

AGRICULTURAL STATISTICS IN ZAIRE
ENVIRONMENT, SITUATION AND PROSPECTS

HENRI P. JOSSERAND, PhD.
ROBERT NATHAN Associates
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EXECUTIVE SUMMARY

The economy of Zaire has not been performing well over the last few years: GDP has declined, inflation and successive devaluations have hit the population hard. The mining sector has been contributing the major - but decreasing - share of foreign exchange and government revenue, and the short term outlook is not bright. The government is trying to use the agricultural sector (which used to be a much greater absolute and relative source of income) as a springboard for recovery, relying strongly on the private sector. The orientation of agricultural policy centers around recovery in export crops and indirect support of foodcrop production and marketing through private sector activities. The part of the 1983-85 Public Investment Plan set aside for agriculture devotes 1/3 of expenditures to foodcrops, and just over 10 percent to livestock and fisheries; the rest goes to cashcrops and "support programs."

Agricultural development projects represent a large proportion of expenditures and production in the sector, but by all accounts, their design, monitoring and evaluation have generally been extremely poor. Strengthening the efficiency of these projects should be - and appears to be to some extent - a major tenet of agricultural policy in Zaire. Projects are also prime producers and users of statistics in the agricultural sector. There is a multitude of government and nongovernment institutions collecting agricultural statistics for their own purposes and always seeking new sources of information. Those identified during this study represent only the tip of an iceberg, adding up to very large amounts of information, admittedly unequal in specificity, reliability, and usefulness. An attempt by Service Présidentiel d'Informatique to create a data bank centralizing statistics in Zaire has had limited success.

Although much data is available from various sources, one must take the initiative in obtaining it from them and demonstrate an ability to use it. Given the quantity of information available, some serious priority-setting is required on what to seek and analyze.

The rationale for establishing the Service d'Etudes et de Planification (SEP), and the Division des Statistiques Agricoles (DSA), is compelling, as long as these institutions remain within the bounds of their legitimate roles. DSA must provide information to SEP or disappear, probably dragging SEP down along with itself. The legitimate role of DSA is to obtain from government and nongovernment sources information on the agricultural sector, centralize and analyze this secondary information and provide it to SEP and other eventual users. Further, it is legitimate for the DSA to collect some primary data, on a limited scale, to complement and corroborate secondary information available from other sources, but not to replace their ongoing data collection work.

The recommended course of action for the DSA includes three main, sequential steps:

- (1) Organize collection and manual sorting of secondary data available in Kinshasa. The computer can be used for inventory and indexing, and for the database identified, with experimental data file entry.
- (2) By the time the rest of the computer equipment has arrived, the data bank should be fed with secondary data collected by the DSA from regional capitals and agricultural project headquarters.
- (3) Based on information drawn from secondary sources in steps 1 and 2, a small-scale primary data collection effort should be carried out by the DSA, in the Bandundu, for instance.

Priorities in data centralization and analysis have to be set. For secondary data in Kinshasa: information on transport and movements of agricultural products, general performance of the modern agricultural sector. From regional capitals and projects: foodcrop production data and movements of agricultural products. For primary data collection, currently: price information from Direction des Prix, Marchés, et Crédit de Campagne. At a later stage: number of farming households, crop calendars, areas cultivated and production, products marketed, local prices, and rainfall.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

- I. INTRODUCTION
- II. BACKGROUND, ECONOMY, & AGRICULTURE
- III. AGRICULTURAL POLICY
- IV. USERS/PRODUCERS OF AGRICULTURAL STATISTICS OUTSIDE OF DOA
- V. USERS/PRODUCERS OF AGRICULTURAL STATISTICS IN THE DOA
- VI. AGRICULTURAL PROJECTS
- VII. RECOMMENDATIONS

APPENDICES

- A. Scope of Work
- B. Minutes from CSA Meeting, 5/10/84
- C. List of Organizations and People Contacted
- D. List of Documents Reviewed
- E. List of Documents Obtained During TDY

I. INTRODUCTION

As part of the Agricultural Policy Analysis Project, this consultant was requested to provide technical assistance to USAID/Kinshasa's Project 070. This project seeks to strengthen the Department of Agriculture's (DOA) ability to collect and analyze agricultural statistics through the Service d'Etudes et de Planification (SEP) and the Division des Statistiques Agricoles (DSA).

