inflationary borrowing to finance the development budget, as well as increased private sector investment from domestic resources. In addition, if world prices for Rwanda's major exports remain favorable and if aid donors continue to take a particular interest in Rwanda, sufficient financial resources may be available to support Rwanda's development plans. At present the prospects appear good for continued favorable prices for coffee and pyrethrum. Continued substantial aid from existing donors is also anticipated.

In light of the above, and allowing for some deterioration in Rwanda's terms of trade, the IBRD has projected: a 4.5 percent GDP growth through the end of the decade, an increase in both the investment and savings ratios (to 15 percent and 9 percent respectively), and roughly a doubling of the need for capital assistance from an estimated gross inflow of $15 million in 1973. The projections assume that all capital assistance will be provided on grant or IDA terms, and that Rwanda's debt service ratio would not rise above

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2/ IBRD, op. cit., Volume 2, Annex 3

three percent. 3/

C. Agriculture in Rwanda

As noted above, agriculture is so pervasive in Rwanda that it is an intrinsic element in the consideration of any economic or social question in the country. Improvements in the transportation sector are directly related to the easier movement of agricultural goods to market; the revised curriculum being considered for the schools is predicated on the preeminent place of agriculture; manufacturing is geared to the processing of agricultural crops; and even health programs are dependent on access to and education of the farmers.

The agricultural sector 4/ provides a livelihood for about 93 percent of the population and accounts for 63 percent of the GDP (another 25 percent of the GDP is derived from tertiary activities largely comprised of government services devoted primarily to administering or implementing agriculturally related programs), which serves to confirm agriculture's overwhelming importance.

1. Government Policy. From 1968-1972 current expenditures of the Ministry of Agriculture rose from 4.5 percent to 5 percent of total government recurrent costs. During the same period nearly 30 percent of total public investment went into agriculture with foreign donors providing the bulk of Rwanda's development budget. Only 4.2 percent of the country's budget was earmarked for this purpose.

While these figures are unimpressive as indicators of the GOR's interest, there is evidence that agriculture will receive increased emphasis in the future. The 1973 and 1974 recurrent budgets reflect only a continuation of the five percent share for agriculture but this represents an increase in absolute terms.

Hopefully, declarations by the President that 1975 is "The Year of Increased Production," portend a significant increase in the resources to be made available to agriculture in the Third Development Plan.

2. Characteristics of the Sector.

(a) Production Units. Approximately 50 percent of Rwanda's total area is suitable for cultivation with about 39 percent of it cultivated. An additional 20 percent is or could be exploited through grazing. The remainder is covered by lakes, marshes, parks, sharp slopes and rocks. Over much of

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3/ IBRD, op. cit., pp. 29-35

4/ The term agricultural sector or agriculture unless otherwise indicated will include forestry and fishing as well as livestock production.

Rwanda two crops per year are grown. Population densities in Rwanda average about 400 people per square mile compared with 131 in Uganda and 49 in Kenya. Population density of agriculturally useful land in Rwanda is about 561 persons per square mile.

Family land holdings of cultivable land range from about 2 to 15 acres with variations reflecting primarily land quality with larger farms in drier, less productive areas. It is reported that there are very few large farms with most grouped closely about the average of 2.5-3 acres. Most holdings are made up of two-three or even more small plots belonging to various members of the extended family. On the paysannats or settlement schemes, settlers receive 2.5-4.0 acres for cultivation of cash and food crops, but substantial further expansions of these schemes is unlikely due to the lack of suitable land.

The absence of large land holdings is a major factor in the unusually equitable division of wealth in Rwanda where differences between the incomes of the richest and poorest farmers probably do not exceed 50 percent. About 98 percent of the cultivated land is used for the production of subsistence crops which provide over 40 percent of total GDP.

(b) Production Technology. In the food crops area, Rwandan production technology is uniformly low resulting in poor yields and quality. The hoe is the basic agricultural implement with no animal or tractor power utilized.5/ Chemical fertilizers are not used on food crops and organic wastes from animals or the household are normally applied only to the bananas surrounding the family residence. On the paysannats food crop yields are reported to be higher than national averages as a result of improved techniques and foreign assistance. This is also true for cash crops where the level of technology employed is higher. Average yields for coffee have been increasing since 1963 and are about back to pre-independence levels which approximate Kenyan smallholder yields. The Office des Cultures Industrielles du Rwanda (OCIR) assists growers by supplying insecticides and pruning equipment and by providing technical advice through its coffee extension force of about 400 persons. Tea is grown on both estate and smallholdings with good average yields. The concentration of production in a few areas where assistance is provided by FED has resulted in the introduction of improved technical practices.

