

SECONDARY CITIES AND MARKET TOWNS

IN BANDUNDU REGION:

INTER-URBAN EXCHANGES AND URBAN SERVICES

TO RURAL DEVELOPMENT

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INSTITUTIONAL ACRONYMS USED

IPTK	Institut Professionnelle de Kikwit
ITAK	Institut Technique Agricole de Kikwit
CBZO	Communauté Baptiste du Zaire Ouest
BCZ	Banque Commerciale du Zaire, Kikwit
ANEZA	Association Nationale des Entreprises du Zaire
JMPR	Jeunesse du Mouvement Populaire de la Révolution
CCB	Compagnie Commerciale du Bandundu
DPP	Développement Progrès Populaire, Idiofa
CADEZA	Caisse Générale d'Epargne du Zaire
IRES	Institut de Recherches Economiques et Sociales
GOZ	Government of Zaire
CKE	Compagnie du Kasai et de l'Equateur
ISP	Institut Supérieur Pédagogique (Kikwit)
PNR	Programme National Riz
CEPAS	Centre d'Etude pour l'Action Sociale
AFSC	American Friends Service Committee
CODAIK	Compagnie de Développement Agro-Pastoral Intégré de Kwango-Kwilu
BCA	Banque de Crédit Agricole
SOFIDE	Société Financière de Développement
ORT	Organization for Rehabilitation through Training
PVO	Private Voluntary Organization
IMO	Intermediate Management Organization
PLZ	Plantations Lever du Zaire
SOZAM	Private Zairian Trading Company
PRONAM	Programme National Manioc
PNE	Programme National Engrais

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## I. SCOPE OF WORK

### Geographical and Time Limitations

From July 4-16, a rapid field reconnaissance of five secondary cities and market towns in Bandundu Region was completed, and Kikwit follow-up project development discussions were undertaken based on USAID response to the case study of Kikwit completed earlier this year. The towns studied include Bandundu, Bagata, Bulungu, Idiofa, and Dibaya-Lubwe. A brief en route survey of Vanga mission (located between Bagata and Bulungu) provided some perspective on the relative status of urban versus rural (mission-based) hospital services. The trip covered over 1,700 kilometers, which absorbed 4 days of travel time (since most of these roads were in poor condition), allowing 9 days of actual research time within the six cities.

### Total Workdays Conducting Research in Secondary Cities

2.0	days	Bandundu
.5	day	Bagata
.5	day	Vanga
1.5	days	Bulungu
2.5	days	Idiofa
1.5	days	Dibaya-Lubwe
<u>0.5</u>	<u>day</u>	<u>Kikwit</u>
9.0	days	Total

### Objectives

- 1) To catalog the major services to agricultural production, transformation, and marketing provided by each town.
- 2) To determine the relationships between these urban centers, and each one's relationship to Kikwit, particularly in terms of access to:

- a) credit for agricultural production and agro-industry
- b) fuel (for transport and transformation)
- c) training (agricultural and technical)
- d) agricultural inputs (seeds, fertilizer)
- e) marketing inputs (working capital, sacks, transport)
- f) consumer goods
- g) warehousing
- h) headquarters for marketing agents
- i) population flows and purpose of inter-urban exchanges

### Methodology

- 1) Interviews with key resource people in the administrative, artisanal, commercial, and educational spheres.
- 2) Physical surveys of each town to identify infrastructural conditions, land use patterns, environmental opportunities and constraints. Markets and vehicle parks in each center were surveyed briefly. Since limited map material is available in Kinshasa (only a very old map of Bandundu city, and small diagrams of zonal centers), Cadastre offices (in each center in which they are present) were consulted prior to each survey.
- 3) En route observations were noted, with a focus on settlement patterns; observation of other vehicles for vehicle type, region of registration and apparent cargo and passenger load (including ones which were abandoned or in disrepair); roadside commercial activities; road quality.

### Major Issues Investigated:

- 1) What services to the peasant cultivators (the predominantly female target group for 560-0102) are already being provided by these cities?

- 2) What services should they be providing, which are not yet sufficiently available?
- 3) What opportunities are provided by existing structures, which could be built upon in order to maximize these centers' service potential (particularly in terms of credit, skill training, provision of commodities and seeds, and local management)?
- 4) How significant is direct agricultural production by urban residents in each center? Is a significant population of temporary female rural migrants present in each center, and what share of them are involved in urban agriculture?
- 5) How prevalent are male and female technical and artisanal skills and training (including apprenticeship) opportunities? Is there a need for more training programs in repair, metalwork, blacksmithing, and/or maintenance of agro-industrial and transport machinery? If so, where should they be sited? What response could be expected from young urban males to such training opportunities? What is the geographical radius of existing school service areas?
- 7) Has the "buyer" system in rural areas diminished the importance of daily urban markets?

## II. OVERVIEW OF THE MAJOR FINDINGS

### Demographic Trends and Project Implications

As shown in the following population tables, which should be considered as order-of-magnitude data only, Kikwit is by far the largest city in the region, at least 50 % more populous than Bandundu, which is in second place. These are the only two cities of over 100,000 population in the region. Within the Kwilu Sub-region, Bulungu ranks third demographically, with a surprisingly large population of about 45,000. Idiofa and Dibaya-Lubwe are similar in size, each with roughly half the population of Bulungu. Idicfa probably has a somewhat larger population than Dibaya-Lubwe (no more than 6,000 persons greater as the maximum estimate of size difference), if official figures are even crudely predictive. (See Table 1)

It is of some concern, however, that Dibaya-Lubwe's population reports show a rapid increase from 13,285 in '81 to 22,848 in '83. (See Tables 1 and 2) It is likely that cité boundaries were expanded between these two administrative censuses to include outlying populations which were formerly counted in Kapia collectivity, especially since the town's '70-'82 growth rate was a stable 1% per year. It is, undeniable, however, that Dibaya cité has been expanding rapidly during the past five years, since field reports confirmed that the whole western portion, beyond the Catholic Mission, has been constructed during this period. The cité is currently lobbying for an additional 5 km. increase in its official geographical radius.

Bulungu also seems to be growing rapidly and is, in fact, the only city which showed an increase, rather than a decline or stable status quo in its '70-'82 rate of growth in comparison with earlier '70-'75 growth rates. Idiofa has retained a high 10% annual growth rate for more than a decade. Overall, the largest centers (Kikwit and Bandundu) seem to be experiencing declining rates of growth, even though they represent important absolute concentrations of urban population. (See Table 2) The differences between the economic and service activities of these two large centers are striking, supporting the continued emphasis on Kikwit as the preferred site for project activities, which is therefore recommended throughout this report. Through the centrally located secondary city of Kikwit, outreach to the fast-growing

market towns of Bulungu and Idiofa is recommended in the design of project activities.

Bagata is the smallest of the towns studied, and has shown the most demographic stagnancy and economic decline. Though USAID may need to consider extending services to Bagata in the long-run, this would be the last priority for urban services to rural development at this time. Bagata is a satellite of Bandundu city, neither of which are central to current project needs, and Bagata is the least agriculturally productive of the three zones in the Kwilu Sub-region.

Table 3 provides a measure of the urban centers' relative attraction of rural youth. Bulungu and Kikwit have shown the strongest rates of increase in their under age 18 populations. This is particularly striking in the case of Bulungu, since it is much less important than Kikwit as an educational center, but has shown the highest rate of increase in its youth population over the past five years. Bandundu and Dibaya-Lubwe are less attractive to young migrants, and have under 18 shares of their population which approach the average rate for the region as a whole. Unfortunately, data was not reported for Idiofa. Of the 52 cities nationwide for which data was collected during the IRES "Urban Indicators Study", Bulungu was second only to Kenge (which is outside the AID project area in Bandundu Region), in having the highest share of under 18 population nationwide.

The comparative urban sex ratios in Table 4 show that all of these urban centers, with the exception of Bagata, are more attractive to males than the rural areas (or the region as a whole). Similar to what was found in the consultant's study of Malian secondary cities, however, all of these regional towns are female-dominated, with the exception of Dibaya-Lubwe. Port activities, which are male labor-oriented, often attract male migration, so this exception is not surprising. The more balanced, but slightly female-dominated sex ratios of Kikwit, Bandundu, and Bulungu (in order of increasing female dominance) are indicators of the importance of female agricultural activities in these urban economies, balanced somewhat by male-attracting economic opportunities (commerce and artisanal activities in Kikwit, administrative employment in Bandundu, and a lower level of commercial activity in Bulungu). GOZ employees assigned to Bandundu city are

usually males who leave their wives and children in Kinshasa, where schools and female petty trading opportunities are better, contributing to the relatively strong male sex ratio in this city. Though the data for Idiofa are incomplete, its sex ratio and the generating causes, seem similar to those observable in Bulungu. Because of its economic stagnancy and lack of non-agricultural activities, Bagata is the least attractive to males, of the towns studied.

USAID assistance should structure central project interventions within Kikwit, supplemented by sub-offices in Idiofa and Bulungu, or by regular outreach from Kikwit project staff to these other two centers. Idiofa sustained a high 10% growth rate from '70-'82 and is by far the most commercially dynamic of the small urban centers of interest to USAID. Its density of entrepreneurial activities and local investment, and its range of influence in the stimulation of more outlying urban centers (such as Dibaya-Lubwe), combine to promote its choice as the second most important USAID project site. Given Bulungu's size, its high growth rate, and its location (like that of Idiofa) in the heart of one of the two most agriculturally productive zones, this town should be the third current priority for the strengthening of urban services to rural development.

Initially, Dibaya-Lubwe activities should focus on increasing private sector access to and development of its port, since the town's economy is otherwise controlled mainly by Idiofa and Kinshasa entrepreneurs. Dibaya's port development will require improvements to the Kapia-Dibaya road, privatization of land titles and provision of credit to encourage private upgrading of port warehouses, and subsidized construction of safe and efficient docking and loading facilities at the town's beach. The more well-rounded set of urban project interventions which are required in order to stimulate agricultural production should focus on Kikwit, Idiofa, and Bulungu.

Table 1: Comparative Urban Population Figures

	1980	1983
Kikwit	157,052	
Bandundu	104,336	
Bulungu	45,806	
Idiofa	19,659	
Dibaya-Lubwe		22,848
Bagata		9,000

Sources: '83 figures reported by Idiofa and Bagata Chefs de Zone during field reconnaissance, '80 figures obtained from Unité Régionale de Planification et de Développement, "Fiche Technique - Région de Bandundu", November 1981, p.5.

Table 2: Rate of Urban Population Growth by Size of City

City	Urban Population			Average Growth Rate			
	1956	1970	1975	1981	'56-'70	'70-'75	'75-'82
Kikwit	16,481	107,000	127,606	154,761	13.5%	4 %	3.3 %
Bandundu	13,856	74,467	90,174	103,513	12.1%	4 %	2 %
Bulungu	-	14,658	22,038	42,822	-	8 %	11.6 %
Idiofa	-	7,626	12,202	23,523	-	10 %	10 %
Dibaya-Lubwe	-	11,439	12,029	13,285	-	1 %	1 %

Source: IRES "Urban Indicators Study", draft report July 1984

Table 3: Percentage of Urban Population Under 18 Years of Age

City	1970	1975	1981	1983
Bandundu	54.3 %	54 %	60 %	-
Kikwit	55.5 %	62 %	63 %	-
Bulungu	52.5 %	52.5 %	66 %	-
Dibaya-Lubwe	-	-	-	58 %
Region as a Whole	53.4 %	57.5%	58%	-

Sources: IRES "Urban Indicators Study" plus Dibaya-Lubwe calculations based on data from "1983 Idiofa Zone Annual Report".

Table 4: Urban Sex Ratios (Number of Males per 100 Females)

City	1956	1970	1975	1981	1983
Kikwit	120	132	93	97	-
Bandundu	97	112	94	95	-
Bulungu	-	83	85	94	-
Idiofa	-	83	-	-	-
Bagata	-	-	-	-	75
Dibaya-Lubwe	-	-	-	-	105
Region as a Whole	104	102	85	93	-

Sources: IRES "Urban Indicators Study", plus 1983 oral report by Bagata Chef de Zone, and calculations for Dibaya-Lubwe based on "1983 Idiofa Zone Annual Report".

### Inter-Urban Exchanges

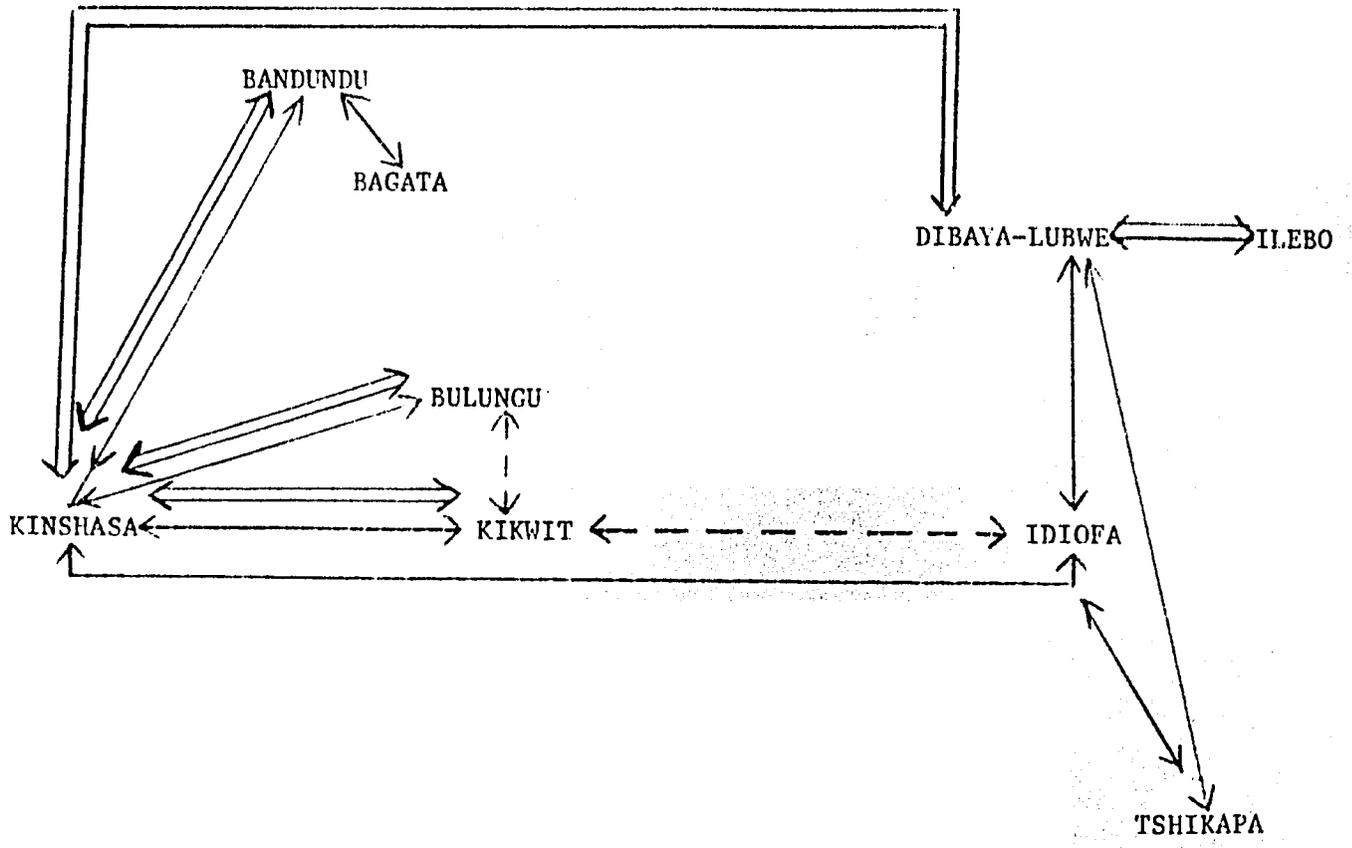
The asphalt road from Kinshasa to Kikwit, which allows rapid travel times between the two cities, has significantly reduced the importance of Kikwit services to other secondary cities and market towns in its region. This short travel time (7-8 hours) has provided an incentive, however, for an increase in Kikwit's own urban agricultural production, destined for the Kinshasa market. The short incremental travel time (and therefore cost) of continuing on to Kinshasa, rather than turning around in Kikwit, encourages traders from Bulungu and Idiofa to buy their imported and manufactured goods in Kinshasa, where prices are lower, rather than buying from Kikwit wholesalers. Even market women in more isolated Dibaya-Lubwe, who trade in imported and manufactured goods, obtain their stocks in Kinshasa rather than Idiofa or Kikwit. Regional wholesaling is not economically competitive. Therefore, aside from Kikwit, almost no wholesaling is found in the region (none in Bandundu city or Bulungu, and only a small amount of semi-wholesaling by four Idiofa merchants). Spare parts for vehicle repairs are not stocked in any of the regional centers, but rather are purchased directly, as needed, in Kinshasa.

A major role for Kikwit could be developed, with USAID support, as a site for (1) the provision of repair services (for vehicles and agro-industrial machinery), (2) the stocking of the most frequently demanded spare parts, (3) the provision of credit, (4) innovation in agricultural training, and (5) research and dissemination of appropriate technology agro-processing equipment. Existing Kikwit institutions which could undertake these programs are primarily IPPE, ETAK, CBZO, BCZ, and local wholesalers who could stock the spare parts. The presence of these institutions in Kikwit, and its central location for serving other centers, gives the city its competitive advantage for attracting USAID institution-building support. This external donor support will be necessary if Kikwit is to actualize its potential for stimulating agricultural development, marketing, and the improvement of rural incomes and living conditions.