The scope of work presented in appendix A consisted of the following three major tasks:

- (i) Through discussions with various public and private groups, Zairian as well as foreign, identify the major recurrent users of agricultural statistics.
- (ii) Define the agricultural statistics needs of the various clients.
- (iii) Determine the minimum data requirements to satisfy those needs.

Within this framework, the purpose of this report is to provide the background and policy information necessary to offer a logical basis for recommendations on the improvement of the agricultural statistics situation in Zaire.

The report comprises seven sections and five appendices. The heart of the report appears in the Executive Summary, and Section VII, Recommendations. Sections II - VI furnish the background information on which conclusions are based and are presented in the form of sets of notes

II. BACKGROUND, ECONOMY, & AGRICULTURE

A. Economy

Evolution of GDP

Since the mid-1970s the country's Gross Domestic Product has declined about 15 percent in real terms. This contraction in the economy has been accompanied by a 2.7% annual population growth. Annual inflation, negligible in the early 1970s, rose to more than 100% in the late 1970s and then declined to an annual rate of 40-50 percent in the early 1980s.

Heavy external borrowing in 1973-74, in conjunction with nationalization of many enterprises. The latter led to downfall in agricultural production.

Origins of GDP & Exports

Main Origins of GDP 1981 (%)

Subsist. Agric.	20
Commerc. Agric	12
Mining & refin.	16
Manufacturing	3
Trade	20
Services (incl. Stat)	19

Main Exports, 1982 (\$mn)

Copper	230
Cobalt	37
Oil (1980)	228
Coffee	107
Diamonds	66

Various Plans

1978: Plan Mobutu: for 1979-1981 period.

1981: Plan Relance Agricole: for 1982-1984 period.

late 1982: P.I.R.E.; monetary reform and budgetary policy (IMF) and Public Investment Program (World Bank).

I.M.F.

Zaire is hoping for a 15-month IMF standby facility of \$350 million.

Devaluation

In September 1983, Zaire devalued its currency by about 480% (Z6/\$1 went to Z30/\$1). Although population had fared better after IMF-induced reductions in annual inflation from 130% to 50%, this devaluation jacked up prices. Furthermore, government subsidies on gasoline and related products were removed just after devaluation. Prices for these commodities rose by 300% - impact on cassava prices: 150%. On November 8, prices for diesel and kerosene were halved through a government subsidy; the new price for gasoline remained unchanged.

Mining Subsector

Gecamines used to provide about 60% of GOZ revenue. Falling mineral revenues will increase budgetary deficit for 1983.

Estimates for 1983:	Revenues	6,773 million Zs
	Expenditures	9,173 million Zs
	Deficit	2,400 million Zs.

OFIDA was established in 1978 on IMF advice (Belgian top officers).

1982 was considered the worst copper market year in half a century

Important 1983 decision: liberalization of extraction, trade and export of gold and diamonds.

Private Sector Organization

ANEZA is to be sole representative of both local and foreign businesses. Association numbers 1,000 businesses of which 600 are small and medium size enterprises.

B. Agriculture

Cash Crop Exports

20 years ago, Zaire depended on mineral exports for 50 to 55% of total earnings. By 1983, with the long-term stagnation of cash cropping agriculture, minerals accounted for 80% or more of export earnings. The outlook for copper and diamonds is not very bright.

Distribution of Modern & Traditional Farming

Agriculture: 30% of GDP in 1979-81. Modern farming (palm oil, sugar, rubber, tobacco, coffee, cocoa, cattle) = 40% of total; traditional farming = 60%. Since mid-70s subsistence agriculture has been more important relative to commercial agriculture.