(c) Importance of Crops and Livestock. Bananas are clearly the most important food crop in tonnage terms, followed, in approximate order, by sweet potatoes, cassava, sorghum, haricot beans, potatoes, peas and maize.

5/ In the entire country there are less than 100 tractors utilized for agricultural operations connected with cash crops. It is estimated that there are less than 10 tractor-drawn plows in the country.

In contribution to average caloric intake, several nutritional surveys indicate the haricot beans are the most important crop.

Major cash crops are coffee, tea, pyrethrum, cinchona and cotton. Coffee is by far the most important crop with production scattered throughout the country. In 1973 coffee exports represented approximately six percent of Rwanda's GDP or more than double the value of the other cash crop exports. However, production of both tea and pyrethrum is growing rapidly as Rwanda seeks to diversify exports.

Livestock have always played an important role in Rwanda as an indicator of prestige and worth, but adequate pasturage is lacking. Cattle numbers are increasing about five percent annually with the offtake estimated at nearly 15 percent including a substantial number exported on-the-hoof. It is estimated that the livestock industry contributes only about five percent of GDP because of the low level of animal care. Cattle in Rwanda are slow to mature, have only a 60 percent calving rate, suffer a 40 percent calf mortality and provide poor milk and meat production.

(d) Demand. Only a very small percentage of the food crop produced enters the market. In addition, the primitive marketing and storage network and narrow market results in severe price fluctuations between harvest periods and also between areas of the country. Opportunities for Rwanda to export foodstuffs are very limited due to Rwanda's geographic location and the poor quality of foods entering the market which make them unsuitable for export.

For export crops, the world market has absorbed Rwanda's production and a fairly attractive produce price has been maintained. However, the producer normally receives less than 60 percent of the export price for the major products of tea, coffee and pyrethrum.

3. Performance of the Sector

Value added in agriculture grew approximately 4.7 percent per annum from 1968-1972 compared to an overall GDP growth rate of about 6.3 percent. Food production appears to have kept pace with population growth, although it should be recalled that malnutrition is endemic and that food production is now reaching its outer limits unless advanced techniques or techology are introduced soon. Agricultural exports in value terms grew at about a 15 percent rate from 1968-73 compared to 12 percent for all exports. Coffee, the major foreign exchange earner, doubled in value during that period and spectacular growth has been registered in tea and pyrethrum exports.

The major thrust of agriculture since 1962 has been directed toward the expansion of export crops, i.e., restoring coffee production to

previous high levels and diversifying into tea and pyrethrum. Parastatal marketing organizations provide funding inputs, technical guidance, processing and marketing services, in those areas involved in export crop production. In addition, these organizations have established a number of small settlement projects, "paysannats", primarily to promote the production of cash crops. There are now about 40,000 families settled on these paysannats (about five percent of the population). Food crop production has received little attention from the GOR or from international donors with the exception of import substitution crops such as wheat, rice, sugar cane and oilseeds, and it has only been the cultivation of new land which enabled food supplies to keep pace with population growth through 1973. The country's livestock population increased to about 1,500,000 in 1972 including 750,000 cattle, 200,000 sheep, 500,000 goats and 50,000 pigs. These increasing numbers have contributed further to over-grazing and deterioration of available grazing and pasture land since there has been no provision for improved feeding or marketing. Livestock is a significant element in Rwanda's economy, but the competition for limited pasture land can only increase as the population expands.

4. Institutions Servicing Agriculture

(a) Ministry of Agriculture and Livestock

The primary organization servicing agriculture is the Ministry of Agriculture and Livestock which is divided into three divisions: Agriculture, Livestock and Lands. The Agricultural division comprises departments of agronomy, extension and seed selection, agriculture, water and forests, agricultural engineering and climatology, studies and settlement. The Livestock division has two departments - animal health and animal production - while the Lands division is divided into land survey, cartography and land registration. In 1973, the total staff of the Ministry was about 2,000. Less than 50 were upper level with the majority of this group expatriates paid by external assistance. Most of the lower level staff (1,600) were trained entirely on the job.