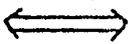
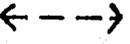
In comparison with the other urban centers studied, Kikwit is still the most important geographical base, within the region, for large scale entrepreneurs, road transport vehicles, and artisan services. Its competitive attraction is enhanced by the presence of urban utilities (water and power), regular fuel supplies at official rates (distributed by ANEZA to major local entrepreneurs), and its critical mass of consumers, skilled labor, and supporting institutions (BCZ, IPTK, etc.). Kikwit is the only urban center of interest to USAID which offers an important agricultural secondary school program (ITAK), any informal agricultural training for the urban unemployed (JMFR), or any high quality technical training (IPTK). The only formal mechanical training offered in any of the other centers was found in Bandundu city. The Bandundu program (the Josephite Brothers' school) is handicapped by its lower educational quality, inferior physical plant, and peripheral location relative to regional clients for repair services.

Figure 1 illustrates the major flows of goods between the towns studied. Kikwit has proved to be less important as a regional service center than was initially expected, since its wholesaling and warehousing role has been eroded by the availability of rapid private road transport to Kinshasa. Its service potential for other regional centers is still great, and should be reinforced by 660-0102 project interventions. Road transport via rented space in a vehicle from Kinshasa to Idiofa usually requires changing vehicles in Kikwit. Freight can be transported in 25 ton trucks between Kinshasa and Kikwit, but usually transfers to 7 ton trucks from Kikwit to Idiofa. Passengers and freight destined for Dibaya-Lubwe usually change vehicles again in Idiofa, using local carriers. Imports and manufactures reach Dibaya by road, but agricultural produce leaves the town for Kinshasa by river. Almost all Idiofa goods and produce travel by road, though CCB uses a Lubwe River port east of the city to transport some of its agricultural produce to Kinshasa. Most Kikwit and Bulungu imports and exports move directly to and from Kinshasa by road. Both cities use their ports to export some agricultural produce to Kinshasa (mostly palm products from Kikwit, and Fernandez's corn from Bulungu). Kikwit's links with Idiofa and Bulungu are weaker than each city's links with Kinshasa, but Kikwit services and development project outreach to these two other centers should be strengthened. Dibaya-Lubwe has important road links with Idiofa and Tshikapa (to which towns Dibaya's merchants sell black market fuel), and traders often

Figure 1: Relationships Between Centers Studied



Legend

- By River 
- By Road: **Strong Flows** 
- Weaker Flows** 

transport agricultural produce from Dibaya to Shaba through Ilebo port. Those who do so, regularly use Ilebo banking services. Bagata is dependent upon Bandundu city for marketing and services, and most freight moves by road between the two towns, since Bagata does not receive ONATRA service, even though its beach on the Kwilu River is passed by barges bound for Bulungu and Kikwit. A considerable amount of Bandundu city's freight traffic with Kinshasa moves along the Kasai River, since the sandy Kinshasa-Bandundu road was the worst encountered during the consultant mission. Imports and manufactures still arrive in Bandundu primarily by road, but corn supplies for Bandundu's Sobraband brewery arrive by river from the east. Bandundu has no strong pattern of exchanges with any other urban center of interest to AID, except for the distribution of beer through its Kikwit depot. Bandundu's schools have some regional importance, but a large share of their students come from the Mai Ndombe Sub-Region north of the Kasai River, rather than from the AID project area.

#### Urban Agricultural Production

Direct urban agricultural production is less significant in Bulungu, Idiofa, and Bagata than it is in Kikwit. All of these other three centers are located on sandy, relatively nutrient-poor soils. Urban residents who are involved in direct agricultural production must travel outside the urban area to find productive soils. In both Bagata and Bulungu, residents cross to the east bank of the Kwilu by pirogue to reach their fields. Only millet is cultivated (for household use) on the sandy soils surrounding Idiofa. Aside from Kikwit, Dibaya-Lubwe is the major urban area of interest to USAID which has a high level of visible urban agricultural production. Bandundu city, however, has fairly fertile well-watered soils within and immediately adjacent to the urban area. A considerable amount of market gardening and rice cultivating is being done by market women near ONATRA's ferry construction facility in Bandundu port. Most of the eastern urban expansion area of Bandundu, which has been subdivided and allocated, but on which construction has not yet begun, is covered by urban women's manioc fields, as is the land surrounding the city's airport runway. Residents reported that most of this urban agricultural production is owned by female in-migrants rather than by indigenous people. Bandundu city's peripheral geographical location, however, discourages an AID-focus on its urban agricultural

potential, in favor of Kikwit-oriented pilot projects (which would be more visible to a larger share of the region's temporary urban migrants, and to the larger number of rural people who will be visiting the Kikwit urban area).

Inter-Urban Comparisons: Secondary City Services to Rural Development

Kikwit is the center with the greatest potential for import-substituting industry, since it has the largest concentration of local consumers with disposable incomes. Bulungu and Idiofa would be the optimal locations for value-adding agricultural transformation industry, since they are the centers serving the highest volume rural agricultural production areas. Both Bulungu and Idiofa are handicapped, in attractiveness to industry, by their lack of urban water and electricity services. Bulungu has an advantage over Idiofa in both its port location (which offers lower transport costs to Kinshasa), and its access to water supply from the Kwilu River. Water is a severe limitation in Idiofa. The city is located on a sandy plateau and distances to the surrounding streams, in ravines outside the city, are substantial. Residents who can afford to do so, invest in cisterns which trap rainwater from their houses' roofs. Idiofa's larger concentration of motivated entrepreneurs, however, gives it a compensating advantage for the absorption of agro-industrial credit, as does the DPP's presence (Développement Progrès Populaire, a Catholic private voluntary organization promoting increased agricultural production and marketing), even though Bulungu's population is almost twice as large. For their population sizes, both Bulungu and Bandundu have surprisingly limited entrepreneurial sectors. Table 5 shows the contrast between the large number of small businesses in Idiofa versus the substantially smaller entrepreneurial sectors in Bulungu and Bandundu.

Table 5: Comparative Attraction of Entrepreneurs

	<u>Small</u> <u>Businesses</u>	<u>Large</u> <u>Businesses</u>	<u>Very Large Businesses</u>
Bandundu	17	2	
Bagata	4		
Bulungu	28	4	
Idiofa	121	8	

Sources: ANEZA offices in Bandundu City, Idiofa, and Bagata.

The relative importance of supporting small entrepreneurs in Kikwit, Bulungu, and Idiofa, versus Bandundu can be seen from past investments such as the geographic concentrations of manioc/corn mills shown in the table below:

Number of Mills, 1982

Kikwit	46
Other Kwilu Urban Centers	38
Bandundu City	19

Source: Coordination Régionale de l'Environnement, Conservation de la Nature et Tourisme, "Rapport Annuel 1982", p. 37.

In Idiofa alone, there are up to 15 manioc/corn mills, 6 rice hullers (in the hands of 4 owners), and 2 coffee mills (owned by DPP and CCB), creating the nucleus of an agro-industrial sector which, in its diversity, is more active than agro-industry in Kikwit. The comparative status of the centers studied, in terms of level of vehicle transport sector activity, is indicated by the numbers of working vehicles in each town, as reported below:

Number of Operating Vehicles, 1984

Idiofa	92
Dibaya-Lubwe	15
Bagata	9

Sources: Consultant's interviews with ANEZA field offices, DPP and CCB in Idiofa, and the Chef de la Cité in Dibaya Lubwe.

Of the Idiofa vehicles involved in road freight transport, 70 are spread among 35 owners, with two larger organizations owning the remainder (DPP with 10, and CCB with 12). This further substantiates the potential of Idiofa's entrepreneurial sector, of interest to USAID's goal of stimulating

small businesses. Vehicle ownership could not be obtained for Bulungu, during this rapid survey, but about 40 vehicles are reportedly owned by Fernandez alone, who is the town's largest market intermediary.

The modern informal sector (metalworking, machine repairs, carpentry, etc.) is relatively underdeveloped in all of the towns studied, with the exception of Kikwit. Bulungu appears to be the next most active center, at least in respect to metalworking, but modern informal sector artisanal apprenticeship opportunities are relatively limited in all centers except Kikwit. It will be important to stimulate formation of this sector in Kikwit, Bulungu, and Idiofa, if urban potential for providing training for off-farm rural employment is to be realized.

No. of Artisan Shops Performing  
Metalworking/Soldering, 1982

Bandundu City	6
Kikwit	17
Bulungu Zone	14
Idiofa Zone	4
Bagata Zone	1

Source: Coordination Régionale de l'Environnement, Conservation de la Nature et Tourisme, "Rapport Annuel 1982", from "Tableau Récapitulatif des Etablissements Dangereux, Insalubres, ou Incommodes de la Région de Bandundu".

Overall, there is a lack of credit availability in all centers aside from Kikwit and Bandundu, which are served by the BCZ (Banque Commerciale du Zaïre) and the Banque du Peuple respectively. Only the BCZ seems to be serving outlying urban areas, and even then, only the top entrepreneurs. A few of the region's marketing/transport agents at this top level have also been able to obtain credit in Kinshasa, usually from the Bank of Kinshasa. The CADEZA State-run savings and credit cooperatives (such as the one in Idiofa) serve merely as safe storage facilities for traders' cash for several days at a time. Their credit function is virtually non-existent. The CBZO

Coopecs (Coopératives d'Épargne et du Crédit) are the only accessible sources of low-cost flexible credit for small scale entrepreneurs. Four of the towns of interest to USAID are served by CBZO Coopecs, including Bulungu, Idiofa, Bandundu (just opened in March 1984), and Kikwit. Only Dibaya-Lubwe and Bagata do not have CBZO offices. As a first priority, CBZO credit services should be strengthened, through USAID-supported staff training in bookkeeping, accounting, loan analysis, and investment planning. Matching funds for CBZO's loan capital could be provided by USAID to increase the loan limits available enabling boat motors, small mills, and other equipment to be purchased through CBZO loans.

No agricultural inputs are being sold or distributed in four of the centers - Bagata, Dibaya-Lubwe, Bulungu, and Bandundu. Kikwit has benefitted from the Chinese-supported Programme Nationale Riz, and CODAIK seems, on occasion, to supply a limited amount of agricultural material to a small number of pilot projects as credit. In October 1983, for example, CODAIK's Kikwit activities were confined to supplying inputs for one small market garden project (about 6 young men) at the Sacré Coeur Mission, and credit for one urban cooperative's purchase of a manioc/corn mill and generator. The DPP (Développement Progrès Populaire) sells tools and parts to masons, carpenters, fishermen, bicycle mechanics, and cultivators, at its shop in Idiofa, and will occasionally sell seeds to peasants. DPP feels peasants should be self-sufficient in planting material, and therefore intentionally severely limits its distribution of inputs. There is a critical need for a structured program of tree nurseries and seed multiplication sites, which would produce and distribute improved varieties to cultivators, through local institutions (Oxfam and ITAK in Kikwit, DPP in Idiofa, the Catholic Mission in Dibaya-Lubwe). In providing aid to peasant cultivators through DPP, assurance should be obtained that an adequate share of the profits from increased yields and marketing are returned to producers. An initial audit of current allocations of DPP profits among its own central costs and investments versus rebates to cooperatives and individual producers, should be commissioned by USAID, as a pre-condition for design of an assistance component for DPP as part of 660-0102. Technoserve would be ideal agent to conduct this financial analysis, and the exercise would give Technoserve a foothold for further credit and financial management assistance to producers' cooperatives in the region.

Secondary cities' own markets are not serving as points of agricultural assemblage for onward export to Kinshasa. The urban markets are only selling food at retail to each city's own consumers, even though nearby peasants sell their own produce in these markets weekly. Organized rural markets are the major site for large scale agricultural buying in Bulungu Zone, and in the two collectivities of Idiofa Zone which are controlled by Cooreman. The rest of Idiofa Zone and all Bagata Zone do not have organized periodic rural markets. The buyer system, in which agents negotiate directly with producers on a village-by-village basis, usually paying for produce with consumer goods rather than cash, is predominant. This lack of organized rural markets favors local small-scale entrepreneurs, since periodic rural markets organized by "Chefs des collectivités" attract and are easily exploited by larger Kinshasa-based buyers, who arrive with their own trucks and can afford to outbid local farmgate prices because of their economies of scale. Organizing rural markets will discourage local small businesses in secondary cities, but may accelerate the monetization of the rural economy, and increase producers' earnings. The trade-offs will need to be weighed.

Diesel fuel availability is a major constraint on Bulungu's urban marketing and transport services to rural producers. Kikwit's shell station receives fuel supplies at official prices on a regular basis, which ANEZA distributes to Kikwit-based and some Idiofa-based entrepreneurs. Bulungu has no official fuel depot, and the Vanga Mission's depot (1/2 hour away) is unable to serve most potential clients. The lower level of local entrepreneurial development in Bulungu, in comparison to Idiofa's more active commercial sector, is partially caused by this fuel situation. Idiofa agricultural buyers obtain fuel illegally from the black market traders in Dibaya-Lubwe (known as "Khadafi"), at rates which are lower than official prices. Dibaya-Lubwe's Kasai River port location gives it access to this fuel trade, which is one of its most dynamic services to rural agricultural development, since it is helping local agricultural buyers in Dibaya itself, Idiofa, and Tshikapa. Bulungu is the most important market town which should be assisted in obtaining increased supplies of locally available fuel. USAID support for construction of a fuel depot in bulungu could be investigated further, as part of 660-0102.

The rates of urban expansion have been most rapid in Bulungu, Idiofa and Dibaya-Lubwe, through absolute numbers of rural-urban migrants are highest in Kikwit. Durable construction investment, outside of Kikwit, is most visible in Idiofa. Dibaya-Lubwe could be expected to realize increased private investment in durable warehouse construction if private land rights were assured in port development. It will be essential for USAID to reconsider its policy on Dibaya-Lubwe port development, to retain private control of the port instead of conferring assisted improvements entirely into ONATRA hands, if Dibaya's current competitive attraction, as a port alternative to ONATRA Mangai, is to be retained.

Boat ownership with the Kwilu Sub-Region, is still at a very low level. Almost no local investment in baleinières ("whaleboats") has been made by local entrepreneurs in Bagata, Bulungu, and Dibaya-Lubwe, though all are river ports. Cultural factors are a major obstacle, since baleinière owners are traditionally from the Mai'Ndombe Sub-Region, north of the Kasai River, especially from Nioki, and the Kwilu ethnicities are not culturally prepared to take advantage of the private sector river transport credit which USAID hopes to make available under project 660-0098. It may be necessary to target Mai'Ndombe investors, who would be willing to open operations in the Kwilu in promoting river transport credit. ONATRA is still the major river transport service which is being used by agricultural buyers who use Dibaya-Lubwe's port, since it is cheaper and more readily available, even though the risk of theft in ONATRA's Kinshasa handling of goods is high.

Comparative entrepreneurial structure varies greatly among the urban centers studied. Bandundu has a very small entrepreneurial sector and no wholesaling. Wholesaling is conducted only in Kikwit, and to a limited extent in Idiofa. Bulungu has small business potential, but Idiofa has the largest number of motivated investors and small scale businessmen (outside of Kikwit) in the region, and its entrepreneurs control a substantial share of Dibaya-Lubwe's commerce. They have invested in Dibaya because local competition is less intense there than in Idiofa itself. Dibaya has also attracted the establishment of shops by Kinshasa-based businessmen, and relatively few of the stores are owned by Dibaya residents.

Therefore, infrastructural construction priorities, outside of Kikwit, should be assigned by USAID to improvement of the Kapia-Dibaya-Lubwe port access road, provision of a fuel depot for Bulungu, and production of feasibility study for hydroelectric and water system improvements to Idiofa, as the town (aside from Kikwit) which has the most agro-industrial potential. A site available 15 km from Idiofa, on the Piopio River, has been proposed as a relatively low-cost site for a hydroelectric facility which is capable of producing up to 2,000 KWH, able to meet Idiofa's electricity needs well beyond the year 2000.

III. DETAILED CITY-SPECIFIC OBSERVATIONS

Bagata

With a 1983 population of only 9,000, this market town is the smallest and least economically dynamic of the urban centers studied. Its surrounding rural areas are less agriculturally productive, and less densely settled, than the other Kwilu zones of interest to USAID (Bulungu and Idiofa). As a reflection of Bagata's economic stagnancy, it is the least attractive center for male rural-urban migration, therefore its population is 57% female.

For fuel supplies (from Shell) and services (vehicle repairs) the town is dependent upon Bandundu city (almost 3 hours away by road). Only 7 trucks and 2 jeeps (working vehicles) are owned by Bagata traders, therefore most of the local transport of rural agricultural produce to markets is provided by Kinshasa traders, who buy on their own account for direct road transport to Kinshasa. The only agricultural transformation machinery in the town consists of a broken down manioc mill. Bandundu city credit institutions have not been serving Bagata traders, however, and no branch office for any savings and/or credit cooperative has yet been installed in or even planned for the town.

Decline is also evident in other commercial activities in Bagata. Of the five hotels, one is in complete disrepair and has been inoperative for years. There is only one small pharmacy. The "hospital" is one in name only, since no trained staff are assigned to the facility. No doctor has been assigned to the hospital for the past six months. Since services are not being provided, it would be preferable to tear the hospital buildings down, rather than to continue to attract clients to a "hospital" with no services. An x-ray facility has been installed, but has been dysfunctional for some time. Several European nuns are in residence, but confine their actions to the maternity and pharmacy. The last doctor was chased away by ethnic conflicts with his clients, and has not been replaced.

Educationally speaking, Bagata is providing little practical training of relevance to its rural hinterland. No agricultural or technical secondary school training is centralized in Bagata. Only abstract majors such as math, physics, or biochemistry can be studied in the Institute Bagata or the Lycée pour les Filles. These schools, however, are predominantly serving rural

young people, who live with extended family members resident in Bagata, or rent space in others' compounds.

The Bagata artisanal sector is not very well developed, so few apprenticeship opportunities are available. The entire supply of artisans includes only 10 carpenters, 1 or 2 shoe repairmen, and about 10 tailors. There are no metalworkers or blacksmiths. Artisans produce only on command, and the quality of their work is seen by residents as inferior to what can be ordered from Kinshasa. For repairs that must be made in Bagata itself, mechanics are brought in from Bandundu city. The daily urban market is selling goods which are only for the town's own consumption. Some nearby peasants sell small quantities of their own produce at retail in the market, but largescale assemblage of rural food production for resale in Kinshasa takes place in the rural weekly or bi-weekly markets. Even these markets are less important than the buyer system.