Food Imports

More than 30% of foreign exchange goes to pay for food imports. DOA estimates local production deficits to come to 10.5% for maize, 13.4% for rice, 50% for meat, and 55% for sugar (the latter will probably be much reduced soon).

Problems

Commonly cited problems: transport system, price info does not circulate.

Commodities

Meat: in 1983, 28% of meat consumed in Zaire was imported.

Corn: The area in corn is 25% of total foodcrop area. National prod. is estimated at 500,000 tons from 712,000 ha. Corn is the basic food in south east, especially for Gecamines employees. Out of total domestic product, only 65,000 tons is marketed thru commercial channels.

Cotton: about 300,000 farmers cultivating 100,000 has produce cotton. It is rotated with food crops like manioc, maize and sorghum.

Forestry

Rich potential, but production has fallen by 33% from 1968-78 levels. Virtually all forestry enterprises are producing at an estimated 30-40 percent of their capacity.

IV. AGRICULTURAL POLICY

A. Orientation & Policy Objectives

Up to now there has been no overall agricultural policy, although a number of policy instruments have been used, on a rather ad hoc basis. Areas influenced include: price, inputs and marketing policies, fiscal and transportation policies, credit policies, farm to markets roads, and extension in the traditional agricultural sector.

The "Mobutu Plan" (1979-81) put forward an agricultural strategy putting the emphasis on improving the infrastructure established by the State, while relying on the private sector and decentralized projects for agricultural production. This is realistic, but a number of problems are not solved:

- The State's ability to provide the needed infrastructure;
- The response of the private sector investors;
- The role of smallholders in the traditional sector: projects have little or no impact on their type of production, and yet smallholder will continue to be the mainstay of overall agricultural production in the country.

It appears that smallholders have gradually left the market economy to fall back on subsistence farming because of the deterioration of transport and marketing networks, shortage of consumer goods, and the disappearance of many development activities centered around mid-size plantations.

POLICY OBJECTIVES:

- increase foodcrop production to reach self-sufficiency;
- increase production of crops used by local industries (cotton, sugar);
- increase production of export crops for foreign exchange (Cocoa, oil palm and wood).

Philosophy: GOZ should define overall policy, monitor and coordinate activities in the sector, and establish infrastructure. This means mostly: road maintenance, extension services, and, later, strengthening of research and training in agriculture. GOZ will also facilitate the creation of an environment conducive to Zairian as well as foreign investment in agriculture: price policy, credit policies (e.g. BCA) and availability of consumer goods in rural areas.

B: Public Investment Plans

Example of legitimate GOZ intervention in the traditional sector: strengthen Centres Agricoles de Production de Semences Ameliorées (CAPSAs).

Extent of "encadrement": DOA sends field agents throughout Regions. Measures taken to assist smallholders (1981-83):

- Maize and paddy seed supplied;
- GOZ + foreign donors = 25,000 tons fertilizer;
- 200 tons basic medical supplies;
- distribution of small implements (hoes, machetes, spades);
- vehicles, motorcycles and bicycles distributed to extension agents.

DOA document presented in Paris, May 23, 1981:

Traditional sector: over 4 million full-time or part-time farmers. State Marketing Agency, Office National des Produits Vivriers, was dissolved in March 1981.

The Policy emphasis is to meet food requirements of Kinshasa and of the south, including Regions of Kinshasa, Bandundu, Bas-Zaïre, the Kasais, Shaba, and Equateur to the extent its roads help supply Kinshasa. Also, there is a policy to promote manual rural roads maintenance in agreement with private companies operating in rural areas.

The 1983-85 PI: in agriculture represents a 30% increase over the 1981-83 equivalent (1951 million Zaires planned vs. 1499 million Zaires spent previously). However, the private sector is expected to take over production, marketing and extension services. One can only assume that this applies to crops used by local industries and for export. Private investment which goes into food crops is probably not much as far as manioc, corn and beans are concerned). There is a goodly amount of private investment in cattle raising, largely for domestic consumption,

but not at the smallholder level. As far as extension is concerned, this may refer to extension in food crops to people working for companies whose primary business is coffee, cocoa, palm oil and even mining. The GOZ's definition of priority foodcrops includes: corn, rice, manioc, vegetables, fish and meat.