Performance of the Ministry varies from program to program and department to department. In general, its impact has been limited except in those areas or programs where substantial foreign assistance is provided. The planning capacity of the Ministry is constrained by the small budget and an inadequate staff. Salaries account for over 60 percent of budget expenditures.

(b) Institute des Sciences Agronomiques du Rwanda (ISAR).

Agricultural research activities in Rwanda are the responsibility of ISAR which is financed by Belgian bilateral aid and operates under the authority of the Ministry of Agriculture and Livestock. Nearly all of the scientific staff are expatriate. The organization has developed

improved varieties and cultural techniques for several crops and is reported to be doing a good job within staff and funding limitations.

(c) Office des Cultures Industrielles du Rwanda (OCIR)

Coffee marketing is controlled by OCIR which assists producers with technical advice provided by its 400 man extension staff, insecticides, and credit. It appears to have done an excellent job within limitations.

(d) Banque Rwandaise du Development (RDB)

The RDB has provided financing for a number of Agro-Industrial projects and is becoming more heavily involved in the agricultural sector through its role as executing agent for the USAID-funded Food Storage and Marketing Project. The RDB should serve as a possible source of funds for capital investments in the sector. However, in the forseeable future it is not likely, for staffing and other reasons, to become actively involved in small farmer agricultural credit.

(e) Cooperatives

The cooperative movement is relatively strong in Rwanda with several large national or regional organizations as well as smaller local organizations. The general problems with the cooperatives are their inadequate coverage and the lack of overall direction from the GOR on what should be the ultimate aims and objectives of the cooperatives. The cooperative movement itself suffers from a lack of trained manpower both in the cooperatives themselves and also in government organizations with cooperative responsibility.

D. Other Sectors

1. Education.

Rwanda inherited an educational system which emphasized primary schooling at the expense of secondary and higher education for Africans. Since independence the GOR has been able to redress this in part by expanding secondary enrollments and establishing a National University. At the same time they have maintained a relatively high primary school enrollment (about 60 percent of the relevant age group at the present time) of about 400,000, together with 10,000 in secondary schools, and 1,400 in higher education, including 525 studying abroad. A new and controversial concept in education, felt by some in the GOR to be particularly appropriate to countries like Rwanda, could be introduced as early as next year (with financing by the IBRD and FRG) if the GOR so decides. Hitherto, primary school graduates were coming into the job

market too young and unskilled, creating undue pressure on the job market. By delaying their start in school until children are at least nine years old, primary school graduates would be ready for jobs when they leave seven years later at about 16. At the same time, greater emphasis would be placed on training students for the agricultural economy of Rwanda. This would be accomplished through vocational as well as academic training in the primary schools.

2. Health

Rwanda's greatest single health problem is malnutrition, which directly accounts for an inordinate number of deaths in young children and contributes significantly to deaths attributable to other diseases. Medical facilities have been expanded rapidly since independence, both under government and private auspices, and compare favorably with those of other African countries.

3. Mining and Manufacturing.

Mining and manufacturing have expanded little in recent years with mining contributing but $6 million to exports in 1973. The manufacturing sector is largely confined to processing export crops and producing a few consumer goods, with the bottling of beer being the country's largest industry. In 1966, the Rwandan Development Bank was established to promote industrialization, but to date has been interested primarily in financing tea factories.

4. Internal Transport

In the past few years Rwanda has secured financing from international donors which will permit substantial improvements in its extensive but low standard road system. Several roads are now underway including connections with Uganda (IBRD), Zaire (IDA) and Tanzania (PRC). There is no railroad and air service is adequate.

5. Public Utilities

Less than one percent of the population has access to electric power which, like piped water, is available only in the urban areas. The drilling of wells and the provision of potable water is a popular element of the paysannat schemes.

6. Tourism

Tourism has potential in Rwanda, but has still not been developed to any significant degree. Net foreign exchange earnings from tourism are probably on the order of $350,000 per year at present. Unfortunately, the general decline of tourism in East Africa now being noted in Kenya is likely to be reflected by an even sharper drop in the number of tourists coming to Rwanda.