Since there is no wholesaling of imported or manufactured goods in Bandundu, these goods are primarily purchased directly within Kinshasa for resale in Bagata's few stores or its market. SEDEC tried to establish wholesaling of cement, sugar, and other goods in Bandundu, and later in Kikwit, but closed its wholesale operations in both towns, since the chain store could not compete with the lower prices which Bagata and Bandundu traders could obtain in Kinshasa even after taking transport costs into account.

Though transport to Kinshasa costs less by river (120Z/sack) than by road (200Z/sack), Bagata's resident traders still prefer to use road transport, and have not invested in boat purchases. Cultural habits and lack of credit seem to be the major causes for this lack of interest. The only privately owned motor boat in town is not used for commercial purposes. ONATRA service is not available at Bagata, though the Kwilu barges stop upriver at Bulungu and Kikwit.

There are no development projects based in Bagata, therefore fertilizers and improved seeds are not available to surrounding peasants. Monetization of the rural economy is not being furthered by the buyer system in the areas surrounding Bagata. Given the high cost and rarity of transport

to Kinshasa, peasants are demanding barter rather than cash as payment from Kinshasa and Bandundu merchants for their agricultural produce. Bandundu city is seen as offering a limited range of consumer goods (wax prints, etc.), disadvantaging local traders in comparison to Kinshasa-based produce buyers. Peasants place orders with their usual buyers for consumer goods from Kinshasa, that will be brought as payment for the next trip's produce purchases. In fact, peasants have been known to refuse cash payments in favor of goods exchanges, even though the terms of trade are thereby distorted in favor of the Kinshasa merchants. This practice, and the ensuing lack of cash in villages surrounding Bagata, discourages local entrepreneurial investment in stocks of consumer goods for local resale, perpetuating the vicious cycle of lack of alternative local sources for consumer goods and lack of local price competition for imports and manufactured goods. There is not a single well-supplied local store, in the residents' own opinion.

Other Bagata urban services to surrounding rural areas are equally poor. The town's post office service is unreliable. No urban water supply, or even a single well, exists. All residents must carry water for household use from the Kwilu River, which bounds the eastern edge of town, or from local springs. A solar water pump had been installed by Fometro at the hospital, but it is no longer functioning.

Bagata is not even important for its direct urban agricultural production. As found at Bulungu and Idiofa as well, soils surrounding Bagata itself are sandy and infertile. Urban residents must cross the Kwilu by ferry or dugout canoe to reach the more fertile soils where they are cultivating their own fields. About 20 pirogues were beached on the city's side of the Kwilu, showing that this is an important means of local transport, but no investments had been made in motors for longer distance transport.

Dibaya - Lubwe

Economic life in this small town revolves around its role as a Kasai River port. Though the 1983 official population of 23,448 shows a decline from the 1982 level of 24,838, there has been a rapid spread of urbanization on the site over the past 5 years. The entire western residential section of the city beyond the Catholic Mission has been constructed on steep slopes over this time period. This predominantly youthful in-migration has drawn population from Mangai and Idiofa, especially family groups who are attracted by Dibaya's commercial opportunities. The most recently developed neighborhoods are mainly BaPende or BaBunda, while the older ones are a mixture of the BaNdinga and BaPele ethnicities. Along with urban growth have come urban social problems, such as theft. The only two market women who reported having invested in their own pirogues for fish trading had lost their boats to thieves.

Dibaya-Lubwe is embedded in a network of exchanges with Ilebo and Kinshasa for export of locally assembled agricultural products, and with Idiofa and Tshikapa for supplying these inland centers with fuel. A number of Idiofa-based traders have established stores in Dibaya-Lubwe, where commercial competition is less intense. About 75% of the Dibaya-based commercial activities are owned by Idiofa or Kinshasa entrepreneurs (e.g. Sanga Sam, Bitshi, Egongobila, Ansiem).

The small number of resident entrepreneurs of local origin were severely impacted by demonetization and have not subsequently organized themselves into an active ANEZA lobbying group. There are, in fact, only 4 ANEZA members in Dibaya-Lubwe. The town offers few of the services to agricultural transport and marketing, aside from its port, that a secondary city should be providing. Its secondary schools offer no agricultural or mechanical training. Only a limited number of vehicle repairs can be performed by the town's 2 garages, which are run by informally trained workers. No spare parts are stocked or sold in the town. There are no credit facilities in Dibaya-Lubwe itself, and with only one exception, the town's merchants have not succeeded in obtaining credit from banks in Kinshasa, the commercial banks in Ilebo or Kikwit, or the Banque du Cr dit Agricole. Dibaya merchants who ship most of their agricultural products to

Shaba by rail from the port of Ilebo usually deposit their funds in the Ilebo commercial bank. Those who market their produce mainly in Kinshasa use banks in the capital, especially the Bank of Kinshasa. Only 3 or 4 have chosen the Banque Commerciale du Zaire in Kikwit.

Dibaya's port is primarily servicing small private produce buyers, mostly Kinshasa-based traders, who use ONATRA to ship their produce to Kinshasa (or to a lesser extent Ilebo, for rail transfer to Shaba). The port's stores are supplied with imported and manufactured goods purchased directly in Kinshasa by the shopkeepers, who bring these goods by road to Dibaya. Shopkeepers rarely own their own means of transport, and therefore rent space in other vehicles, changing trucks in each of the major en route urban vehicle parks (Kikwit and Idiofa). Except as a place for vehicle transfer, Kikwit is of little importance to Dibaya merchants, and Kikwit traders have not invested economically in Dibaya.

Kikwit's secondary educational facilities are not seen as serving significant numbers of Dibaya young people, even though their quality is recognized as superior to that which can be found locally. The costs of sending a child to school in Kikwit are affordable to only the most successful merchants (300Z for transport alone from Dibaya to Kikwit each way; a close to 9,000Z/year cost for dorm fees, tuition, food, and spending money to send a child to Kikwit's Sacré-Coeur Mission boarding school).

Only about 15 trucks, in working order, are based in Dibaya-Lubwe. This small number of vehicles constitutes a bottleneck to increasing agricultural marketing activities in the town's rural hinterland, since road transport to the port is essential. The lack of formal sector credit for new vehicle purchases will be likely to perpetuate this situation unless USAID intervention is planned.

Legally purchased fuel is available to most Dibaya merchants only from the PetroZaire depot in Ilebo. The large fuel depot in the Lubwe portion of the town is run by CCB primarily for its own use, though a few other (mainly Idiofa-based) users order fuel supplies from Zaire FINA through CCB, which are delivered to this depot (DPP and the Catholic Procure from Idiofa, Solbena, and Cooreman Mangai). The minimum order of 50-100 drums of diesel

fuel must be paid cash-in-advance in Kinshasa, eliminating most local traders from eligibility. This Dibaya-Lubwe depot is used far below its capacity (500,000 liters in the large reservoir plus four tanks of 100,000 each). There is rarely even 100,000 liters stored at a time on site. The location of this depot limits fuel barge access during the dry season, at which time the channel is extremely shallow and is blocked by sand bars.

The lack of a strong entrepreneurial association is reflected in the lack of an organized system of rural periodic markets in which produce sales could be centralized, and the lack of concerted action by merchants which could enforce lower river freight loading fees. Dibaya's merchants feel that rural markets would undercut their competitive advantage as produce buyers, since these markets would provide easy access for Kinshasa merchants who would be able to arrive with their own vehicles and outbid local farmgate prices. The further negative aspect of government surveillance and local tax collection would be easier to enforce in an organized market situation. In Idiofa zone, only in the two rural areas controlled by Cooreman are the periodic markets serving as effective agricultural produce assemblage points.

The usefulness of Dibaya's port is constrained by the poor condition of the final 20 kilometers (from Kapia to Dibaya-Lubwe) of the Idiofa road. No one is currently assuming maintenance responsibility for this segment, which is still not included in any of the USAID upgrading plans, even though significant investments in the port itself are to be funded under the 660-0026 project. At current wage rates, only 24,000 Z per year would be required to pay the seven person crew needed to maintain this segment. Alternatively, a CCB maintenance agreement through the Office des Routes could be funded. Because of the light dry season rain which had fallen earlier in the week, our four-wheel drive vehicle could barely negotiate this segment of the road. It is probably impassable for most of the rainy season, especially for heavily loaded trucks.

Investigation into the port activities at Dibaya-Lubwe reveals several other development constraints that should be addressed in USAID's project, primarily:

- (1) the need for ONATRA relinquishment of land rights in order to encourage upgraded private warehouse construction;

(2) the need for a policy decision on cargo loading time and cost efficiency, safety in operations, and employment, as the basis for generating an engineering design for the port's construction, and

(3) the need for a radio communications service manned by ONATRA at Dibaya, which would provide information to port users, on a daily basis, about expected arrival times for barge service.

Each of these points will be discussed briefly below.

There are eleven warehouses in the Dibaya port, all privately built by their owners, on land allocated by the Chef de la Cité, even though formal land rights to the ground are legally vested in ONATRA. Most of these warehouse owners have specialized in storage services. They are small scale entrepreneurs of local origin who rent space to other small merchants (produce buyers from Kinshasa and Idiofa, for the most part, including the DPP, as well as some buyers from Dibaya itself), and only a few do any produce-buying on their own account. They receive a 5 Z/sack fee which is not related to the length of time for which goods are stored. For the most part, goods are stored only until the arrival of the next ONATRA barge on which freight space can be obtained. The warehouses all have mud wattle walls and thatched roofs. Only one warehouse has cement stuccoed walls. Because of the high cost of durable building material, this low level of investment will continue unless secure land title to their warehouse properties can be conveyed to these owner-investors. Otherwise, investment will be discouraged by the fact that ONATRA (which is theoretically committed to long term port construction and management) could seize these private warehouses at any time. Since leaky roofs and walls are unavoidable with these village-level construction materials, losses through pest and rain damage are substantial. Dibaya-Lubwe has a competitive advantage as a port, in comparison to Mangai (where ONATRA has made investments and installed a resident presence), thanks to the security from theft, low cost, and relative efficiency which private control of port operations has provided for port users. ONATRA, on the other hand, has not been anxious to invest in Dibaya facilities which would compete with its Mangai installations. A USAID project component which would negotiate clear title to existing or nearby warehouse sites for private development, combined with credit for durable construction materials, could attract many of Dibaya's owners to upgrade their storage facilities. Initially, sheet metal roofing should be the first

upgrading priority.

The Dibaya warehouses were in more active use, at the time of this consultant survey, than those in the other centers visited, and each was at least half full (mainly with corn and manioc, as well as some groundnuts and squash seeds). The warehouse owners do not negotiate loading or transport for their clients, and they do not themselves own vehicles. Small scale buyers from Kinshasa spend about one out of every two months in the region, renting space in an Idiofa-based truck to collect agricultural produce in the rural areas centered around the Dibaya road, and to deposit their stocks in one of these private warehouses near the beach. The merchants must wait at the port with their goods to negotiate transport and loading on the first available barge, and supervise the process. Though several expressed a preference for using private baleinières for transport to Kinshasa, so that they could personally accompany their goods to avoid the thefts and delays prevalent in ONATRA handling (security in the transfer of goods in Kinshasa is particularly risky), none actually use this more expensive fluvial transport alternative. Even CKE and CCB hire ONATRA barges. The small traders' preference for Dibaya over Mangai port is attributed to the more competitive buying situation, caused by the dominance of large market intermediaries, in the rural areas served by the Mangai port. Control of the Mangai marketing area is in the hands of CKE, Cooreman, and Mboliaka, making it difficult for smaller entrepreneurs to rent vehicles or obtain produce. Dibaya port is also preferred by many small traders because its lack of ONATRA presence means that freight fees for goods loaded in Dibaya are paid afterwards in Kinshasa, allowing traders to arrange resale in Kinshasa port upon arrival, avoiding the need to outlay transport fees in advance. This advantage would be lost if ONATRA presence, for fee collection purposes, were to be established at Dibaya. Daily radio contact with ONATRA, however, would be advisable, since Dibaya traders would be better informed about expected barge arrivals, and would therefore be able to organize their loading arrangements more efficiently. Dibaya entrepreneurs have not invested in baleinières, though some have purchased outboard motors for short distance pirogue transport.

Design of improved access to the Dibaya beach requires formulation of a USAID/GOZ policy on the trade-offs between cost and time of loading versus employment generation. All additional charges increase the capital entry

barriers to small traders, and are likely to either increase the ultimate price of food to urban consumers or reduce the farmgate prices offered to producers. Currently about 15-20 Z/sack must be paid for loading at the Dibaya beach. Since traders prefer to use the monthly ONATRA mail boat, which offers faster service, and allows traders to accompany their baggage (easing surveillance), loading fees skyrocket at this boat's arrival, as traders hectically jostle for space and will pay any price to gain an advantage over their competitors in speed of loading. The steep descent to the beach involves at least an 8 meter drop, and is particularly hazardous and inefficient in the rainy season. Technically, many alternative construction improvements are possible, involving at least (1) reinforced cement steps, (2) a gently sloping concrete ramp on which push carts could be used, (3) a manual vertical lift, and/or (4) a manually run ramped conveyor belt. Any mechanical system would also decrease the total number of informal sector port jobs, but would probably be advisable in view of the faster, safer, and less costly service which would be provided. Those workers remaining would receive more viable living wages. Use of vehicles for on-barge loading would be unlikely, even with port improvements that would allow vehicle access, with the scarcity of vehicles available.

Though the cité of Dibaya-Lubwe collects a total of 700,000 Z/year from its many local sources of revenue (head taxes, civil registration fees, legal fines, port user fees, hotel taxes, market stall fees, and taxes on pirogues and motors) these funds are not being invested in road improvements, drainage, water systems, erosion control, or any other development project. The funds are being used by the Chef de la Cité for construction of his own official residence, guest house, and audience hall.

One improvement in local services to entrepreneurs was being initiated on an experimental basis during the consultant mission. CADEZA Idiofa (the State-owned Caisse Générale d'Epargne du Zaïre) had just opened a branch office in Dibaya in response to local demand. Twenty local entrepreneurs had already opened accounts during CADEZA's first 4 days of operation. As with its Idiofa members' deposits, these accounts are mainly used as multi-day safe deposit facilities for working capital. Members deposit their sales proceeds and withdraw almost the whole amount a few days later for new purchases. CADEZA offers this security from theft since its State-run status

requires 24-hour military guard service. CADEZA Idiofa has few long term deposit accounts against which it can offer loans to other members. Total Idiofa branch deposits of 18,000,000 Z in 1983 were balanced against 17,000,000 Z in withdrawals. The Dibaya branch is likely not to become a source of credit for the same reason even though, as with its Idiofa branch, the office will try to attract members to open "comptes bloqués" (accounts with medium term withdrawal limitations, paying 8% interest). Most members open only regular accounts (3% annual interest) or interest-free checking accounts (100 Z trimestrial service charge plus 15 Z/day charge when checks are written).

CADEZA's transaction charges discourage low income individuals from opening accounts, whereas CBZO offers an attractive alternative in towns where branch offices have been opened. In Idiofa, for example, only 11 Z is charged to open a new CBZO account paying 4%/year interest, giving access to credit, and requiring no transaction charges or maintenance fees. An ordinary CADEZA account, on the other hand, costs 100 Z for a deposit book, a 60 Z/year maintenance charge, and 5 Z/withdrawal. Since a lower interest rate is offered, and virtually no access to credit, only traders trying to protect their cash from theft are attracted.

The limited amount of credit offered even in an established secondary city CADEZA branch office, like that of Idiofa, is not geared to meeting local needs in terms of duration of loan, amount obtainable, collateral available, or processing time required for loan approval. The Idiofa branch, for example, usually gives loans for only 30-90 days (120 day maximum) which is too short a period to serve as working capital for the agricultural marketing campaign. The maximum loan limit of 100,000 Z is too low to finance vehicle purchases (the major credit need of its members). Title to a durably constructed building (cement walls and metal roofing) is required as collateral for a loan, and rolling stock is ineligible, eliminating most potential loan applicants from eligibility.

Aside from the opportunity to attend secondary schools, rural youth are attracted to Dibaya by commercial and agricultural opportunities. Boys who are forced to leave school after failing exams often obtain self-employment as fishermen, and girls engage in trading and smoking fish. There is also an

annual dry season influx of rural people into Dibaya-Lubwe for fishing activities. Reasonably good quality agricultural land within daily round-trip walking distance can still be obtained relatively easily, adjacent to the cité limits in Kapia collectivity. The cité is currently negotiating with the Ministry of Territorial Administration for a 5 kilometer extension of the cité boundary farther into the rural area to protect urban residents' agricultural land rights. The Chef de la Cité reported that for corn in particular, however, marketing problems were still being experienced. He personally knew of at least 2000 sacks of corn which were unsellable at the time of the consultant mission. There has, however, been some out-migration of Dibaya youth attracted by diamond prospection in Tshikapa and Kahemba.