Sectoral Distribution of the Public Investment Plan: (1981-83)

Agriculture (3.8%), Mining (34.4%), Energy (15.9%), Transport (30.2%), Education (3.2%), Health (1.2%).

The rationale explaining low investment in agriculture is that it is major role of the private sector; public sector role should therefore concentrate on extension, credit, and infrastructure. However, there have been departures from this planned distribution. The actual distribution was: Agriculture (7.6%), Mining (21.4%), Energy (41.8%), Transport (19.2%), Education (2.3%), and Health (1.4%). These are investments in Zaires & foreign currency; in Zaire terms, Agriculture received 11% rather than the planned 3.8%.

Steps taken in late 1982: liberalization of agric. prices, and progressive liberalization of industrial prices 1981-1983. Tightened budgetary control procedures, and privatization of number of public and parastatal organizations in agriculture, transport and health. In September 1983, 78% devaluation of the Zaire. Furthermore, given the current level of inflation and the impact of the devaluation, the GOZ raised salaries in the public sector by 20% yearly in 1983 and 1984, and froze hiring in the civil service.

September 1983 price of gasoline tripled while the price of diesel fuel increased fivefold.

APPROXIMATE DISTRIBUTION OF PIP IN AGRIC. 1983-85

<u>Subsector</u>	<u>Percentage</u>
Foodcrops	
Maize	11.5
Rice	3.8
Manioc	.3
Legumes	3.4
Cotton	12.1
Sugar	15.7
Cocoa	5.3
Oil Palm	11.7
Support Programs	11.7
Livestock	14.2
Fisheries	2.9
Forestry	7.4

1983-85 (and beyond) PIP Program:

Agriculture (10.2%, of which 33.6% is from GOZ and 61.8% foreign); Mining (19.2%); Energy (19.1%); Transport (41.1%); Education (1.8%); Health (1.6%); Misc. (6.9%). The PIP level for 1983-85 is lower (by 13%), than that for the 1981-83 PIP. The planned share of agriculture increases, although real investment may not. The investment emphasis is shifted from energy to transport. Allocations within Agriculture: All crops (77%); Livestock (11.1%); Fisheries (3.4%); Forestry (8.5%).

C. Fonds de Relance Economique

Fund set up in 1978 to stimulate participation of private sector in economic development. Private companies sign agreements with the GOZ to manage funds obtained through special tax (up to 10%) on retail prices of their products. Types of projects allowed are production of primary products used by local industry or marketed within Zaire, improvement of rural infrastructure (roads, schools, dispensaries, village shops), and training of local technical personnel.

Problems with the Fonds de Convention

The DOA, responsible for activities in the agricultural sector, is not involved in the design or control of how fonds de convention are spent. As soon as overall budgetary constraints start pinching seriously, the fonds de convention activities are the first to be jettisoned by participating agribusinesses. Sugar companies at Kwilu-Ngongo are using fonds de relance to provide extension in foodcrops and in jute growing, for sacks used in shipping sugar.

Funds collected from 1978 to 1981 by the companies that have signed development agreements total about 200 million Zaires. An estimated 2/3 of these funds have been spent.

Example from the cotton industry: CSCo has been using fonds de relance obtained through "conventions de développement" to provide extension in cotton as well as food crops, and maintenance of roads in areas where it is active.

BCA quoting Banque du Zaire: As of September 30, 1983, total agricultural credits were 2771.2 million, 99.2 percent of which were marketing credits. The distribution was as follows:

Coffee	522.2 million (68%)
Cocoa	4.2
Rubber	10.2
Food crops	232.8 (30.2%).

At the same time, loans to the subsectors of livestock, fisheries, and forestry were:

Livestock and fisheries:	34.8 million (1.5%)
Forestry	: 29.4 million (1.3% of total loans).