E. Rationale and General Strategy for US Assistance

1. Rationale

Economic assistance was first provided to Rwanda by the United States following Rwanda's independence in 1962. This assistance included the construction of paved streets and a water supply system in the-then-new capital of Kigali; commodities and technical assistance for the National University at Butare; and financing in support of an IMF-sponsored stabilization program. These programs were terminated in 1969, although the US has continued to provide PL-480 Title II assistance and self-help funds at a level of about $600,000 per year. The Government of Rwanda requested renewed US project assistance after 1969, but was turned down because of AID's policy of country concentration and inadequate economic justification for the projects proposed. Recently, however, AID has agreed to provide limited economic assistance to Rwanda. This decision was based on several considerations which are discussed below.

- Rwanda is perhaps the poorest of the UN's 25 relatively less-developed countries and is included in the "inner six" least-developed among the twenty five. Renewed economic assistance to Rwanda is consistent with the US commitment to the UN to direct more aid to these least-developed countries. Although Rwanda is already receiving substantial assistance from other donors, it is clear that a significantly higher level of assistance will be needed during the remainder of the decade.

- The GOR is committed to a development strategy which accords highest priority to improving the life of the small farm family through integrated rural development programs, with a particular emphasis on increased food production and improved nutrition. This strategy is fully consistent with AID assistance policies and warrants US support.

- Limited assistance in areas of proven US expertise can have a significant impact on Rwanda's ability to become self-sufficient in food and reduce her dependence on food aid. This is particularly important now in view of the uncertainty concerning future supplies of major food grains. (The US has earmarked up to 5,000 tons of emergency food assistance for Rwanda as a result of recent floods. The first increment of 2,500 tons when it is delivered in early 1975 will represent a cost to the US of over $1.0 million.)

2. General Strategy

In view of the precarious balance between population and food supplies in Rwanda, US economic assistance should concentrate on supporting those aspects of Rwanda's rural development program which aim at increasing food production. This could include soil conservation, agricultural research, seed multiplication, the supply of inputs and knowhow, marketing, and training. And, at such time as

the GOR is prepared to undertake family planning measures, the US should be prepared to provide assistance within the health sector to support programs in nutrition, maternal child health and family planning per se. AID should also be prepared to support non-food production activities directed at facilitating Rwandan development if a significant contribution can be made at relatively low cost. Such activities would include projects now under consideration such as the development of middle level and technical manpower and the rehabilitation of the Kigali Water Treatment Plan. The project proposed below for the preservation of the important watershed in the Virunga Volcanoes area would also fit into this category. Concomitant with the development of economic assistance activities in these areas the US should maintain the PL-480 Title II program at an appropriate level, continue to provide Self-help funds, and encourage the development of programs by the Peace Corps and US private voluntary organizations (PVOs).

With respect to general criteria and procedures it is important that the impact of the limited US economic assistance program be maximized by selecting activities which can be implemented quickly with a minimum of lead time with the simplest procedures possible. As a minor donor in Rwanda, the US should cooperate as closely as possible with other donors, particularly where the US can act as a catalyst or provide a unique input. The US program should permit a large element of local cost financing and all assistance should be on a grant basis.

F. Current Activities of Other Donors

1. Bilateral Donors

Belgium is the most significant contributor to Rwandan development programs, providing financial and/or technical assistance for: (a) agricultural research (20 staff and financing), (b) a regional agricultural cooperative, (c) the Seed Multiplication Organization (1 technician and financing), (d) drainage of the Nyabugogo swamp, (e) work in the Icyanga paysannat for tea and pyrethrum culture and, (f) OCIR, the coffee marketing organization. In addition, Belgium furnishes technical experts in a variety of other fields.

Switzerland is providing assistance in the development of Rwandan cooperatives and to a regional agricultural development effort. The Swiss have also been considering financing the upgrading of a key section of the main highway in western Rwanda. Germany's assistance consists of financing, technical assistance and materials for tea production, and for the Ministry of Agriculture. The People's Republic of China is managing a large irrigated rice project near Kigali. In addition, the Chinese are surfacing the road from Kigali to the Uganda border.

2. Multi-lateral Donors

The UNDP provides experts in the horticulture and fisheries fields as well as for the hides and skins industry. UN pyrethrum experts are also assigned to

the processing plant. In addition, the UN is responsive to special requirements and is providing the experts needed to coordinate the present emergency food distribution. The UNDP is proposing a $19 million program for the third planning period (up from $10 million during the second plan).