One of the commercial ventures which is most attractive to Dibaya youth is the illegal traffic in fuel (mainly diesel) for which Dibaya is well situated, with its Kasai River port location. Providing illegally obtained fuel is, in fact, one of Dibaya-Lubwe's most important urban functions for regional agricultural marketing, and for the servicing of the vehicle transport sectors in other urban centers (especially Idiofa and Tshikapa). Fuel barges enroute to Ilebo (PetroZaire) and to Dibaya itself (Zaire FINA) and ONATRA boats are the main sources of this black market fuel, in a system which involves complicity at high levels in the Kinshasa fuel companies. More volume of fuel is taken on each boat in Kinshasa than is reported on its manifest, and this is the surplus which is sold en route. Black market fuel traders (known locally as "Khaddafi") hire pirogues (either with or without motors) to place initial orders with these fuel boats, and to arrange an upstream pickup point for that evening. Thirty or forty fuel drums (200 liters each) is the maximum purchase usually made by any one trader, but many Khaddafi are buying in very small quantities, such as one or two drums at a time. A Khaddafi's per barrel costs involve:

Rental of an empty fuel barrel	70 Z
Motor boat rental	140 Z
Beach to house transport of purchased fuel	60 Z
Bribe to the local police	20 Z
Per barrel supplier's price	1200 Z

TOTAL

1490 Z

Most Khaddafi who trade in these small quantities resell as rapidly as possible in Dibaya itself, usually to Idiofa-based traders who supply their own empty barrels and onward transport. The resale price in Dibaya of 1800 Z provides a minimum profit to the local Khaddafi of 310 Z/barrel. Buying in bulk provides additional cost savings in the price of boat rental and bribes, increasing the Khaddafi's profit level per barrel. In the dry season, when fuel supplies are scarcer, the per barrel resale price in Dibaya increases to 1900 Z.

It is interesting to note that Idiofa fuel buyers are forced to use their own vehicles to reach Dibaya to buy from the Khaddafi, since the Idiofa resale price is 2500-3000 Z/barrel. Both Dibaya vehicle owners, and small scale Khaddafi who would need to rent vehicle transport to Idiofa, do not realize enough profit to justify the cost of such a trip.

Per Barrel Costs of Resale in Idiofa

Transport of fuel to Idiofa	250 Z
Return transport of empty barrel to D.L.	50 Z
Roundtrip trader's transport	500 Z
Extra barrel rental fee for delay in resale	<u>70 Z</u>
	870 Z

In addition, lodging and meals costs for the trip would be an expense for a Khaddafi who did not have relatives in Idiofa. Even if 3000 Z per barrel could be obtained in Idiofa, the Dibaya Khaddafi would risk merely breaking even economically on his incremental costs. Since at least 4000 Z-5000 Z per barrel, or even as much as 7000 Z, can be obtained as a black market resale price in Tshikapa, however, Dibaya-Lubwe vehicle owners find it profitable to serve this market.

Dibaya Khaddafi operate with considerable flexibility, serving either established long term clients, or selling on a first-come first-served basis, or in combination. Most of these black market fuel traders are young men, and at least 100 individuals are involved, including in-migrants attracted by this trade from Kinshasa, Tshikapa, and Idiofa (mostly BaNdinga). Relatively little startup capital is required, since turnover is fast, and small

quantities (one or two barrels) may be purchased. The need to establish relationships with boat owners, suppliers, barrel renters, and authorities is the major entry barrier. Kerosene is also traded on the black market in a similar way, but is usually purchased at 2,000 Z for a 200 liter barrel, which is resold at 15 Z/bottle (75 cl).

Small scale Khaddafi usually have multiple sources of income (tailoring, fishing) and in some cases use their fuel profits to purchase local agricultural produce for resale in Kinshasa. The preferred investment for profits, however, is the purchase of empty barrels (250 Z each in Dibaya), to reduce the drain on profits caused by barrel rental fees. Some local Khaddafi have purchased up to 10 of their own barrels in this way. Often the small amount of profit which a Khaddafi receives is frittered away on beer and current expenses, so that long term savings or investments are not accumulated. Most Khaddafi are afraid to invest their earnings too visibly (in durable housing construction for example), and this is undoubtedly one of the reasons that almost no durable construction activity was observed in the entire town. Most residents are still using village construction technology and materials. The dominance of the most remunerative Dibaya commercial activities by Kinshasa and Idiofa-based proprietors, with the exception of local warehousing, also contributes to local inactivity in construction investment.

As stated earlier, Dibaya-Lubwe secondary schools are not serving local employment markets. The town's six secondary schools offer only pedagogy, math/physics, and biochemistry specializations. A commercial option is available, but does not seem to be geared towards encouraging entrepreneurial self-employment. State investment in local secondary schools has been minimal; (5 of the 6 schools are run by religious PVO's). The JMPR runs an informal training center which claims to teach auto mechanics and commercial skills, but the level of such training is generally poor, and no other technical skills are being taught in the town. Père Camille at the Catholic Mission has a small number of apprentice carpenters and masons under his supervision, who are helping to construct Mission buildings from adobe brick. There is a complete absence of agricultural training programs in Dibaya, in spite of its record of attracting young rural cultivators, who continue production on the urban fringe. No development program is distributing seeds or other agricultural inputs in the town.

In spite of their lack of relevance to local employment realities, Dibaya's secondary schools are drawing students from rural parts of the Kapia, Bankumuna, Ipamu, Mukoko, and Kasangunda areas, into the cité. The failure rates are quite high, especially in the first and second years, and among those students who are remaining in school, many must repeat one or more years. Even for the small number of Dibaya graduates (only 2 diplomas were awarded last year by the 200-student Lycée Ndana) the chance obtaining funding and a placement for higher level studies is slim, and employment as a teacher (the only employment for which graduates are qualified) is difficult to find. Dibaya's Protestant-run commercial school has had considerable difficulty attracting and retaining qualified teachers. Not a single student passed the school's final exams last year. The few Dibaya residents who have succeeded in obtaining higher education, and who have thereafter returned to work in the town, are the handful of ISP Kikwit graduates who have become secondary school professors or prefets.

Dibaya offers a limited range of health services to its surrounding rural populations. There is no hospital, and no resident physician in the urban area. For these services, both rural and urban residents must travel to the Ipamu Mission to the west. Though Dibaya has 3 dispensaries, two maternities, and several pharmacies, only the Catholic dispensary is regularly supplied, and its maternity attracts rural women from the north side of the Kasai River, from Tumbalungu in the west to Mombi in the east, and from as far away as Bankumuna and Kapia on the south bank. These rural women come to Dibaya primarily for pre-natal consultations, but with relatively few exceptions, only women from the cité actually give birth at the maternity. A small resident program for severely malnourished children is also run by the Catholic nurses in Dibaya. The next nearest maternity accessible to rural women south of Dibaya is almost 80 kilometers away, at the Lakas Mission.

Dibaya-Lubwe's daily urban market, as was found in other Bandundu cities and towns, is only selling food to the cité's own population. The market is most active on Sundays, when nearby peasant women arrive to sell their own produce, and Mai'Ndoambe residents from the north bank of the river come to buy provisions. On a daily basis, the fish sales in Dibaya's market

are more active in the afternoon, since the market women buy fish in the morning on the Kasai sand bars from fishermen who can be reached by pirogue. Large quantities are not traded in the cité's market, since it plays no role in the regional assemblage of food for export to Kinshasa or Shaba. Though cité market women (mostly RaBunda) pay 185 Z/year in taxes at the zonal and cité levels, village women who sell on a more occasional basis are not taxed. Even the market women who sell imported or manufactured goods obtain their supplies in Kinshasa, often through arrangements with their trader husbands, who buy for them during trips to the capital. The only organized rural market which is attended regularly by Dibaya market women is the fish market held every other day in Mutanga, a fishing village on the Kasai in Kapia collectivity.

Only two market women have worked their way up through this petty trading system to become proprietors of their own shops in the cité. The market women themselves see trading as a livelihood of last resort, and are not grooming their daughters for similar lifestyles. Instead, they are investing their profits in education, sending their daughters to schools in Gungu, Idiofa, and the missions, in the hope that they will become nurses or teachers. Collective mechanisms for saving, credit, or investment are lacking among Dibaya market women. As examples, the formerly active "likelemba" (rotating credit society) is now defunct, and no collective action has been taken to either protect each other's investments in pirogues from theft or to buy canoes collectively. Since pirogue rental costs 20 Z/day or 130 Z/month, in comparison with the purchase price of 1,100-1,200 Z, the women are assuming a significant financial penalty by not taking this sort of collective action.

Another informal sector trading activity, which links rural producers and urban consumers, involves palm wine sales which take place outside the market, in a special location near the cité's administrative offices. Young men from Dibaya bicycle south to forest zone villages on the Idiofa road with large empty bottles and calabashes, returning early the next morning to sell the palm wine in town.

The urban and nearby rural areas are also linked by the "reverse commuting" of 100 employees of the C.K.E. (Compagnie de Kasai et de

l'Equateur). These employees work at the company's coffee purchasing and weighing station 2 km from the town's southern limit, or in its surrounding 1155 hectare plantation (coffee, palms, and rubber trees), but have chosen to live in the cité and walk to work each day, even though most originally came from neighboring villages. Though CRE uses the Lulwe beach to export its coffee to the company's decorticating plant at Lumbu (12 km from Bandundu city), and has a warehouse and storage tank on the beach from which it ships palm oil and palmiste to the Amato Frères soap factory in Kinshasa, the firm has not invested in boats based at Dibaya, or in agricultural transformation industry in the cité itself. The company's baleinières operate out of Lumbu and only transit in Dibaya.

There is almost no other agricultural processing equipment in Dibaya. Tchenzo, elderly owner of a 76 hectare palm and coffee plantation on the western edge of the cité, has a small oil press, but has virtually ceased to harvest his palm products because of the low yields of his aged plantation, and the scarcity and high cost of palm cutting labor. His manioc/corn mill was dysfunctional until fairly recently, when it was repaired by the Catholic Mission. The mill, which is the best of the two which are working in Dibaya, is subsidized by the Mission. The mill runs only at night, powered by the Mission's diesel generator. The mill's proprietor is not charged for the fuel, and the Mission makes no claim on his personal profits, reportedly out of a sense of obligation for his support for the Mission's establishment during his younger, more prosperous days.

Kikwit

In contrast to the other Kwilu urban centers of interest to USAID, Kikwit's role in direct agricultural production is extremely impressive, attributable to its location within an area of relatively good quality soils. As the urban area with the largest population of unemployed or under-employed rural migrants, many of whom will probably be returning to live in more smaller towns or rural villages within the next few years (if past trends continue), Kikwit is the most appropriate site for urban-based agricultural demonstration projects and up-to-date training programs in improved production technologies. A major opportunity for USAID facilitation of the development of a model agricultural training facility, which could offer both long term formal and shorter term informal courses, and which could be influential on a regional scale, is presented by the on-going construction of the new urban campus for ITAK (the Institut Technique Agricole de Kikwit).

During the consultant's site inspection, it was observed that construction activities had resumed in full force, after having been put on hold for much of the past year by GOZ delays in providing regular and adequate payments to the construction firm (ERCO - Etude et Réalisation des Travaux de Construction, a Zairian owned small business). A substantial amount of the construction has already been completed on several of the dormitory buildings and classroom blocks, though completion of the total campus is not expected before the end of 1986, since a number of faculty residences have been included in the plans. The 10 hectare campus provides an opportunity to address many of the important regional agricultural issues. Elderly palm plantation covers a major portion of the site, offering the opportunity for recycling experiments which would be useful for generating alternative reuses for obsolete palm plantations throughout the region. In its new location, ITAK will be adjacent to the JMPPR/PNR (Chinese-assisted) paddy rice training program installations on the Nzinda River, providing an opportunity for technical assistance for the expansion of this highly visible agricultural program for unemployed rural migrants in the urban area. Market gardening and other irrigation experiments could be undertaken in such an expansion effort. JMPPR's upland manioc and pineapple fields are adjacent on

the south bank of the Nzinda, which could facilitate ITAK's dissemination of disease-resistant PRONAM varieties. Since portions of the ITAK site are steeply sloping, combined reforestation/erosion control trials could be undertaken, with relevance to Bulungu and Dibaya-Lubwe, as well as Kikwit itself.

Since the construction budget was established before devaluation, current estimates for project completion show significant shortfalls in comparison with original construction bids and ensuing GOZ Executive Committee allocations. According to ERCO's June 1984 report, recently submitted to the committee, as much as 72 million additional zaires may be needed as a supplement to previously remaining allocations of 11.5 million zaires, to complete ITAK construction as planned. This is a highly inflated estimate, however, since not all costs should be upgraded even 400% to match devaluation. Cement, labor, and many other project costs are local expenses, not dependent on imported materials, and should thus have been inflated at most by 50%. It is recommended that USAID monitor the Executive Committee's financial commitments to this project and explore, in more detail, incorporation of training program assistance to ITAK, possibly including some construction funds, into project 660-0102.

Technical training needs in the region can also probably best be served through a Kikwit institution, IPTK (The Institut Professionnel Technique de Kikwit). Bandundu city is the only other urban center in the Kwilu which has a well-established training program for mechanics. The Josephite Brothers, who run the Bandundu technical secondary school program, have a less well-equipped machine shop, since they have not received external aid. They also seem to have diluted the quality of their training program by accepting almost all applicants, regardless of the school's actual capacity for training so many students adequately, since the Brothers have assigned their highest priority to meeting demand for education. Several urban centers, including Kikwit, have JMPR auto mechanics training centers, offering two year diploma courses to the urban unemployed, but the quality of instruction and equipment is uncertain.

IPTK Kikwit, however, has the following advantages as the lead institution for USAID technical training support:

- (1) a demonstrated capability for conducting R and D on appropriate technology and constructing prototype equipment for testing and replication;
- (2) detailed long-term experience in repairing vehicles in the region, which could be capitalized upon to develop specific preventive maintenance and repair programs which would address the typical causes of equipment breakdowns in the region (including vehicles, boat engines, small mills, and generators for agro-industry);
- (3) a well-equipped machine shop, and an institutional memory thanks to long-term commitments by the resident Jesuit administration and faculty;
- (4) a nationwide reputation for technical excellence;
- (5) a wide network of contacts with former graduates which could be tapped to recruit the most appropriate additional teaching personnel;
- (6) affiliation with the CEPAS network of information on appropriate technology in Zaire and West and Central Africa.

IPTK has recently experienced great difficulty in retaining qualified Zairian teaching personnel. Mechanics with IPTK diplomas who are working in Kinshasa private industry are able to obtain salaries of 3,000 Z-5,000 Z/month after only 2-3 years of working experience (i.e., 36,000-60,000 Z/year). Even with European donor's assistance, IPTK is only able to offer 1600 Z/month, a 100% salary topping above the applicable GOZ teaching salaries. Though IPTK has always been faced with high turnover in its locally recruited faculty for this reason, the situation has worsened. At the time of this survey, IPTK has lost all of its locally recruited teaching staff because the institution was unable to fund competitive salaries. A USAID-assisted program at IPTK, designed to meet the equipment maintenance and repair needs of the region's private transport and small scale agro-industry sectors, would need to provide additional salary toppings of 16,800-40,000 Z/year to provide competitive salaries for Zairian teaching staff. The long run sustainability of this higher staff salary level would be unlikely, beyond the USAID project period, at least for IPTK faculty who would be assigned to meet the training needs of the USAID target groups (self-employed mechanics who would be likely to remain in the region as service providers). Kinshasa industries (such as Chanimetal), which have absorbed most of IPTK's past graduates, might be willing to subsidize local teaching salaries for the regular industrially-oriented IPTK program.

Careful planning of USAID training assistance to the informal self-employed artisanal repair sector in Bandundu would therefore be required, in order to ensure local financial sustainability.

It is recommended that USAID consider financial support for a 5-7 year program at IPTK which could incorporate the following elements:

(1) An initial field survey designed to:

- (a) Identify the major causes of breakdowns for leading brands of equipment in use in the region, with a focus on truck, baleinière, and pirogue motors; manioc/corn mills; bicycles; and generators. Weak elements in the design of leading types of machinery in current use would be identified, as well as items most in demand for urban-based spare parts inventories. Programs would be recommended for preventive maintenance and part replacement which would prolong the useful life of future equipment investments. Recommendations based on this survey might include design of locally produceable spare parts as import-substituting artisanal products, and/or identification of the most durable machinery in each category, to promote for future local investments.
- (b) Collect teaching materials (equipment which would be economically feasible to repair) for use in IPTK's Kikwit-based training workshops.
- (c) Assess the skill levels and training needs of artisans currently repairing machinery in the Kwilu urban centers, and identify candidates for IPTK-run training programs.

(2) Based on the above survey findings, an IPTK action program could be designed to:

- (a) Develop relevant post-diploma specializations in current IPTK graduates (such as soldering or injection pump repairs), followed by supervised field placements for these IPTK trainees within cooperating artisans' workshops. The IPTK students

would provide training for the artisans in these locally needed skills, while themselves gaining supervised practical experience. IPTK supervisors would visit each training site on a regular basis to provide on-site consultations.

(b) Provide practical workshops and short courses for local artisans, to strengthen selected locally needed skills, at IPTK's Kikwit facility. Based upon the past experience of West African informal sector training programs, training stipends would need to be offered to artisans to ensure their participation.

(c) Initiate a selective research and development program to produce locally needed spare parts, tools needed for repairs, and locally useable agro-industrial equipment. For example, IPTK recently designed a prototype mechanical palm oil press, and built five of these presses which were sold to local producers for 2,000 Z/each. As suggested by the PFP (Partnership for Productivity) report during the past year, there seems to be a market for local artisanal soap production in the region. The Technical Consultancy Center (TCC) in Kumasi, Ghana, a PVO which serves local entrepreneurs, has developed low cost soap-making equipment which has been successfully used in AFSC's project with Malian women's cooperatives, and in other West African income-generating projects. USAID support for the development of an IPTK research and development service could include support for networking and exchanges with TCC and other selected appropriate technology workshops in Africa, especially those which have developed effective prototype hydropower and water wheel projects, which are important technical inputs for the promotion of Zairian small scale agro-industry.

In summary, program sustainability for the training of artisans could be achieved through use of IPTK students to train artisans as part of the redesigned IPTK core curriculum. Local artisans with upgraded skills would become sources for local informal sector apprenticeship training. IPTK

improvements on local equipment maintenance, adaptation, and repair would be funded as part of USAID's credit assistance to local entrepreneurs. Loans to individuals for equipment purchases could include funding for the performance of recommended part replacement and maintenance. Written evidence of a prepaid maintenance contract with an approved artisan could be required from each borrower as part of his or her loan agreement. Sustainability could also be assured by upgrading the skills of the JMPR centers' trainers through IPTK workshops and apprenticeships.