D. Short & Long-Term Measures

1. Short Term Measures:

Improve foodcrop production/marketing by enlisting the participation of "opérateurs économiques" (enterprises active in the agricultural sector). Improve their access to agricultural credit, better maintenance of the road network, establish a price policy conducive to production and marketing. Prepare studies on future programs and projects (coordination of activities) and insure supply of basic consumer goods in rural markets.

2. Long Term Measures:

Provide smallholders with extension on improved techniques and better inputs (seeds, fertilizer, equipment). Harmonize of regional agricultural policies between foodcrops and crops used by local industries. Set up structures to give a new impetus to research, extension and training in the agricultural sector. Livestock program involves cattle and poultry; not a word about small ruminants, the smallholders's livestock.

E. 1986-1990 Plan.

The 1986-1990 Plan: is to be designed by Commissariat of Plan, working closely with Executive Council and First Commissioner of State. Key orientations for the plan are to improve quality of preparation of dossiers for projects by departments and organizations; and to identify and coordinate sectoral policies among departments and organizations, especially as far as transport is concerned. With respect to preliminary studies: In most cases, one will have to rely on existing data, taking their weakness into account, which means that the planning approach will have to remain very pragmatic. The lack of a clearly defined economic strategy characterized the 1975-1983 period, and this shortcoming undoubtedly contributed in a major way to the repeated economic and financial failures Zaire experienced over the last few years.

Specific Planning Tasks to be undertaken are the overall economic assessment, sectoral assessments, objectives and programs; the assessment of ongoing projects and analysis of possible future projects; and economic assessments and rough development strategies for regions.

IV. USERS/PRODUCERS OF AGRICULTURAL STATISTICS OUTSIDE OF DOA

There are almost no net consumers of agricultural statistics; multitude of government and nongovernment organizations gather information for their own purposes. Some of this information should be capitalized upon by the DOA. It is obviously not realistic to expect the DOA to replace other economic agents in data collection; the DOA should obtain, centralize, and organize what exists, as well as collect its own information. Some of the most important sources of secondary data are listed below. Even when it comes to private companies, secondary collection should be used to the extent possible. In fact, it would be quite in keeping with the government's policy of partial reliance on the private sector, and this should be used as an argument supporting DOA data collection.

The government and other sources and users of agricultural data that were visited are described below. Many others banks, OPIDA, ANEZA, palm oil companies, donors and religious organizations, etc. The areas of concern to private companies are more in the realm of policy than in that of statistics availability for the agricultural sector. The companies appear to be particularly interested in exchange rate issues and availability of foreign exchange for the agricultural sector, agricultural credit policy, uses of the Fonds de Convention monies, and price/tax policies for agricultural inputs. Their basic approach is that they will take anything the DOA has to offer in the way of statistics, but they are not too hopeful that the Department will provide much. Very basic data would be fine: number of farming households, acreage cultivated, production, by region or sub-region.

Other Government Agencies & Programs

Institut National des Statistiques. Formerly a branch of the Institut de Recherche Scientifique, INS has been under the Department of Plan since 1977. Its Scope of work is demographic surveys, household budget surveys, prices and price indices, national accounting, statistical reporting of agricultural production, mining, transport, foreign trade, banking, public finances, etc.

Cit. Mpila and Cit. Kazu-Kifa, Division of Statistical Production 5/11/84:

Greatest area of difficulty is statistics for traditional agriculture sector. INS enumerators in the field don't do the job. Plan asked INS to collect data on agriculture, livestock, forestry and plantations (small enterprises, over 5 active persons) for planning purposes. There is therefore a lot of data on modern sector in agriculture, including areas cultivated and production, but none on the traditional sector. INS did surveys in 1979, 1980 and 1982 for Plan with Canadian assistance in 1982. The census of enterprises takes 3 to 5 months, and is done every other year. INS cadres (n=100) recruit agents in other departments for the field work. Are trying to put together

Tableaux entrées-sorties for agriculture products, including their movements and storage (also livestock).