- The European Development Fund (FED) supplies substantial financial and technical assistance (12 experts in the development of the tea industry). There are also eight FED pyrethrum experts in Rwanda as well as four others for a regional development effort. One technician is assigned to the industrial crops organization (OICR).

- The World Bank is funding a regional development project in northern Rwanda focusing largely on livestock and is preparing a project to assist with coffee and cinchona production in the Lake Kivu area. IBRD ranching activities are underway in other areas and two major road projects are being financed with IDA money.

The value of donor assistance to the agricultural sector in 1972 was roughly US $6.5 million. About 120 technical assistance personnel were provided.

G. US Economic Assistance to Rwanda

1. US Role

Belgium's present leadership of the foreign development effort in Rwanda is appropriate and the growing roles of the international institutions and other bilateral donors are reasonably well defined. US assistance which will have a very low profile is being designed to fit into this context. AID has approved or is expected to approve soon, four projects totaling over $1 million. Implementation in all of these is expected to begin in FY 1975. This initial commitment to a renewed assistance program has greatly strengthened relationships between the US and Rwanda. A continuing program on a modest scale is considered to be highly desirable from both the economic development and the political points of view.

2. FY 1975 Program

Descriptions of the projects to be implemented in FY 1975 are given below. The first two have been approved, the last two are in the approval or preparation process and should be cleared for implementation by the beginning of the third quarter.

(a) Food Storage and Marketing Project. ($716,000) Project is designed to address the marketing constraint noted in Section C.2.d. above by assisting in the development of a price stabilization system for three major food crops: beans, peas and sorghum. If the project is successful the availability of food at reasonable prices should raise nutrtional levels throughout the country. The project includes the establishment of a food marketing board to provide

policy direction and an office in the Rwandan Development Bank to administer the project; the construction of eight 250-ton storage warehouses at six locations; the provision of a marketing advisor (AID) and an accounting specialist (Peace Corps); and working capital.

The Project Agreement for this project was signed in December 1974. Construction of the storage facilities should begin by June 1975 at three sites. The Swiss have indicated an interest in participating in the project beginning in FY 1976. If successful, the project could be expanded with additional AID funding in FY 1977 or FY 1978.

(b) Reduction of Food Storage Losses. ($89,000) In December 1974, AID also approved a project to be implemented by the Catholic Relief Services. This project is designed to reduce the food losses suffered because of poor on-farm storage. In the pilot phase to be initiated in 1975, AID funded silos, each with a capacity of about 10 tons, will be built in four hilltop communes (another is to be built with funds provided by an Austrian charitable organization). If these efforts are successful, additional silos will be placed in other communes in subsequent years. Operation of the silos will be in the hands of Catholic missions in the various communes with Rwandans to be trained to handle them in the near future.

(c) Rehabilitation of the Kigali Water Treatment Plant. ($50,000) The Kigali water supply system was constructed in 1967 under an AID grant. The system is inadequate to Kigali's present requirements and is no longer capable of providing high-quality water. The UNDP is currently financing a $230,000 feasibility study which should provide the basis for the improvement and expansion of the system within several years. In the meantime, the GOR has requested that AID provide up to $50,000 in FY 1975 to permit the repair of the system so the quality of the water can be brought back to acceptable standards.

(d) Participant Training. ($200,000) As noted above, Rwanda suffers from a particularly acute shortage of middle-level and technical manpower in all fields. Accordingly the GOR has requested that the US assist in providing training at these levels. The proposed participant training project would provide $100,000 in both FY 1975 and FY 1976 to train 30-40 Rwandans in appropriate programs. The training would be coordinated by the UNDP Resident Representative in Kigali, with most of it to be provided at UN or AID centers in Africa.

3. FY 1976 Projects (Proposed) Project Review Papers have been submitted for two projects considered to have particular merit. Both are designed to improve agricultural production directly or indirectly. Both are high on the list of GOR priorities.