IPTK has already been able to identify the three most typical causes of Silaouka truck breakdowns (the '40-'45 vintage ex-Army trucks which are popular for agricultural transport throughout the region). Repair of fuel injection pumps and cylinder-head replacement are the most common repairs needed on these trucks. In addition, IPTK has noted that Silaoukas have several weak design features including fragile rubber water hoses, and large wheels which strain their transmissions. CKE recently preventively corrected these weak features on several Silaoukas that they had just purchased, before putting the trucks into use, to prolong the life of their investments. IPTK's experience could probably be converted fairly quickly into a concrete strategy for these types of technical services. Given the importance of injection pump repairs in all diesel motor mechanical work, including servicing of the new baleinière motors that USAID hopes to promote through its river transport assistance, as well as the new trucks to be financed in USAID's agricultural marketing project, IPTK offers another advantage. It already has purchased equipment for an injection pump workshop, and has in-house skills in this type of work, especially in generator repair. USAID could support the incremental cost of installing the injection pump equipment, for which IPTK is currently seeking financial assistance.

Kikwit is the most accessible and centrally located regional site for the stockpiling of spare parts, and for housing mobile equipment which could circulate outside the city to perform maintenance and repairs. Kikwit is also the most economically viable site in the region for import-substituting industry, since it has the largest concentration of potential consumers with the disposable income which could support such production, especially of consumer goods (e.g. soap). Only Bandundu city and Kikwit have the urban water and electrical supplies that would be required to attract decentralized

industry. Because of its marginal location relative to demographic densities within the region, Bandundu city is not likely to be able to provide cost economies over Kikwit as a location for import-substituting industry.

Bandundu city also has a lower level of disposable income per resident, since its economy relies upon administrative salaries. The decision to locate the Sobraband brewery in Bandundu may have involved some transport cost savings for raw materials, made possible by its Kasai River location on the fluvial transport system, however, regional marketing of its production was extremely poor until Sobraband set up its own depot in Kikwit. The cost of transporting its finished goods to the Kikwit consumers may have counter-balanced many of the cost savings in the factory's more direct access to its inputs. Political factors were probably at least as influential for the brewery's locational decision as economic ones, in any event.

Currently, REGIDESO is planning Belgian aid-financed investments in the Kikwit water supply system which will strengthen its viability as a potential site for decentralized industry. These improvements will fully convert Kikwit to well water sources (including 5 sites on the west bank of the Kwilu River within the city limits, several of which are artesian). Kwilu River surface water, which has been the source of all REGIDESO water in Kikwit, has already been partially phased out by 2 artesian wells next to the REGIDESO Kikwit Station, which were just recently put into operation. This is extremely encouraging and should improve Kikwit residents' health status noticeably since, as noted in the October '83 case study of Kikwit, the Kwilu water intake area was highly polluted by immediately adjacent upriver discharge from the heavily silted Lukeml River. The construction of two new reservoirs, and the installing of pumps to fill them, will be beginning shortly in Kikwit, increasing the volume of water available to existing users, and reinstating service in several neighborhoods which are served by water mains for which pumping capacity has been inadequate. REGIDESO is expecting a decision shortly from Belgian aid about whether Kikwit will continue to be the exclusive site for all of its water system investments in Zaire. If this turns out to be the case, USAID may not need to consider Kikwit water system investments in its own assistance program, unless support could be provided for extending service connections to unserved sites with agro-industrial potential.

It is still not clear whether German bilateral aid will be proceeding with the financing of a hydroelectric facility for Kikwit. USAID should continue to monitor German action on this project possibility, since this investment would considerably strengthen Kikwit's competitive advantage as a site for import-substituting industry.

Kikwit also appears to be the best service center for USAID's regional support for agricultural and marketing credit. CBZO's regional headquarters in Kikwit is backstopping its 15 other branch offices in the region. All but three of these offices (Vanga, Tonu, and Dula) are located in urban centers as follows: Kikwit (4), Bulungu, Idiofa, Gungu, Feshi, Masi-Manimba, Kenge, and Bandundu city. Supporting CBZO savings and credit cooperatives, and their rapid outreach to new parts of the region, clearly appears to be the most effective way of encouraging local savings and providing credit for small scale entrepreneurs (for mills, baleinières, pirogue motors, vehicle repairs) involved in transport, agricultural marketing, and artisanal transformation of rural production. Training for CBZO's regional staff, especially in accounting and investment analysis, could be provided through Technoserve or another PVO or local financial institution, and would be an inexpensive, rapidly implementable way of supporting an existing institution. For larger credit actions, particularly loans to medium size and large scale agricultural marketing agents and transporters, a second institutional collaborator probably would need to be chosen, either SOFIDE, the BCA (Banque du Crédit Agricole), BCZ (Banque Commerciale du Zaïre/Kikwit), or CODAIR. USAID has already commissioned other consultant studies to assist in its choice of such an institution (e.g. Kingata's report), but whatever option is chosen, it will be important to establish the institution's presence in Kikwit, as the focus for regional service provision, if this credit program is to be effective. A Kikwit credit office would be centrally located with respect to serving both Bulungu and Idiofa, the other urban areas in which active regional market intermediaries are located, since these centers are in the major agricultural production areas. BCZ Kikwit is still the major bank outside of Kinshasa which is serving the region's merchants and agricultural marketing agents, and as such may be the best institutional home for providing a higher level of credit for major entrepreneurs. In comparison, the Bandundu Banque du Peuple serves a much smaller number of clients, is less accessible geographically, has unreliable

liquidity, and has a poor track record in providing credit. Reservations on the option of using CODAIK as a mechanism for providing this level of credit were expressed in detail in the chapter on "PVO's and Development Projects" in the author's recent case study of Kikwit. Current interviews in the region have confirmed that CODAIK activities are having no impact aside from providing credit for its own shareholders' vehicle purchases. CODAIK has virtually no outreach to smaller urban centers in the region.

The remaining options - BCA or SOFIDE - have not been studied during this consultancy, however, as an existing institution with an on-going credit program, SOFIDE could make credit available to project beneficiaries in a more timely fashion, even though its program would need to be adjusted to the loan size limits of the USAID target group. Usually SOFIDE loans are considerably larger than USAID's target entrepreneurs could absorb. If USAID chose to work through the BCA, a multi-year delay in starting up the flow of credit funds would be unavoidable, since BCA activities are not yet underway. It is always more time-consuming and risky to rely on a new institution, as yet unproven, than to modify an on-going program, and several Idlofa and Dibaya-Lubwe traders have already financed vehicle purchases through SOFIDE. Entrepreneurs in the smaller urban centers in Bandundu region were aware of the BCA's proposed program, and were anticipating help from this resource to meet their credit needs.

### Bulungu

Though less economically active than Idiofa (half its population size), Bulungu is much more commercially dynamic than the regional capital, Bandundu (twice as large). Fernandez is by far Bulungu's largest exporter, trading mainly in palm nuts which are collected by local cutters, for a commission. He has at least 40 vehicles in his fleet. The road from Vanga mission to Bulungu, which passes through extensive palm plantations, is lined with cutters' platforms, on which clusters of palm nuts are left for trucks to collect.

According to local entrepreneurs, Bulungu is more important than Idiofa as a center for food production (particularly manioc, corn, and beans), and the tonnages handled by its port are larger than those of Kikwit. Located only 75 km from the macadam road to Kinshasa, Bulungu has stronger ties to the capital than to the region's largest secondary city, Kikwit (only an hour's drive from Bulungu). Kikwit wholesalers are not relied upon for stocking Bulungu's shops. Most shopkeepers buy their imported and manufactured goods, destined for sale in Bulungu, directly from Kinshasa suppliers. Major merchants trading in imports and manufactures have a pattern of opening separate sales outlets in each of the major regional towns, producing a "chain store" structure. Nogueira, for example, has outlets in Bulungu, Kikwit, and Idiofa.

Smallholder peasant production of food crops predominates in the environs of Bulungu, though soils are sandy and infertile on the edge of the city itself. Town residents who are active in agriculture cross the Kwilu River by pirogue to find more fertile land for their fields. Slopes in Bulungu are fairly steep, creating an erosion problem. No public drainage works are addressing the situation, which is worsening with urban densification, and the ensuing removal of the ground cover. Though more severe than erosion in Dibaya-Lubwe, which is cut by ravines in the western neighborhoods, Bulungu's erosional problems are less pressing than those of Kikwit (where a considerable negative impact on urban agriculture is occurring).

Periodic rural markets are more organized in Bulungu Zone than in other zones in the USAID project area. In fact the zones of Bulungu and Masi-Manimba have the most disciplined organization of rural markets in the region. These markets occur more frequently during the height of the agricultural season (once per week from April to July), and about once every two weeks at other times of the year. These markets are organized by the local "chefs de collectivité". Theoretically, each market is monitored by the collectivity's agricultural extension agent. Local traders in agricultural produce, based in Bulungu, have found this organized rural market structure to be to their disadvantage. The well-publicized and regular schedule of markets provides easy access for Kinshasa produce buyers, who can outbid the prices which local traders can afford to pay for peasant production, especially when seasonal food shortages drive consumer prices higher in the capital. After such crisis periods, producers continue to expect these higher prices, which local buyers cannot afford to maintain. Though barter is theoretically illegal as a means of paying peasant producers for their food crops, many Kinshasa merchants exchange beer, sardines, and other imported and manufactured goods for the produce they buy, increasing their competitive advantage over local merchants, since Kinshasa traders can obtain economies of scale, transport cost, and purchase price for manufactured goods.

Many of the major Bulungu merchants were severely impacted by demonetization. Cit. Mafandala, current President of ANEZA, and Bulungu-based trader since 1979, lost the four boutiques which he owned in the interior during this crisis, for example. A number of Bulungu merchants have bank accounts at BCZ Kikwit, but have not been satisfied with the access to credit which these accounts provide. Guarantees are demanded, though a maximum of only 100,000Z (less than \$2800) is available to a local trader. Mafandala claims to be able to absorb five times this amount of credit, but has been unable to raise his credit ceiling, even though he self-reportedly always prepays his loans. He was unable to obtain credit for the construction of his hotel, which is the major one in Bulungu (albeit in a rather isolated location on the edge of the city). Allegedly, BCZ favors politically well-placed individuals in its allocation of credit.

As a case study, the factors leading to Mafandala's choice of Bulungu as his commercial headquarters are instructive. He was born not far away in Pindi and had worked for PLZ (Plantations Lever du Zaire) for seven years at nearby Lusanga, and at the Central Bank in Kinshasa, before opening his commercial activities in Bulungu, using 150,000Z as his initial capital. He chose Bulungu rather than Kikwit or Kinshasa as a base for operations and residence, in order to be closer to the producers, and to capitalize on his connections in the surrounding area.

Unlike Mai Ndombe Sub-Region to the north, boat ownership in the Bulungu area is not part of local cultural tradition. Since road transport to Kinshasa only takes 6-7 hours (though up to 12 hours for large trucks), this is by far the most frequently used and highest volume freight and passenger transport mode, even though the vehicle fleet is plagued by frequent breakdowns. Mafandala only had half of his vehicles in working order during the consultant's visit (two out of four trucks). In contrast, river transport takes about four days from Bulungu to Kinshasa.

Use of baleinière transportation only interests Bulungu merchants who are sending large loads to Kinshasa, and use of ONATRA is discouraged by the high risk of theft. ONATRA service in Bulungu has declined greatly in comparison with earlier track records on speed of service and cargo security. Currently, ONATRA barges stop at Bulungu only about once per week. Mafandala has chosen to use vehicles for transport, buying his spare parts in Kinshasa and doing his own repairs. The Catholic Procure in Kikwit is the only major repair service in that city which is used by Bulungu's transporters. Some Bulungu vehicle owners also repair their vehicles at the Catholic Brothers' garage in Masi-Manimba or at PLZ's Lusanga workshop.

According to ANEZA, the major obstacles in local food marketing are the lack of credit and of vehicle fuel in Bulungu. The town's CADEZA branch office offers no credit services. The only credit source within the city itself is the recently opened CBZO savings and credit cooperative, which has accumulated capital of almost 1.7 million zaires since the branch office was opened in January 1981. The maximum CBZO loan is about 20,000-30,000 Z, and

is a resource for some boutiques. ANEZA feels that Bulungu has enough local capital to justify the establishment of its own branch bank, though further study would be needed in order to determine whether this is economically feasible, or even necessary, in view of the cheaper alternative of extending nearby BCZ Kikwit's service outreach. The largest Bulungu traders, especially Fernandez and SOZAM, have obtained BCZ credit in Kikwit.

Diesel fuel, when available in Vanga or Kikwit, costs over 3,000Z per barrel. There is no fuel depot in Bulungu itself, and service from surplus Vanga Mission supplies cannot be relied upon. Fernandez, for example, obtains supplies at both Vanga and Kikwit. ANEZA Bulungu cannot place orders through Kikwit Shell on behalf of its members, in contrast to ANEZA Kikwit's role in allocating private sector supplies of official rate fuel for its local members and some Idiofa traders and organizations. During frequent shortages, Kikwit supplies are consumed by the town's own traders. During the dry season, when only smaller barges can navigate the Kwilu, fuel supplies arriving in Vanga and Kikwit by river are inadequate and must be supplemented by cistern trucks. Since Idiofa has access to low-priced black market fuel supplies, and Kikwit has its own depot for official fuel allocations, Bulungu is at a disadvantage as a base for agricultural marketing. Except as part of the search for credit and fuel, agricultural marketing interactions between Bulungu and Kikwit are fairly minimal, though CODAIK has distributed some agricultural inputs in the Bulungu area.

The agro-industrial sector is much less developed in Bulungu than in Idiofa, and the former town is also comparatively disadvantaged by its lack of any local development project or PVO headquarters. Only three manioc mills are operating in Bulungu (2 owned by Cardoso, a Kikwit-based firm, and 1 by Pastor Pambi). Eyuma, a Bulungu trader, owns the only rice huller in town. Cit. Senga was in the process of building a rice hulling factory on the edge of town during the survey, but with the declining competitive position of domestic versus imported rice, this project may not be completed.

Prevailing policies on the enforcement of trading licenses make it difficult to assemble statistics on the number of traders in Bulungu. Rural producers do not need permits in order to sell in the urban market. On Saturdays, nearby peasants bring produce to sell at retail to urban residents, swelling the size of the city's daily market. Traders selling imports and manufactures in the market are expected, however, to pay for permits.

Most of the town's warehouses are located at the ONATRA beach on the opposite bank of the Kwilu from the town (the east bank). The Fernandez warehouse was the most active at the time of the consultant's survey, with sacks of corn as its major inventory item. Other products such as manioc, punga fiber, palm nuts, and coffee, are sent downriver from the Bulungu beach through ONATRA barge to Kinshasa. Pushcarts are not in use in Bulungu, probably because of the sloping terrain.

Bulungu: Warehouse Inventory At ONATRA Beach

Owner	No. of Warehouses	Product Stored
CAC (Cooreman)	2	punga fiber
Fernandez	1	corn
Ndoy	1	empty
SOZAM	1	corn
Yusa	1	live pigs
Madail	1	corn
Tavares	1	lumber, manioc

The Bulungu port was fairly active at the time of the consultant's site inspection. Seven ONATRA barges were in port, mostly anchored in the deeper waters on the opposite shore from the city where there are fewer sand deposits, but only one baleinière was present. The Zonal Economic Inspector

reported that baleinière traffic in Bulungu port is fairly minimal. Some baleinières deliver and sell beer purchased in Bandundu City. About 20 unmotorized pirogues for short distance transport were beached on the town's side of the Kwilu River.

The modern informal artisan sector is not well-developed in Bulungu. There are no carpenters, and only one metal worker (Isungu, who is also a trader), who does a limited amount of body work on vehicles.

The city offers few services, aside from transport and marketing, to rural agricultural production. The only agricultural training provided in the town is the three-year JMPR training program for agricultural agents. Investment in mills, and other agro-industrial equipment is needed, but the lack of public water and electrical services (which are only available in Bandundu City and Kikwit) are an obstacle. Both rice and corn were difficult to sell this year. Transport and producer costs for paddy rice required Kinshasa sales prices of at least 1,000 Z/sack to cover marketing agents' costs and profit. Imported U.S. rice was selling for 800 Z/sack in Kinshasa in July '84, discouraging local rice assemblage in Bulungu and Idiofa. Marketing agents could be more effective if roads were improved and working capital were made more available. None of the Bulungu stores sell agricultural inputs. Existing warehousing, however, is adequate for current needs and is, in fact, significantly underused.

The only source of formal sector credit in Bulungu is the town's CBZO branch office, which opened in January 1981. Its operations now include 1,254 members, some of whom are female traders. Its total capital is 1,698,982 Z, of which 682,161 Z were outstanding in the form of 61 loans to members at the time of this survey. These loans were primarily supporting traders' purchase of goods and produce for resale, but some loans had also been given for construction, school fees, medical services, and funereal expenses. No loans had yet been requested for other types of capital investment, such as the purchase of manioc/corn mills or transport equipment (even bicycles).

The Bulungu CBZO has its own credit commission which screens members' loan applications. Loans are given for a maximum duration of 12 months, with a member's credit limit being twice the amount of his or her savings. Defaults were limited to 9 cases for a total of 14,492 Z which remained uncollectible at the time of the survey. In order to insure the cooperative against future defaults, a 1% tax on loans had been established with the proceeds divided equally between a "risk fund" to cover defaults, a "reserve fund" for contingency management expenses (total of 8,513 Z, at the time of the survey), and a "social security fund" ("Fond de Prévoyance"). Interest charged on loans to members totalled 2%, including this 1% tax described above, and the 1% redistributed as interest on members' savings deposits. Interest actually paid to depositors is calculated as 1% per trimester on the depositor's minimum balance over this period.