Demographic data: the 1970 data was from an administrative census; people just compiled data from lists provided by the local authorities. The next census will be more scientific and take place from July 1 to July 15, 1984. Information sought: number of people, age, sex, primary activity, and level of schooling.

The Commissariat of Plan has a minicomputer (Data General), presumably used to centralize and analyze data. Problems: few qualified people to operate it, INS has limited access to it because of the Departments priorities. INS occasionally does specific jobs for. payment: it did study on agricultural research in Kivu for the Germans in 1975, and a socio-demographic survey in Kivu, in 1979. Westinghouse is currently financing an INS study on contraception (contract with division Statistiques Démographique).

INS budgets for studies include personnel wages, transport (highest cost of all), end-of-survey bonuses, office supplies, computer analysis fees, and 10% contingency line item. Most recent published work: Annuaire Statistique du Zaïre (1982) covers data through 1979. Next one to come out in June 1984, will cover data through 1982. INS will not turn over data to SPIZ or any other place to be put into a data bank until it is published, although one can come and see their unpublished data for specific research purposes. The minicomputer was only installed in 1983, and is probably not fully used. All statistics are typed, and printed in Kinshasa. Lag between final data verification and publications: minimum 6 months, average one year.

In spite of being located - at least some divisions - on the top floors of an incredibly seedy building, with little or no equipment, in terrible working conditions, INS rooms I have seen are full of people busy compiling statistics; for some reasons, morale seems to be very high.

SERVICE PRESIDENTIEL INFORMATIQUE: 5/11, Cit. Malameka

SPIZ is one of the special "Presidential" technical offices; personnel are civil servants, but with a special status. SPIZ has one Hewlett Packard 3000 with 512 Kbytes RAM and 32 CRT stations; the host is hooked up to one of three 120 megabyte disks. They plan to get an additional 400 megabyte disk. SPIZ is not specifically doing any data base management or analytical work for the GOZ; people who need a data base established or data processed bring it to SPIZ. Data can be read in with card readers, although the staff prefer to have "saisie assistée" on CRTs. Users can provide their own software or use SPIZ's canned stuff, write their own programs or ask SPIZ programmers to do it for them. Most common applications are: payroll, accounting and other management

tasks. They suggested I go to the Centre de Documentation Agricole (an FAO-financed project which seems to have collapsed when financial support ended).

SPIZ Data Bank, 5/14, Director Cit. Mbumba, Cit. Mulumba.

The decision to create a data bank for statistics on Zaire to be used by the President's office and other GOZ agencies dates to a 1972 "ordonnance." SPIZ used Banque du Zaire computers until they got an IBM in 1976, later shifting to HP 3000 models (2 at Mont Ngaliema, 1 in Gombe). They collect data from various departments and organizations: Finance & Budget, Economy, Portfolio, ANEZA, Agriculture (latest data 1980). The data base has been created, but is not populated; machines are used about 40% capacity; bottleneck is availability of data rather than equipment, training, etc. Also complained of limited resources to go and dig out the information scattered around.

However, they are about to produce a repertory of entreprises, some information on fish resources, and a "recensement forestier." Information stored in their bank may be obtained as a listing; they don't seem interested in or prepared to do any analysis. (Bureau Présidentiel d'Etudes does that, for instance). USERS of their information: Bureau Présidentiel d'Etudes, FAO (for DOA purposes).

BAIQUE DE CREDIT AGRICOLE : PDG, Cit. Mambu

The current PDG, nominated in November 1983, was in charge of SOPIDE previously and has been at the Banque du Zaire; he came here from the Cabinet du 1er Ministre. BCA's mandate is to extend loans to "collectivites" in agric., livestock raising and fisheries.

BCA asked DOA for a list of "collectivités agricoles"; are still waiting for it. Had to go around collecting the data themselves. BCA is about to create its own "Service d'Etudes et de Documentation," to obtain the information required for their operations, obviously not being able to rely on DOA for anything. BCA's operations will eventually also provide a fair amount of data (which they would be willing to share with interested parties); responsibility for general statistics on agriculture still rests squarely on DOA, however.