(a) Seed Improvement and Multiplication. ($200,000) Increased production can normally be accomplished in several ways - area under cultivation can be expanded, cultural practices can be improved, additional inputs can be applied, better varieties can be used or a combination of methods employed. In Rwanda the lack of additional land, the high cost of inputs such as fertilizer and an ineffective system of teaching farmers improved practices leave the provision of improved seed as the most logical method. Given the start Rwanda has in this area, through ISAR in testing varieties for Rwandan adaptability and through the Service des Semences Selectionnees (SSS) in multipying and distributing seed, a modest additional input would likely have a significant effect. Particular attention should be on expanding current operations and incorporating new crops into the program. Particularly emphasis would be on wheat, oilseeds (soybean, peanuts, sunflower) pulses, maize and sorghum.

It is proposed that a three-year Project be funded for an FY 1976 start which would include the following: training for Rwandan technicians in appropriate areas; assistance in establishing continuing contacts with world wide research networks; short term consultants in specific areas; funding for travel of technical staff; funding for operational costs such as seed for testing purposes etc; and small amounts of required commodities.

(b) Conservation Project. ($400,000). Rwanda's Virunga Volcanoes area is the watershed for Ruhengeri Prefecture, one of Rwanda's most productive agricultural areas with a population of 450,000, and indirectly for much of northern Rwanda. Although the area has been declared a national park, the government does not yet have the means to prevent encroachment into the park by agriculturalists and by herders and their cattle. If unchecked, this encroachment will gradually destroy the fragile vegetation and soil cover, thus destroying the park's value as a watershed and as one of the last remaining areas where the nearly-extinct mountain gorilla is able to live. The GOR has requested that the US provide assistance in preserving the park. The GOR has also solicited help from other sources and has received offers of support from the International Union for Conservation of Nature; the African Wildlife Leadership Foundation; the Frankfurt Zoological Park and the National Geographic Society. The US contribution would include one or more experts in park planning and management (Peace Corps); construction of housing for park staff, shelters for visitors, paths and access roads, and barriers and boundary markers to delineate the park; training and equipping of park staff; and development of incentives (such as water and forestry development and alternative grazing schemes) to persuade the surrounding rural population not to encroach on the park.

4. Possible Activities, FY 1977 Through FY 1979. For FY 1977 and beyond, the US could provide budgetary support for the GOR's expanded rural development program, and could consider assistance related to family planning if it is appropriate. Assistance in both of these areas will be contingent upon GOR policy decisions which should be forthcoming within the next one or two years.

(a) Integrated Rural Development. (Agricultural Sector Grant) The Government of Rwanda is committed to a development strategy focussed on integrated rural development.

While the details of possible national program have not yet been worked out, integrated rural development is expected to be the basic thrust of the next plan covering the period 1976-1981. The program will probably include a heavy emphasis on increased food crop production through the provision of needed inputs, upgrading of extension services, and improved storage and marketing. Primary school enrollments are to be increased and the curriculum reoriented to make it more relevant to rural life. Health services will be expanded with emphasis on preventive health care. Rural industries and rural infrastructure development are to be encouraged through local-level participation in the planning and coordination activities carried out by the local Development Councils. AID could support the food production and possibly other components of the program by several means, including the provision of regional planning assistance for one or more of the ten prefectures (e.g. the three prefectures bordering Lake Kivu). AID could supply advisors for a planning, coordination and evaluation unit to be located in the Ministry of Agriculture or the Ministry of Planning and Natural Resources; as an element in a multi-year sector grant to finance local costs of the national rural development program.

Given the status of planning within the government, it is unlikely that any of these activities could be funded before FY 1977.

(b) Maternal/Child Health Care. AID should be prepared to consider expanded assistance for maternal/child health (and possibly nutrition and family planning) at such time as the GOR decides upon a family planning policy and initiates family planning activities. An expanded MCH or family planning effort would probably not require funding prior to FY 1978 or FY 1979.

5. Other Current US Assistance Activities

(a) PL-480- Title II. The food program for Rwanda is run by the Catholic Relief Services and will provide about $675,000 in food commodities in FY 1975. The program is directed toward preschool children, boarding schools, training centers, orphanages, summer camps, and adult and health institutions. There is a maternal/child health element in the program which reaches nearly four percent of the population under five years of age through 53 centers serving 27,000 children daily. This program will continue at approximately the same level through FY 1979.

(b) Self-help. This program will continue at its present level, i.e., $75,000 per year for the regular self-help program and $60,000 per year for special population activities.