Most of Bulungu CBZO's remaining funds are deposited in the Kikwit branch's CooCEC (Coopérative Centrale d'Epargne et de Crédit) account at BCZ Kikwit. Only an amount judged necessary to meet immediate liquidity needs is retained in Bulungu itself, within a home-made concrete vault in the CBZO office. Accessibility to services is ensured by both morning and afternoon hours on week days. Security includes two night guards paid by the cooperative. At the time of the survey, the Bulungu branch office reported:

Cash on hand	162,652	Z
Deposited at BCZ Kikwit	846,018	Z
Outstanding loans	<u>682,161</u>	Z
Total Savings	1,690,831	Z

As a network of 15 PVO-run credit cooperatives in Bandundu Region, 11 of which are located in the region's major secondary cities and market towns, the CBZO institutions should be assigned a priority for USAID assistance in the credit sector. The Bulungu branch has two fulltime salaried staff (its manager and cashier) and a trainee who could participate in Technoserve-run training activities. The trainee is a primary school teacher undergoing three months of CBZO in-service training. Saturdays, staff in Bulungu control the account records. The Kikwit CooCEC staff audit Bulungu's records periodically, and had last done so in March '84, prior to this USAID field

survey. The Bulungu CBZO's administrative council sends monthly financial reports to the CooCEC which pays Bulungu staff salaries. Contract with the CooCEC also involves two to three trips per month to Kikwit for the deposit of Bulungu's funds. Technoserve or other USAID-supported training should initially target the Kikwit CooCEC, which is the regional center for the financial control of branch offices, and the locus for investment decision-making.

The Bulungu branch office has requested USAID assistance in obtaining a more permanent safe, more calculators, and transport equipment which would increase staff outreach to potential rural members. CBZO branch leaders represent Bulungu's educational elite, therefore training activities should also target administrative and credit council members who donate their time to CBZO work, as well as salaried staff. One member of the Bulungu CBZO's administrative council, who spends a significant amount of time overseeing branch operations, is the perfet of studies at the town's Institut Technique, Commerciale et Administrative. He grew up in Bulungu, and returned to work there after obtaining his secondary school teaching diploma from ISP Mbanza-Ngungu in Bas Zaire.

Secondary school institutions in Bulungu generate a large amount of rural-urban migration during the school year. The Institut Technique, Commercial et Administrative has a total of 365 students enrolled in its six grades, which include short and long cycle diploma studies. Most graduates pursue (or attempt to pursue) higher studies after graduation in either of the two disciplines (commercial studies or administration) in which diplomas are offered. Higher education is sought by Bulungu graduates in Kinshasa, Kikwit, or Lubumbashi. Teaching is one of the few fields in which graduates are eligible for employment, and some seek work in Bandundu city.

At the time of our survey there were 9 secondary schools in Bulungu, including two Catholic schools. Four other schools had been closed during the recent past, probably through lack of official accreditation and/or financial resources. Approximately 80% of Bulungu's total students reportedly come from the town itself, with the remainder from surrounding rural areas, but the share of rural participation is higher in secondary

schools. No student origin records were available to verify these reports. Urban primary schools are mainly serving urban residents. Of Bulungu's secondary schools, PVO's run more than half, as was found in other urban areas of Zaire.

Bulungu Secondary Schools, '82 - '83

	No. of Schools	Fields of Diploma Study
<u>State-Run</u>	2	Pedagogy
	1	Commercial, Administration
	<u>1</u>	Math/Physics
Subtotal	4	
<u>Catholic</u>	1	Math/Physics
	<u>1</u>	Sewing/Tailoring
Subtotal	2	
<u>Protestant</u>	1	Biology, Pedagogy
	<u>1</u>	Biology
Subtotal	2	
<u>Kimbanguist</u>	<u>1</u>	Pedagogy
Subtotal	1	
Total Secondary Schools	<u>9</u>	

Complete figures on '82 - '83 secondary school enrollments were not available, but about 1300 students were in State-run schools, and 640 in Catholic schools. Overall, only 40% of final year students in Bulungu pass their state exams, an indication of the poor level of teaching offered, and lack of teaching materials available to students. Given the high rate of failure, and high level of competition faced by graduates seeking further

higher education or employment, the complete absence of agricultural training in Bulungu secondary schools is extremely disappointing. Remedying this situation deserves a USAID priority for project activities.

The importance of agricultural activities for urban residents, especially among women, is clearly documented by observation of the ferry passengers in late afternoon, just before sunset. The ferry is completely jammed with women returning to Bulungu from their fields on the more fertile east bank of the Kwilu River, carrying baskets and basins of manioc, firewood, and machetes.

Nonformal education for women is limited to instruction in sewing, mainly of women's and children's clothes, given as a diploma program run by the Catholic nuns in Bulungu. A Catholic father, Abbaye-Cur  Masieta Lukodi, runs a small informal training program for male high school dropouts, which provides training in masonry or carpentry. Designed as two year programs, the success rates in both sections have not been high. In the masonry program, only four boys graduated into the second year, while four others are repeating the first year's work. In carpentry, four completed the first year, and three boys are repeating. The masonry section introduces building materials, adobe and fired brick-making, as well as cement block production. Construction of church buildings provides the context for the students' practical training. A German missionary society provided the funds for building materials, but no salaries for trainers, so the Abbaye pays the instructors in kind with a share of the construction materials. The carpentry students are trained in making furniture, doors, roofing, and coffins, using a similar payment system for their instructors. The textbooks followed are twenty years old, and the motivation level among both students and instructors is low, leading to a high rate of absenteeism. Informal sector apprenticeships which are available in Bulungu are mainly confined to carpentry. Quality artisanal training must be sought in Kikwit apprenticeships, or at the PLZ school in Lusanga.

The Abbaye also coordinates a training program for nurses' aides, for about 20 students per year, who receive practical experience in the Diocesan neighborhood clinic in Bulungu. The Bulungu Hospital itself is a disaster.

Like most urban hospitals in Zaire, it is State-run, and PVO (mainly religious) organizational support has ended. One of the three expatriate nuns in Bulungu works with the hospital, but facilities are minimal and are not maintained. The x-ray machinery is broken, and there is no refrigerator to preserve vaccines. The nuns keep a limited amount of vaccine for the hospital in their own refrigerator, and monitor the pharmacy's stock of medications and sales receipts. This situation forces clients for medical services to travel to the Kikwit Hospital, where doctors' services and supporting equipment and medications are available.

IDIOFA

The density of commercial activity in this town has been generated by its location at the key crossroads in a relatively densely populated area of the region. Idiofa is centered upon the crossroads for goods and produce moving between the Kasais, Shaba, Tshikapa, and Kikwit/Kinshasa. According to the Chef de Bureau, Idiofa Zone, the Office des Routes counted 160 vehicles in a single day, which were moving between Idiofa and Kinshasa. Though this was not a scientifically collected sample, but simply the count collected on a randomly selected day, it is indicative of the high level of vehicular transport activity which passes through Idiofa. In comparison to Idiofa's crossroads setting, Bulungu is somewhat isolated, causing its lower level of commercial activity. Idiofa's locational advantage is being undercut by the construction of the new National Road No. 1, on an alignment from Kikwit south through Tshikapa to the Kasais, which will bypass and therefore diminish the traffic through the city. Though located at the center of one of the two most agriculturally productive zones in the region, and therefore playing a critical role in agricultural produce assemblage and marketing, Idiofa is built on a poorly watered and sandy plateau, so its role in direct agricultural production is minimal. Only a limited amount of millet for home consumption is grown on the edge of the city. Idiofa residents interested in cultivating manioc must travel farther from the town. Some residents have their manioc fields in a village 18 km from Idiofa. According to DPP agricultural agents, many women return to their villages of origin (within a 50-60 km radius of the city) to grow corn and manioc during the growing season. In contrast, urban agricultural production is very significant in Kikwit, and to a lesser extent in Bulungu and Dibaya-Lubwe, where more agriculturally productive conditions combine with population density and urban unemployment.

The Catholic-run DPP (Développement Progrès Populaire) headquarters in Idiofa holds a virtual monopoly control over PVO agriculturally-related activities in the city, and in its area of rural influence. Therefore DPP is potentially an important partner in USAID's agricultural marketing project. Before committing project support to the DPP (by designating it as a USAID intermediary organization), it is recommended that a thorough audit of DPP accounts be carried out by Technoserve, or another appropriate organization such as ORT, to determine the extent to which existing foreign support for

DPP investments is benefitting producers themselves. Interviews throughout Idiofa indicated that there is general concern about this issue, and a widespread impression that foreign aid to DPP is merely creating salaried jobs within the organization itself, with agricultural marketing profits being reinvested as they would be in a private profit-making organization, to increase DPP's own capital and profitability. USAID should insure redistribution to producers of an adequate share of profits from any agricultural marketing and production support to DPP through project design, and should enforce these provisions through regular audits.

Before discussing DPP in detail, it seems appropriate to provide an overview of private commercial sector concerns and activities in Idiofa. The city is second only to Kikwit in having the most dynamic central market and largest number of adjacent shops of all the towns studied, even though, as was found in other cities, this market is not significant in regional assemblage of rural agricultural production for re-export to Kinshasa markets. Only two of the city's major entrepreneurs are women; other female traders are market women who sell from stalls rather than being owners of shops or vehicles. Most Idiofa shopkeepers purchase their stocks of imports and manufactures in Kinshasa rather than Kikwit, a practice which is seen to be necessary in order to retain competitive profit margins in the context of local prices.

According to ANEZA's Idiofa branch office, the city's commercial activities are constrained by lack of credit, vehicle fuel, and wholesale suppliers. According to the present survey, the credit constraint is a valid report, but fuel supplies are easily obtained on the parallel market, at official rates or less including transport cost, from the black market suppliers in Dibaya-Lubwe. As noted in the Dibaya-Lubwe chapter, where a full description of this illegal fuel trade was provided, Idiofa merchants use their own trucks to transport the fuel which they have purchased directly from Dibaya-Lubwe intermediaries. Fuel does not seem to be a constraint, therefore, so long as this parallel market is not eliminated through police action, even though there is no official fuel depot in Idiofa itself. The nearest source of official rate fuel is the Kikwit Shell station, and some missions and private entrepreneurs receive supplies at the Kikwit depot.

DPP fuel is mainly supplied through the CCB-run official depot in Dibaya-Lubwe, from which the fuel is trucked by DPP in its own vehicles, and then transferred into the underground cisterns at DPP's Idiofa pumping station. CCB Idiofa also obtains its fuel from the official depot in Dibaya-Lubwe, but again the supplies are for its own use only.

Cit. Ele, a major Idiofa trader and hotel owner who is also a shareholder in CODAIK Kikwit, has partially constructed a gas station for public use in Idiofa. The project has progressed slowly over the past three years, because Shell has not followed through on previous agreements which would have provided a fuel tank truck for delivering supplies from Kikwit or Dibaya-Lubwe.

The absence of wholesaling activities in Idiofa is not likely to change under current economic conditions. As was found in Bandundu and Bulungu, wholesaling is not attractive to most merchants, and does not seem to be economically viable. Traders who could buy in wholesale quantities in Bandundu Region's secondary cities prefer to buy in Kinshasa itself, since the extra transport cost still justifies the higher profit margin they receive from retail sales prices. Wholesaling is probably more viable in the Kasais and other parts of Zaire which are less accessible to Kinshasa than Bandundu Region.

ANEZA Idiofa initiated efforts to increase credit availability through 1983 correspondence with BCZ Kikwit. At the time of this survey, only a limited response had been received, providing 30,000 - 50,000 Z credit for up to 90 days for Idiofa traders. This limited amount of credit has not assisted traders with vehicle purchases. A few traders in Idiofa or Dibaya-Lubwe have made vehicle purchases through obtaining credit from SOFIDE (eg. Masamba, Ngankutu, Donguibo, Sanga Sam). The two CODAIK members in Idiofa are financing new trucks through CODAIK. Idiofa merchants are also concerned about theft of cash, a risk caused by the lack of banking facilities in the city. Most of the major entrepreneurs use CADEZA as a relatively secure short term cash deposit facility, and take their cash to Kinshasa as soon as possible. More detail on the Idiofa CADEZA operations has been provided in the Dibaya-Lubwe chapter of this consultant report.

CADEZA Idiofa will be administering a sub-office in Dibaya-Lubwe.

ANEZA has set a high priority on convincing the Office des Routes to award more maintenance funds to the private sector for secondary agricultural roads. Currently only CCB and DPP are parties to such funding agreements in Idiofa Zone.

Dibaya-Lubwe is seen as being closer and more accessible by road to Idiofa merchants than Mangai port. Because of the delays in ONATRA unloading in Kinshasa, and the high rate of theft en route on ONATRA barges, only Idiofa traders dealing in large quantities of agricultural produce use ONATRA barges from Dibaya-Lubwe to Kinshasa. Most Idiofa buyers rely on their own vehicles to transport produce to Kinshasa. On return trips to Idiofa, they bring imports and manufactures bought in Kinshasa, often to use in barter with peasant producers.

Transport is not the only constraint to marketing. A large amount of rice, corn, and groundnuts remained unsold at the time of the survey, and was being stored in the Idiofa warehouses of Mboliaka, CCB, and the DPP until a time with more favorable market price conditions. Without protection against imported rice, domestic paddy is simply not economically viable because of producer costs alone, at a producer sales cost of 937 Z/hulled sack in Idiofa, versus the 800 Z/sack cost of imported U.S. rice in Kinshasa. The cost of vehicles, fuel, and spare parts is blamed for unsold corn.

Idiofa has a more dynamic artisan sector than that of Bulungu, attracted undoubtedly by the large amount of commercial and residential construction activity that one sees throughout the city. The Idiofa artisanal sector includes vehicle mechanics, carpenters, masons, painters, tailors, and shoemakers. Four private garages were reported as offering vehicle repair services (Candosi, Kilumbu, Kalunzi, and Katshi). The Catholic Procure in Idiofa and the Ifwanzane Mission (24 km. from the city) also do some repairs for private clients. Spare parts are not sold in Idiofa, so they must be purchased in Kinshasa.

Many of the region's largest traders and storeowners, especially those based in Kikwit, have branch offices in Idiofa. Three of them (Nogueira, Cardoso, and Mboliaka), as well as Minar, sell in both semi-wholesale and retail quantities at their Idiofa stores.

Urban services are minimal in Idiofa in comparison to Kikwit, and private market response to demand has been slow in respect, for instance, to lack of urban transport and water. No private sector urban transport system has developed. Workers reach their jobs by foot or by bicycle in the spread-out city. REGIDESO has not developed any public water system in Idiofa, and has no plans to do so in the foreseeable future. Since streams are rather far from the city, which is located on a plateau, urban residents with means have built concrete cisterns to trap rainy season rooftop runoff. Even lower income urban dwellers have jerryrigged catchment systems using empty oil drums whenever they can afford to do so. Some mobile water sellers exist, but among most urban families, the women and children must hike long distances on a daily basis to carry water.

In spite of the high cost of durable construction (150,000 - 200,000 Z for a house 12 meters by 10 meters), and the lack of local public services or credit, an impressive amount of durable construction activity is underway, evidence of the local commitment to reinvestment in the city. Many residents wistfully remember the 1959 period in which housing construction loans were available through the public "Fond d'Avance". The city is clearly growing rapidly, and is a strong attractor of in-migration. The people indigenous to the Idiofa area are known for their commercial aptitude, entrepreneurial creativity, and industriousness. Many traders now working in Kikwit or Bulungu originally came from Idiofa. Young migrants see more commercial opportunity in Idiofa than in the competitive Kinshasa situation, and opportunities for women in particular seem attractive. The lucrative trade which supplies Tshikapa with produce from Idiofa Zone and black market fuel from Dibaya-Lubwe also employs many urban dwellers. Idiofa is also attractive because of its large number of bars and other leisure activities.

Though more active commercially than Bulungu, in spite of its lack of a river port, Idiofa is of lesser importance administratively and in terms of its demographic size (and therefore of lower importance as a market for local import substitution industry). Bulungu, as a Sub-Regional Capital, has a larger share of public sector salaried employment, and a higher priority for future public investments. For example, REGIDSO plans to initiate public water system investments in Bulungu, after achieving current construction objectives in improving the Kikwit and Bandundu city REGIDESO systems.

CCB and DPP are the largest single private sector employers in Idiofa. The CCB operations will be discussed first, since they provide a case study of the rural/urban linkage provided by large private sector agro-industrial activities. Regional management and some first-stage agro-industrial transformation industry is located in a secondary city (Idiofa); transshipment and warehousing is sited in a port-generated market town (Dibaya-Lubwe); and collection of rural agricultural production, some first-stage agro-industrial processing, and vehicle maintenance and repair are all operations taking place on self-sufficient rural sites. It is interesting to note, however, that the rural first-stage agro-industry operations and vehicle repairs workshops are located relatively near the urban management center in Idiofa (at a distance of 23 km and 15 km respectively). Final agro-industrial processing for import-substituting industry (in this case the manufacture of palm oil into soap) occurs in the primate city (Kinshasa). Within the city itself, CCB employs 68 persons (59 workers, 6 foremen, and 3 top administrators which include one Belgian). Only top management is housed on the CCB compound itself others live in the cités. Though there is evidence of retrenchment (e.g. closure of the palm oil factories at Mwilu and Banza), CCB Idiofa supervises two main types of decentralized activities: (1) assemblage, transport, and marketing of rural food production; and (2) collection and processing of palm oil nuts, followed by shipping of the oil to Kinshasa. CCB's Kipuku oil factory is located at Minganzi, 23 km. from Idiofa. The assemblage of rural food purchases (manioc, paddy, etc.) is coordinated by four agents, each one responsible for a geographic zone. Palm nuts are collected by four rural centers as well. Food crops are stored in the CCB depot at Minbambi (27 km. from Idiofa towards Banza), from which they are shipped to Dibaya in CCB's own baleinières. The produce is then stored

at CCB's warehouse on Dibaya beach until it is shipped onward to Kinshasa or to the Shaba railhead. Though CCB is one of the biggest users of Dibaya port, Dibaya is only a transit location for CCB. It employs fewer people there (38 workers, one manager) than in its management center at Idiofa. In the shipping activity itself, CCB employs 44 workers who are supervised by Minganzi. Six workers assist with transshipment to baleinières at Minbambi. CCB repairs its own vehicles at the central garage in Musenge Mputu (15 km. east of Idiofa), where seven workers and one foreman are employed. Though the oil factory at Banza has been closed, 50 CCB workers are still employed as palm cutters on the Banza plantations, and 27 others are involved in produce assemblage. The Minganzi factory employs another 30 workers, plus 67 palm nut cutters.