Some current or potential sources of data for BCA: milling companies in the regions, transporters, including ONATRA barges, airlines (for meat and potatoes), trucks and railroads for manioc, and barges for rice. Other sources: OFIDA, ANEZA. Some sources can be contacted by mail, but in most cases some "penetration" is necessary.

I N E R A

INERA has about 22 research stations, but only seven are currently operating.

Parastatal & Private Users/Producers of Agricultural Statistics

SOFIDE (Soc. de Financement et de Développement), Cit. B. L. Mukena, Département Agricole.

SOFIDE finances a number of investments in the agricultural sector, in all regions of Zaire. Projects financed during the 1983 fiscal year came to a total of about \$3 million. SOFIDE financed a total of 57 projects, including 11 in agriculture, 5 in livestock raising, 4 in forestry, and 13 in various agribusinesses. Consideration of loan applications requires some background information on the region, sector, etc. SOFIDE turns to the Department of Economy, the Department of Agriculture, ANEZA, etc. If they cannot obtain enough information this way they field a team to inquire from local authorities (at the Zone and Sous-Region level) and other economic operators active in the area, including large projects, like CEDERIM. They also turn to transporters and milling companies (e.g. for data on corn).

Cit. Okenge, Dir. Département des Etudes:

This section is mostly in charge of following the performance of various projects. It seeks to obtain information primarily from the Department of Economy and the Department of Agriculture (without success), but also tries to work rather closely with Institut National de Statistiques and large companies like CCP, PLZ, etc.

Cit. Tumbe, Département Informatique:

Tumbe is in charge of SOFIDE's data processing section. The equipment (Data General minicomputer) has just been installed. Storage is on hard disk and reel tape; the unit has 15 minutes' worth of UPS (uninterrupted power supply) backup. There are now 5 terminals. Tumbe is having SOFIDE obtain the 4 more terminals. The only current application is payroll, with a Cobol package modified for their specific use. Planned applications include general accounting, project budget monitoring, word processing, statistical analysis, and graphics. The service includes only Tumbe and two assistants so far; all have received their basic training at the UNAZA and at the Department of Finance. Note that the Dept. of Finance has just purchased a Hewlett-Packard 3000 with 25 terminals for training purposes only. One of Tumbe's assistants is away in Belgium for further computer training. Tumbe himself will be going there for about a month's training in structured programming.

ONATRA: Mr. Marijnissen, Service Agricole:

The most directly relevant set of statistics collected by ONATRA involves movements of commodities among regions, on a monthly basis. Marijnissen thinks a centralized data base makes sense, but emphasizes that "producers" of statistics would not be willing to turn them over to the DOA on a routine basis (what would be the use?); they might, however, be amenable to requests - in person - from a liaison from DSA for data to be put into the data bank, especially if they can get a feeling that it is going to be used and will do some good. Of course, would be very happy to be able to turn to DSA for general information for their own purposes.

Note that ONATRA is a major transporter of palm oil (for PLZ) and of wood. Most of ONATRA's transport is done by barges (75%). Marijnissen concurred with my remark that wood exports from Zaire are relatively very low (on the order of 38,000 cubic meters per year). He says the GOZ would like to export up to 5 million cubic meters by the end of the century; the major bottleneck is transport, including the ONATRA rail link to Natadi. He quoted a recent estimate that the cost of organizing transport for wood exports would reach \$2 billion.

OZACAF: Cit. Bisuta, Service Agricole:

OZACAF is naturally interested first and foremost in statistics on coffee, but it is also trying to obtain some on cocoa, rubber, tea, and quinquina. From 1974 through 1976 the company set up the most recent statistical basis for coffee, a sort of census of plantations, which is supposedly updated yearly by OZACAF's field agents. Information includes basically areas planted and production estimates. The first published "Repertoire des Plantations" has just been completed and will be sent out to the main plantation companies for comments and comparison with their own data. The "Repertoire" should cover 2,810 plantations, all over ten hectares in size. (Their current estimate for the corresponding planted area is 189,107 hectares).