6. Financial Level of Economical Assistance

A level of about $500,000 per year after FY 1976 is recommended for Rwanda. At that level the US can contribute effectively without assuming leadership responsibilities. The higher levels anticipated during the initial years are necessary to make a definite impact and to get the program underway. If all the projects proposed for FY 1975 are approved, a total of $1,055,000 will have been committed. In FY 1976; the two projects proposed would cost approximately $600,000. In subsequent years the US contribution should not exceed about $500,000.

7. AID Manpower Requirements.

It is not foreseen that an AID affairs Officer would be assigned to Rwanda. The Embassy staff has been structured to tend AID affairs with frequent assistance from REDSO/EA. TDY specialists will be required from time to time and, in some instances, a project manager may be called for. Peace Corps Volunteers are now written into the Food Storage and Marketing and Conservation projects, and the Peace Corps may also be requested to provide specialized personnel to assist the GOR with project planning under the proposed Sector grant.

References

IBRD, "Recent Economic Development and Prospects of Rwanda", Report No. 422a - RW, July 24, 1974. Volume I: The Main Report; Volume II: Annexes; Volume III: Statistical Appendix.

IBRD, "Recnt Economic Developments and Prospects of Rwanda". Report No. AE-23a, April 20, 1972.

Republique Rwandaise, Etude de Developpement: Plan Interimaire d'Urgence, Paris, 1970. (Development Plan for 1969-1970.)

Republique Rwandaise, Institute des Sciences Agronomique du Rwanda, Rapport Annuel 1973, Kigali 1974.

Republique Rwandaise, Ministere de L'Agribulture et de L'Elevage, Rapport Annuel 1973, Kigali, April 1974.

U.S. Government Printing Office, Area Handbook for Rwanda, Washington, D.C., November, 1969.

U.S. Department of State, "Rwanda - Background Notes", March 1973.

U.S. Department of State, "Foreign Economic Trends - Rwanda". October, 1974.

BACKGROUND DATA - RWANDA

Rate of Exchange: US$1 = RFr 92.5

Population: (1970)

Total Population	3.7 million
Annual Growth Rate	2.8%
Rural Population	3.55 million
Density of Population	per sq. mile

Gross Domestic Product (GDP)
(millions of dollars)

	1970	1971	1972
Agriculture, forests, fisheries	146.5	147.0	146.1
Mines	4.7	4.4	4.0
Manufacturing	8.6	9.0	10.0
Construction	6.6	6.9	8.5
Electricity, gas	0.6	0.6	0.6
Transport, storage and communication	2.7	2.8	2.8
Trade	24.2	24.3	24.6
Administration	19.6	22.7	24.0
Other services	7.9	8.6	9.6
GDP at factor cost	221.3	225.4	230.3
Indirect taxes minus subsidies	16.5	13.9	15.1
GDP at market prices	237.8	239.3	245.4

Government Finance
(millions of dollars)

	1970	1971	1972
Current Receipts	21.0	19.9	20.3
Current Expenditures	19.0	23.5	26.2
Current Surplus (Deficit)	2.0	(3.6)	(5.9)
Capital Expenditure (not including foreign aid)	1.2	2.0	2.8

BACKGROUND DATA - RWANDA (continued)

Foreign Trade (millions of dollars)	1970	1971	1972	1973
Total exports	25.3	22.3	19.4	29.8
Total imports	33.5	33.0	34.4	31.5
Trade surplus (deficit)	(8.2)	(10.7)	(15.0)	(1.7)
Principal exports				
Coffee	15.2	11.1	8.6	18.6
Tea	1.0	1.3	1.9	2.1
Pyrethrum	0.3	0.6	0.7	1.2
Cassiterite	5.1	4.6	5.3	4.7
Wolfram	4.3	3.6	1.6	1.6
Agriculture Production				
Food Crops (000 metric tons)				
Bananas	1,651	1,679	1,681	1,767
Haricot Beans	144	144	131	133
Peas	65	67	55	56
Sorghum	156	140	144	142
Cassava	345	372	350	363
Potatoes	126	148		
Sweet Potatoes	413	399	413	426
Cash Crops (metric tons)				
Coffee (Merchant)	14,240	15,652	10,602	15,500
Tea	1,245	1,819	2,396	2,800
Pyrethrum	556	865	1,174	1,427
Livestock Populations (000 head)				
Cattle	706	748	742	NA
Goats	481	512	506	NA
Sheep	187	188	202	NA
Pigs	54	58	60	NA