Over the whole set of decentralized operations, therefore, CCB employs about 352 fulltime salaried people (340 workers, 7 foremen, 4 managers, and one expatriate director). Approximately 20% of these employees are living and working in the secondary city of Idiofa, with another 11% in the market town of Dibaya-Lubwe, and the remainder in rural areas of the Sub-Region. An additional 110 part time workers: 68 agricultural buyers, and 42 road maintenance workers (2 teams), are also employed. The agricultural buyers are given sacks and advances of funds for purchases. CCB vehicles leave the workers at specific assemblage points, and return on a predetermined date to pick up the sacks of produce. The road crews are responsible for maintaining (1) the segment from Beipanga at Isanyango ferry to the Catholic Mission at Mwilambango, and (2) the segment from Isamongo towards the Munqa ferry and to Kipuku. Fulltime salaried workers earn about 450Z-500Z/month including both salary and allowances, and also receive free health care.

Idiofa is the base for CCB vehicles, including nine large Man trucks, two large Saviam trucks, and a jeep. CCB's policy of giving housing allowances to its workers, while only housing 12 of them within its own compound in Idiofa, has certainly contributed the means for some of the new construction which was observed in the Idiofa cités. The CCB dispensary in the city is supplied directly from Kinshasa, and is the best equipped in town. Occasionally it supplies the medications for the hospital. CCB has a large manioc mill on its compound which provides free grinding services for its own workers, and private clients are allowed to pay for grinding at the

CCB mill on two days per week. The two CCB decorticators process coffee and rice for re-export to Kinshasa and Shaba. So CCB provides a variety of informal social and economic services for the city as a whole, in spite of being a private business, with primary allegiance to its own employees. CCB's provision of free grinding for its employees, however, reduces the market for independent small mill owners.

The DPP is an important organization for USAID to consider using as an IMO for Idiofa Zone for 660-0102 agricultural production and marketing activities. As a development project of the Diocese of Idiofa, the DPP's organizational structure includes four divisions: agriculture, livestock, education, and infrastructure.

The agricultural division buys rural production and shares the resale profits with the producers. When buying produce in rural areas, DPP will also sell tools to peasant producers. DPP distribution of other agricultural inputs is limited. Formerly, credit for paddy seeds (R-60 variety) was available from DPP, and reimbursement was required in-kind, but this action has been discontinued. Peasants must now buy rice seed if they have not become self-sufficient by stock-piling and conserving seed from the last harvest. DPP has not been acquiring mosaic disease-resistant manioc from the PRONAM Kiyaka project for redistribution and/or replication, but on occasion, other manioc planting material is available from DPP. Considerable room for improvement in DPP distribution of agricultural inputs exists.

DPP is already active in small scale agro-industry through operation of its two rice hullers, and will be inaugurating the use of a coffee mill, a rice huller, a manioc/corn mill, and a groundnut/soy oil press in its new large scale agro-industrial combine. At the time of this survey, DPP was finishing the construction of its new combine building (the silos remained to be constructed), and had already begun to install the new larger milling equipment that had been purchased for the complex. The lack of urban water and electrical services in Idiofa has been an impediment to this type of largescale private sector agro-industrial activity in Idiofa in the past.

Therefore, DPP has painstakingly constructed a small hydroelectrical facility on the Mosanga River at the edge of the city. The combine is sited on the higher ground near the hydroelectrical turbine, which will produce 140 kva (710 kwh, 3000 volts). This will generate enough power to run the combine by day, and to pump water from an artesian well next to the turbine to the factory. At night, the power will be diverted to serve electrical needs on the downtown DPP compound (which includes an under-utilized deep freeze in which space is rented to local entrepreneurs, mainly for fish and poultry storage). Currently, the freezer is powered only at night by the Catholic Mission's generator, and use of this facility to stimulate rural production has not been thought out at all. Surplus power to serve other Idiofa users is not expected to be available from the new turbine. The finishing touches were just being completed to the turbine during this survey, and it was expected to become operational by fall 1984.

There is some question about whether DPP's combine will saturate the local market, causing existing independent small agro-industrial entrepreneurs to fold, and discouraging the formation of new small businesses of this type in future. DPP will be able to offer cheaper grinding services to market agents and producers (15 Z/basin in comparison with the 25 Z/basin currently charged by neighborhood mill owners in Idiofa). According to the DPP Director, however, there should still be a market for small mill operators in many urban neighborhoods, since the DPP facility is far from the center of town. The DPP Director, in fact, currently privately owns and operates his own mill. The maximum price for mill grinding is set by the office of Affaires Economiques in town. There are reportedly about 15 small manioc/corn mills in Idiofa, including those at the CCB complex and the Catholic Procure. There are also four rice hullers including those owned by DPP, CCB, Mholiaka, and Bitsi (a local entrepreneur).

Rice marketing has been a big problem for the DPP. Approximately 800 tons of unhulled rice were stockpiled in the DPP's Idiofa warehouses at the time of this survey, with no resale prospects in the offing. About half of the tonnage will be lost in the hulling process. Since locally grown hulled rice costs about 800Z/sack in Idiofa, it can not compete with imported rice

which is already selling at the same price in Kinshasa, when one considers the transport to market costs which would be required. DPP has been able to sell some of its stocks, nonetheless, to Idiofa and Kinshasa schools and hospitals, probably through missionary connections, and is now negotiating for the purchase of a baleinière to ship its rice from Dibaya port to Kinshasa. Because of the slow rice market, only about one-third of DPP's stock has been hulled this year, and the waste material has been used for cattle feed.

DPP's construction of the hydroelectric facility has been an arduous process over the past eight years. In order to tap Mosanga River water to run a hydroelectric turbine, a dam had to be built to create a holding pond, and a 400 meter canal had to be dug and lined with poured-in-place concrete. A 30 meter chute was required to drop the volume of water available from a sufficient height to power even this small turbine. Three tries were required before a viable damming technology was constructed, each previous effort having been washed away in the next year's rainy season floods. A team of 40 local workers were employed for the construction, supervised by Brother Hugo van den Broeck, a Catholic missionary with extensive practical construction experience in Zaire. No construction machinery was available to DPP; all labor was done by hand for both the hydroelectric and combine building construction efforts. It is rather awe-inspiring to contemplate the massive, over three-story combine building, and its monolithic poured-in-place roof beams, knowing that this work was done a bucket of cement at a time, passed by hand by rows of workers lining the scaffolding. The hand dug excavations of the successively deepened dam retaining walls must have been even more exhausting. The perseverance required for this effort has been monumental, but it is extremely unfortunate that provision had not been made for the soil and engineering studies, at least, which might have avoided some the earlier construction failures. No engineering studies were ever undertaken, therefore a trial-and-error approach was followed over this long construction period, despite successive failures. Future technical assistance may still be needed, if vegetative growth in the holding pond continues, threatening to clog the turbine's water source system, and it remains to be seen whether this latest DPP dam and retaining wall combination will withstand the current rainy season. DPP will be using the Hossberger

turbine from Weinburg, Bavaria, Germany which had been installed prior to this field survey, and it will be instructive for AID to monitor the turbine's performance in the acidic Mosanga River conditions (pH 4-4.5), for comparison with hydroelectric turbines financed by AID in Zaire.

Because of this experience, DPP feels it has learned some of the pitfalls to avoid in similar work in future. Brother Hugo has identified another hydroelectric site on the Piopio River, 15 km. from Idiofa by road, which would be capable of supplying up to 2,000 kwh, i.e. enough power to provide electricity and water pumping for the city as a whole for the medium to long term. This site was inspected during this present field reconnaissance. Because of the larger volume of water available from the Piopio River (seven meter width), only an 80 meter canal would be required in order to provide a six meter drop in altitude which would power two larger turbines. The site is nearly flat, actually a buckle in the river with rapids, so the canal would merely take the river water off at the top of the rapids, and drop it straight into the turbine at the bottom of the rapids. The site has rock nearby which would provide construction material, and is already accessible almost all the way from Idiofa by road; both factors would reduce site preparation costs. The soil is sandy, however, so soil tests would be required before more detailed site and cost assessments could proceed.

To date, the DPP has had no role in credit provision. The DPP savings and credit cooperative (which is not part of the CBZO network) has not yet established a credit service for its members, even though it has been in existence for four years. A brief past credit experiment was discontinued because payments were delayed. It handled a total volume of savings in the amount of 2.8 million zaires in 1983 (a year-end U.S. dollar equivalent of \$82,353.) As was found with CADEZA Idiofa accounts, the DPP records show a high level of withdrawal activity in savings accounts, indicating that members are using the DPP Coopec mainly as a short term safe deposit facility for cash, to avoid theft. By year-end, withdrawals by members in 1983 totaled 2.58 million zaires, showing only 235,871 Z excess of deposits over withdrawals for the year. Monthly cash balances rarely exceeded this amount

for any individual month. At this time, DPP pays no interest to members on their savings. In order to institute a credit program, this situation would need to be restructured, to provide financial incentives which would attract longer term deposit funds from which loans could be made. A total of 721 members in 1983 had account balances ranging from 25Z to 265,000Z, and though membership grew by almost 50% in 1983, and had risen to 907 by the time of this survey, a decline in membership rather than growth can be expected soon, unless interest and credit programs are implemented.

DPP has a fleet of ten trucks (including two Silaoukas), and uses Vespa motorcycles for transporting its agricultural extension agents. As stated in the Dibaya-Lubwe chapter, its diesel fuel is shipped in via CCB, and trucked to Idiofa for deposit in its three underground storage tanks, for its own use only. INADES correspondence courses in French are promoted by DPP for peasant training, with an attempt at enrolling husband and wife couples, but only ten women are participating. No training events are sponsored at DPP's Idiofa headquarters, a missed opportunity, in view of the large number of temporary rural-urban migrants and periodic rural visitors who are always passing through Idiofa. DPP's only demonstration fields are soya ones planted at its rural outreach centers. According to DPP agricultural agents, river valleys bordering the Idiofa city limits could be developed for market gardens to supply the Idiofa central market, at least, if not expanded markets in other urban areas. Fish ponds and reforestation projects could also be considered for these valleys, depending upon soil characteristics. DPP has experienced problems, however, securing land for these sorts of experiments. During negotiations with one proprietor over 50 hectares for a young people's vegetable garden project, DPP could not obtain an asking price below 33,000Z for the land rights. There is no PNE activity in the Idiofa area, and DPP has only been using fertilizers for experimental purposes on its own soya and groundnut demonstration fields at its rural centers.

The DPP compound houses its own garage for vehicle repairs, but spare parts are a problem, and are purchased in either Kikwit, if possible, or Kinshasa. DPP needs AID support to improve its vehicle repair services, therefore it is recommended that its mechanics be enrolled in any IPTK Kikwit training events which are sponsored under 660-0102.

Foreign assistance to the DPP has included grants from Miserior since 1976, and Belgian government support for its rural outreach centers, and its hospital construction projects at Ipamu and Makala. CODAIK has given some logistical and salary support to DPP, and has provided some small tools to be sold on credit to producers. The four rural outreach centers include Kondo (near Bienge), Loba (near Dibaya-Lubwe), Mbaö (near Panu, this is the best equipped and has a core staff), and Jaku to the north of Idiofa. Akoshibanda (60 km south of Idiofa) has a carpentry school, begun by DPP, which is now run by the State.

Agricultural marketing activities are conducted as follows. Each village is considered by DPP as a "pre-cooperative" for marketing purposes, though they are not State-recognized cooperatives. Ten of these pre-cooperatives sell coffee, rice, and manioc to the DPP. All ten are further organized into the "Union des Cooperatives Agricoles" which negotiates sales price and post-sales rebate from profits with DPP as a group. The whole system is rather suspect, since women are usually absent from DPP village meetings, even though they are the major cultivators. Since 1982, DPP has not had a monopoly marketing agreement with these villages. The "rebate" is fairly small, however, and really seems to be a token payment which psychologically is designed to make the peasant feel like a partner rather than a client. Furthermore, the "rebate" is paid whether or not the crops purchased by DPP are actually sold (on this year's rice, for example). For instance, DPP paid 10Z/kg to producers for undecorticated coffee this year, and gave 15 makuta/kg as a post-sales rebate. After decortication, the coffee was actually being sold by DPP for 35Z/kg in Kinshasa. The rebates (or "ristornes") are renegotiated annually. This year, 5Z/kg was paid for rice, plus 5 makuta/kg rebate. DPP uses its own trucks for transport to Kinshasa markets, and retains the rest of its own commodity sales profits for "amortization" and salaries. DPP also sends its buyers to contact individual villagers.

DPP in fact seems to be considered as a buyer of last resort by peasants, who prefer to deal with traders, since they receive their cash faster, even though DPP claims to be offering 30-35% above the local manioc sales prices. At the time of this survey, for example, DPP was offering 245Z/sack for manioc near Idiofa, and 180Z/sack for purchases made over 100 km from the city. The large inventories of unsold rice in DPP's Idiofa warehouses confirm the fact that peasants have had few other marketing alternatives for this year's rice crop.

DPP's other actions (livestock, infrastructure, non-agricultural education) were not surveyed in detail during this brief field reconnaissance, since they were not seen as being central to USAID 660-0102 activities. DPP now has little involvement with artisans or training in informal sector repairs. DPP does sell planks and construction materials to artisans in Idiofa (between October and November, and March and May, plants are produced by rural sawmills). Wood comes from far away, and is therefore considered to be expensive. In its store on the compound in Idiofa, DPP sells some tools, parts, and supplies which are useful to Idiofa artisans, including: bike parts (spokes, chains, sprockets), painters' supplies, carpenters' tools and supplies, shoemakers' supplies, some electrical wiring, masons' tools, upholstery springs. For the most part this is imported material. Kikwit artisans do not appear to be coming to Idiofa to purchase these tools and supplies. DPP has a link with IPTK in Kikwit, through which IPTK's corn de-cobbers are being sold in the DPP store. This relationship could be built upon by project activities designed to train artisans in repairs and keep them supplied with inputs and credit for opening new or expanded services in Idiofa.

DPP employs a total of 450 workers. DPP is involved with communal livestock raising, by selling animals to groups within villages, or to groups of villages. DPP matches the number of animals purchased by each group with their own financial resources. After four months, the villagers repay the "loan" with a number of female animals equal to the number of animals originally given to the group by the DPP, plus two male animals. DPP supports this program by sending its own veterinarians to service the herds, which are mostly cattle. For this purpose, two State vets have been assigned

to the DPP project. DPP promotes use of the Ndama cattle strain which resists sleeping sickness, but is currently providing no vaccinations or dipping for the village herds. DPP has constructed a dipping bath on its agro-industrial combine site, however, and it is not clear whether this will only serve DPP's own herds, or whether it will be open to the use of village herds as well, and through what mechanism. DPP makes and sells mineral blocks to the cooperatives for their herds, in an operation which seems to be independent of the BDD action in Kikwit, though both are aware of each other's activities. From '76-'79, herds experienced catastrophic mortality in the Idiofa area, probably through parasites and malnutrition, therefore DPP is attempting to build up this local activity again. Fifteen villages are currently participating in livestock training activities under this project. The DPP's own training centers have small livestock for financial self-sufficiency. This DPP livestock lending program deals only with groups, and not with individuals.

The DPP's infrastructure action formerly included training for carpenters and blacksmiths. The carpentry school, as stated earlier, has been taken over by the State, and it was unclear during the survey whether any blacksmith training has been continued. A sculpture school established earlier by DPP has been falling apart since its former head retired last year. Bridge construction in rural areas is a major DPP action, including a number of key bridges which are the only links over the Piopio River, a major geographical barrier to communication and transport in the DPP influence area. DPP uses Office des Routes funds to buy bridge construction materials, and the local community supplies stone, sand, and some labor. A separate DPP action is involved with rural housing, and is designed to attract rural people to stay on the land, and to reduce post-harvest losses through improved food storage practices. DPP does not offer housing improvement credit, but does rent its own trucks to individuals to transport their building materials, and gives a certain amount of technical assistance. Some new housing construction techniques have been implemented on a pilot basis by DPP next to the new agro-industrial combine site. On the whole, in summary, DPP is an important candidate for IMO status in the implementation of 660-0102 activities, and considerable room for improvement in its current services to rural producers exists, even though a diversified base for future activities has been laid.

## Bandundu

Though Bandundu city is the Regional Capital, a major role for the city in 660-0102 activities does not seem appropriate. The city has an extremely limited entrepreneurial sector, even though fuel is abundant thanks to the presence of an official Shell depot. There are only a few stores in town, concentrated on a several block area near the port, all of which sell only at retail. The reason for this small commercial sector is the dominance of GOZ salaried employment as the economic base of the city. GOZ workers are posted in Bandundu from all over Zaire, and many of them keep their wives and children in Kinshasa, or back in their areas of origin. Wives of GOZ officials, especially in the lower administrative levels, have access to good buying opportunities in Kinshasa, and can supervise their children in Kinshasa schools. Therefore, GOZ employees in Bandundu city often do not invest in durable building construction in the city, and remit expendable amounts of their salary to their families elsewhere. Most of these GOZ workers rent a room on a local family's compound with part of their housing allowance, rather than investing in construction of their own house, or house purchase. Construction funds are invested back in Kinshasa or in their area of origin. GOZ employees are paid irregularly and after considerable delays, therefore, on the whole, the consumer market in the city is not as attractive to large scale entrepreneurs as Kikwit, Idiofa, or even smaller centers such as Dibaya-Lubwe, all of whom had more dynamic commercial sectors, as a result. This limited buying power makes Bandundu city a lower priority to Kikwit as a center in which import-substituting industry should be encouraged.

Agricultural potential in and around Bandundu city is impressive. Urban women have capitalized on the well-watered sites near the river next to the ONATRA ferry construction compound to plant extensive market gardens. Bandundu city would be a prime candidate for a new zoning law project action which could reserve the most agriculturally suitable land for long term agricultural use, especially land with irrigation potential. If this sort of action becomes part of the 660-0102 project, as follow-up to preliminary discussions with the Land Tenure Center this week, Bandundu city as well as Kikwit should be the first sites for such new agricultural zoning activities.

Urban women have also planted manioc extensively on the airport's waste land, and on sub-divided areas of the city in which construction has not yet proceeded, due to lack of disposable income. If the economic situation improves in future, these peripheral urban agricultural activities will be pushed farther and farther from the city.

The only major industry in Bandundu is the Sobrabond Brewery, which employs 198 persons (including only 6 women). Though the brewery is not operating at capacity at this time, it would only increase its employment marginally (to a total of 220 persons) if it were to be run at full capacity. The distribution depots are more labor intensive than the factory production process itself. Up to 10 workers are employed at each sales depot. The factory operates 6 days/week, 24 hours/day, and has back-up systems for electricity and water to protect it from interruptions in urban services. There are two generators of 670 kva each, and a 250 cubic meter water reservoir, for example, on the factory's compound. At this time, however, REGIDESO water is used untreated for the brewery's operations. This water comes from the Kwilu River. REGIDESO Bandundu will be upgrading its services shortly with the installation of a new 600 kva generator of its own. The generator had just arrived in Matadi port at the time of this survey. The brewery's PDG is extremely dynamic, and already cooperates fully in providing apprenticeship experiences for the Josephite Brothers' Technical School students in his plant. He is also a key figure in the Bandundu Region ANEZA organization. The brewery rents privately owned baleinières and motorized barges to transport its beer from the factory to its depots (such as the depot in Kikwit). The brewery was under construction during the mid- to late '70's, and began production in 1982. It produces soda water, cola, orangeade, grenadine, and Primus beer, for distribution within and adjacent to the region. The brewery had over-bought corn at the time of the survey, having amassed stocks for over a year in advance, and was in the process of turning away baleinière loads of corn which were still being delivered. The brewery is currently operating at 30% of capacity, geared to market conditions for beer sales, and has built its own depots at Kikwit, Nioki, and Ilebo to accelerate sales. The brewery's major constraining input at this time is "gaziers", the plastic crates designed to protect bottles during transport.

The only other major potential employer under discussion at the time of this survey was a Belgian sugar factory, still involved in feasibility studies, which would be built 32 km from Bandundu city at the site of the proposed sugar plantations (Mushipentan). The effort is still looking for 157,000,000Z financing, though the African Development Bank is allegedly one potential source of funds. The sugar would not be irrigated, and reportedly an initial 100 hectares of sugar have already been planted.. Ownership would be a mixed private foreign and GOZ venture, in the form of a commercial society. The brewery already uses about 140 tons of sugar per year, and could absorb up to 200 tons per year under current plans for expansion of soft drinks production, so the implementation of the sugar project would provide backward linkages for the nearby brewery. There is also an existing CKE oil factory 12 km from Bandundu city, completing the list of industrial investments made in the urban vicinity.

The Ministry of Plan's Regional Office in Bandundu city was interviewed extensively, to determine whether it should be a partner in USAID's proposed regional project planning activities, as preliminarily recommended in the author's earlier report ("The Rural-Urban Profile for Zaire"). Unfortunately, the Bandundu Regional Plan Office has little to offer, since it consists only of two university-trained professionals and six technicians (with high school educations), and is completely devoid of initiative. Despite the lack of transport, equipment, and supplies experienced by this office, its presence in Bandundu city could at least, given staff interest and initiative, have led to the preparation of synthesis reports on the regional data available in the city, and its regional economic development implications. A USAID vehicle which had been furnished to the office as part of the start-up regional planning office assistance, provided to the Plan in the past, was sitting uselessly in the Division Chief's compound, with one wheel replaced by a concrete block. The office has taken little responsibility for keeping its equipment in repair, and it can not be recommended that new money be poured into assisting this office. Given the fact that travel times from Bandundu city to Kikwit are equivalent to those from Kinshasa to Kikwit on the paved road, it would be advisable for USAID to work directly with more highly qualified professionals at the Plan's central office to conduct regional surveys or Kikwit-based planning sessions. No assistance to the regional

office is recommended, since, essentially, one would have to start over completely in creating a viable and effective organization, and Bandundu city is simply in too peripheral a location to provide viable economic planning services to Kikwit and its area of rural influence. Almost no prior studies had been produced by this regional office which could be consulted for data or recommendations in the field. The most recent data the office had produced was its initial "Fiche Technique" released in 1981 and based upon 1980 data. A study of 1981 food provision for Bandundu city had also been produced.

The Regional Office of the Environment in Bandundu is actually the best source of planning data identified during this field reconnaissance of the city. This office had surveyed small mills and some artisan activities regionwide, and its report was collected and filed at USAID Kinshasa for future staff reference.

The secondary schools in Bandundu city are considered to be of lower quality than those in Kikwit, and entrance into them is less competitive. They do, however, have regional importance, and serve a large number of Mai Ndombe residents. They are a major attractor of rural-urban migration to Bandundu. There is a machinery repair program available at the Josephite Brothers' Technical School (Institut Technique Professionnel Mosala), which could eventually be upgraded by the project through IPTK outreach activities. There is also an agricultural secondary school (the Ecole Secondaire Agricole) which offers a six year diploma program, and which could be integrated into urban demonstration fields, urban agricultural zoning, and nonformal agricultural training for rural migrants in Bandundu city, at a later stage of 660-0102 project activities. During discussions with the Bandundu Regional Office of Primary and Secondary Education, it was also recommended that USAID consider agricultural training assistance in the long run, to the Ntoto and Lokolama agricultural schools in Bandundu city, and to the Idiofa Institut de Balaka. Other schools which could be considered are outside the urban areas studied per se, including one school 40 km from Bagata, and another 23 km from Bulungu. ITAK Kikwit still appears to be the most centrally located urban agricultural school, and it should be the focus of USAID urban pilot projects for rural migrants and demonstration fields.

Credit availability in Bandundu city is extremely limited. The Bank of Zaire offers no credit from its branch office in the city, but only awards foreign exchange for imports purchases, and pays State salaries.

As a whole, data available on the regional level in Bandundu city is extremely unreliable, even for order-of-magnitude estimates. For example, the following Table 5 shows data reported on public sector employment in the region by the Office of Public Functions in Bandundu city. By department, there are reportedly 18,770 public sector employees in the region, but by geographical area of assignment, there appear to be only 6,901 employees region-wide. This sort of over 100% discrepancy in reported data reinforces the finding that USAID will need to collect its own survey data for 660-0102 project design, monitoring, and evaluation, rather than being able to rely to any major extent, on GOZ regional data collection. According to the geographical portion of this public employment table, there are over twice as many public sector employees in Kikwit as there are in Bandundu city, a proposition which is hard to believe, since Bandundu is the regional capital, and Kikwit is an autonomous sub-regional municipality.

By Department

Administration of Territory	-	1475
Public Functions	-	95
Social Affairs	-	1420
Finance	-	187
Environment	-	328
Energy	-	21
National Education	-	325
Mines	-	21
Veterans	-	50
Labor and Social Security	-	19
National Economy	-	183
Sports and Leisure	-	113
Justice	-	225
Transport and Communications	-	67
Land Affairs	-	167
Plan	-	24
Peace	-	17
National Defense	-	110
Portfolio	-	18
Public Works	-	1549
Public Health	-	9121
Court of Appeals	-	92
Agriculture	-	2095
Courts	-	79
Culture and Arts	-	111
MOPAP (Ministry of Information)	-	246
JMPR (Youth)	-	607
Women's Conditions	-	5
TOTAL		<u>18,770</u>

By Geographical Location

City of Bandundu	-	571
City of Kikwit	-	1233
Sub-Region of Kwilu	-	2273
Sub-Region of Kwango	-	1438
Sub-Region of Mai Ndombe	-	1386
TOTAL		<u>6901</u>

#### IV. SUMMARY LIST OF RECOMMENDATIONS

Kikwit should be the major site for project interventions including:

- 1) Support to ITAK for innovative agricultural training.
- 2) Support to IPTK for technical training of artisan mechanics, research and development for agro-industry, and import-substitution for spare parts.
- 3) Support to CBZO as a means of providing credit for small scale agricultural production, transport, marketing, and transformation.
- 4) Training programs for unemployed rural migrants (through Oxfam and JMPR via ITAK and IPTK) in rurally useable agricultural and off-farm employment skills.

Through the CBZO Kikwit network, credit should be extended to the agricultural and transport sectors in Bulungu and Idiofa. DPP Idiofa should be investigated as a possible IMO for 660-0102 distribution of agricultural inputs, credit, marketing, services, and new technologies. Agricultural marketing by Bulungu's entrepreneurs would be facilitated by fuel depot construction. Bulungu, Idiofa, and Dibaya-Lubwe artisans should be included in Kikwit training programs at IPTK.

In development of Dibaya-Lubwe port, private control should be fostered, rather than an ONATRA monopoly situation, to retain existing private sector attractions in the port's future exploitation. Dredging of the access channel to the Lubwe fuel depot in Dibaya should be considered for inclusion in port improvements. The first construction priority would be improving the Kapia-Dibaya access road, and loading access from existing warehouses to the beach.

In support of Idiofa's emerging agro-industrial sector, a feasibility study for hydro-electric development of the Piopio River site, 15 km from the city, should be considered. Even if USAID would not be interested in funding hydroelectric installations, the study might be used to attract complementary donor financing (or an African Development Bank loan to the GOZ). Idiofa water supply provision could be concurrently studied.

The organization of periodic rural markets should be considered as a 660-0102 intervention which might increase rural producers' incomes even though a trade-off would be involved, in increased economic pressure from Kinshasa, which might discourage local produce marketing entrepreneurship. Increased monetization of the rural economy, through replacement of the barter system used by buyers with cash sales in rural periodic markets, might provide compensating economic opportunities for local traders.

Promoting 660-0098 credit for private boat ownership may require negotiation with Mai Ndombe baleinière owners, with loans offered to those who would increase services in the Kwilu.

In the long-run, USAID should supplement its health program with support for urban-based hospitals which are serving large numbers of surrounding rural clients. Idiofa and Bulungu hospitals are in chronic need of equipment, supplies, and staff support.

If the ITAK pilot project succeeds in Kikwit, follow-up urban-based support for agricultural training could be promoted in Dibaya - Lubwe, Bandundu city, and other urban areas with high levels of direct urban agricultural production. These programs could target unemployed rural migrants in the urban areas.

V. LIST OF PERSONS CONTACTED IN THE REGION

Bagata

Cit. Kindembe Mpel'Ekirnkay      Chef de Bureau, Zone de Bagata  
Cit. Mukwayanzo-Ngomame      Vice Président ANEZA and Commerçant

Kikwit

Père Wattley      Director, IPTK  
Frère Losseau      Professor, IPTK  
Père Ernest      Professor, IPTK  
Père Diercks      Professor, IPTK  
Cit. Omumbu W'Omekoko      Président Director Général, ERCO  
Construction Firm (Etude et  
Réalisation des Travaux de  
Construction)

Idiofa

Cit. Kebungo Mofimi      Commissaire de Zone Assistant  
Cit. Kingwaya Nzuzi      Chef de Personnel,CCB  
Cit. Kilwesi Manyanga      Responsable Routes Conventionés, CCB  
Frère Hugo van den Broeck      DPP Construction Coordinator  
Cit. Mukoko      Coordinateur,DPP  
Cit. Muwulu Inio      Commissionaire à l'Education,DPP  
Cit. Kidinda Benoï      Secrétaire,DPP  
Cit. Miti      Veterinaire,DPP  
Cit. Atungale Nkwol-Nkeramen      Chef de Section Elevage,DPP  
Cit. Mbungu      Géront, DPP Savings Society  
Soeur Rosario      Tuberculosis Hospital, Soeurs de la  
Soeur Maria-José      Sainte Famille Mission  
Cit. Musoso Hubert      Secrétaire d'ANEZA, Zone d'Idiofa  
and Directeur du Bureau MACO  
(accounting firm)  
Cit. N'Kuny Nkoto wa Nkoto      Chef de Bureau, Zone d'Idiofa  
Cit. Pombo Kibilu      Chargé d'Urbanisme, Zone d'Idiofa  
Cit. Masenzi Mudi Ngubu      Chef de Station, Travaux Publics  
Zone d'Idiofa  
Cit. Makengo Ngombe      Médecin Traitant, Hôpital d'Idiofa  
(proposé Médecin Chef de Zone de Santé  
d'Idiofa)  
Cit. Mangungulu      Médecin Directeur, Hôpital d'Idiofa

Bandundu

Cit. Djoko      Vice Gouverneur du Région  
Cit. Nguvu Milano      Directeur Régional, ANEZA  
Cit. Eloku Makindu      Chef de Division  
Fonction Publique Régional

Cito. Eliboza	Chef de la Planification Enseignement Régional
Cit. Tshiteya Ntumba	Sobraband Brewery Director and President d'ANEZA
Cit. Katambwa Mutshi-Muna	Chef de Division Régionale du Travail et de Prévoyance Social
Cit. Iboto Ite	Chercheur Antenne de la Planification Ministre d'Enseignement Régionale
Cit. Kawele Lefu	Voix du Zaïre Broadcaster
Cit. Boye Kisele Sadi	Reporter at Voix du Zaïre
Cit. Mbandanzo Pambu and Cit. Fumutiya Gimbonge	Technicians from Bandundu Regional Division of Plan
Cit. Funwathu Nathu	Chef de Division Régional Plan Office
Cit. Bongolo Lebađu	Chef du Bureau "Projets" Regional Plan Office

#### Bulungu

Cit. Tshimanga Mukala Sister Jerome	Commissaire Sous-Régionale Assistant Catholic Missionary
Cit. Kasanza Nunza Cit. Miyalu Mandefu Cit. Mapanda Musolo	Gérant, CBZO Président CBZO Conseil d'Administration CBZO and Prefet des Etudes de l'Institut Technique, Commerciale et Administrative
Cit. Bongoto Bonda Mayaka	Chef de Bureau Sous-Régionale des Affaires Foncières
Cit. Bwango Tete	Chef de Division Sous-Régional de l'Enseignement
Cit. Muyumbu	Chef des Services Généraux de la Sous-Région de l'Enseignement
Cit. Mbunsu	Conseiller Pédagogique, Enseignement Catholique
Abbèye-Curé Masieta Lukodi	Training Coordination for Masons and Carpenters
Cit. Mafandala Cit. Mumbimbi	President of ANEZA Secrétaire, Inspection Sous-Régionale de l'Economie
Cit. Kimini	Dactylographe, Inspection Sous-Régionale de l'Economie
Cit. Kimbau Mwatak Cit. Mbunsu	Inspecteur de l'Economie Conseiller Pédagogique pour la Zone de Bulungu

#### Dibaya - Lubwe

Cit. Kidugafila Lusasi	Gérant CADEZA (Caisse Général d'Epargne du Zaïre)
Cit. Nswam Mpi-Mube Cit. Bongibo Ngoba Cit. Muyitu Bwabwa	ANEZA President Gérant Ets Bongibo (Commercant) Ex-Gérant CCB, and Vice-Président de la Comité de Base MP du Marché

Cit. Muntulu Anson-Nkoy	Administrateur Gérant, Pharmacie Muntaphar
Cit. Pentuala Kasongo Bikwili	Chef de la Cité Dibaya-Lubwe
Cit. Tshimanga Ex-Fabien	Agronome de la Cité
Cit. Mapompa	Warehouse Owner, Dibaya Port
Cit. Capitaine Yumpele	Warehouse owner, Dibaya Port
Cit. Tshitenge Gibikulayi;	Kinshasa-based clients at
Cit. Ilunga Tshikusha; and	Dibaya port
Cit. Kabongo wa Kabeya Maweza	
Citoyenne Amputu	Présidente Comité de Base, Marché de la Cité
"Khaddafi"	Assorted Black Market Diesel Fuel Traders in the City
Citoyenne Etoy	Préfet des Etudes, Catholic Lycée Ndana
Soeur Joceline and	Nurses at Dibaya Maternity
Citoyenne Véronique Pitakoyo	
Cit. Moke Bumpa and	Adjoints Inspecteurs Régionales
Cit Kinuka Mboko	Agricoles, CKE(Compagnie du Kasai et de l'Equateur)

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ANNEX I: Maps of Secondary Cities Studied - Findings from Cadastral Offices Visited during the Field Reconnaissance

1. Bulungu : "Plan Aménagement de Bulungu" at 1/5000 scale, prepared by C. Mposo and E. Bituisila, no date but prior to 1970, was borrowed from Cit. Bongoto, the Chef du Bureau Sous-Régional des Affaires Foncières by BEAU, Kinshasa during this mission. BEAU will prepare a reproducible milar from which future blueprints can be made for USAID surveys.
  
2. Dibaya-Lubwe : Only a schematic (unmeasured) map of this town exists. The original was prepared by Citoyens Pombo Kibilu and Masenzi Mudi Ngubu, and can be consulted at the Zone of Idiofa, Office of Urbanism and Public Works. Since we did not have portable blue print developping capability, no print could be obtained, though a copy would be useful to AID in future Dibaya-Lubwe work. Major buildings and properties are labelled, and a copy would help field missions with future surveys.
  
3. Idiofa : A 2,000 scale (unmeasured) plan had been prepared by the same two technicians in the above-listed zonal office. No street names or symbols for public facilities had been added yet, so the map has limited usefulness until completed, and again prints could only be obtained if field missions brought a portable developping box, their own blueprint paper to expose in the sun, and ammonia for processing the print after exposure on site.