Bisuta also said they plan to go on making an inventory of plantations less than ten hectares in area. All this information is collected and transmitted directly to them by their 92 "agronomes" in the various regions. He currently has a table showing coffee production by region per year from 1976 through 1983.

They had been promised data on rubber, cocoa, etc. by DOA, but don't seem to have received anything; they will have to ask their agents to see what they can come up with. This will include requesting information from plants processing cocoa in the interior, etc. Note: Arabica grown in Kivu does not require tree cover (OK for remote sensing), but Robusta grown in other regions and cocoa do require tree cover (remote sensing implications?).

D. Other Users

Users of Agricultural Statistics include:

Plan Semencier National.

- Common definition of needs in agric. stats: Commission Stats. Agr.
- AID Project 091, agr. research support?

Client/user for Agricultural Statistics:

Comité de Coordination des Ressources Extérieures; includes: Cabinet du Premier Commissaire d'Etat, Dept. Foreign Aff., Dept of Plan, Dept. of Finance & Budget, Dept. of Agriculture, Dept. of Transport & Communications, Dept. of Mines & Energy, Dept. of National Economy & Industry, Banque du Zaire, Assoc. Nationale des Entreprises Zairoises (ANEZA).

E. CONCLUSION

There is a vast amount of statistics available from producers/consumers. Most of them are willing to share some information, but the DOA must take the initiative. The GOZ overall policy orientation is consistent with this, but it requires some attitudinal change on the part of the DSA staff, and the creation of some confidence among suppliers that statistics turned over to the DOA will not just be stacked away forgotten, or "lost".

V. USERS/PRODUCERS OF AGRICULTURAL STATISTICS, DOA

A. Rationale and Problems

"The utility of the function of the Service is well established within the GOZ and DADRE. If a flow of valid agricultural statistics could be developed, the Service would be in a remarkable position as the major provider of agricultural statistics, agricultural economic analyses, identification of constraints to the development of the agricultural sector, and in planning strategies and designing projects to improve conditions for both the producer and the consumer. The future economic development of Zaire will probably be more determined by the performance of the agriculture sector than by that of mining and manufacturing" (pp. 35-36, Morris/Rideout Evaluation). Agricultural Statistics are a prerequisite to planning; "agronomes de zone" & "moniteurs" must receive equipment to collect data on foodcrop marketing in their areas.

Example of problems with current statistics:

Good example is that of coffee, say for 1983. With STABEX framework, the PED needs solid coffee statistics to allocate ECUs to Zaire following a drop in international market prices or a shortfall in production due to climatic factors.

OZACAF, OPIDA, DOA, INS, and the coffee companies could not get to agree on statistics, partly because they look at things from their own point of view, and partly because data collection is so difficult and results so unreliable. Reconciliation of numbers could not be made, and the request for STABEX support was turned down. Mubenga acknowledges the fact that information does not circulate, and the institutional nature of the problem. OPIDA has problems with smuggling, false bills of lading, false grading bills, etc.. Commerce Extérieur gets their data both from OPIDA and OZAC.

Although Mubenga finds methodological skills and training "excellent" at the cadre level (35% remain?), training is sorely deficient at the field level. Mubenga notes that the Agronome de Zone cannot transmit data without the approval of authorities all along the chain of command; naturally, numbers are "adjusted" along the way.

EVALUATION 052 AND 070 (Morris/Rideout, Feb. 83)

DSA: No Statistics, loss of trained staff to other GOZ units, etc.

DSA endangers the functioning, usefulness and sustainability of Service d'Etudes.

- Need for a high-level foreign technician at DSA, for general advice, at Division Chief's level.

Dept. of Plan pays higher salaries for same Civil Service grades than does the Department of Agriculture. Problem with financing of salary premiums by AID: sustainability.

- Activities of Econ. Analysis bureau obviously weakened by almost total absence of output from DSA.

- Directorate of General Project Administration has a: great shortage of trained personnel.

- Some of time at Service d'Etudes and the DSA is spent responding (or thinking about responding) to specific requests from the Executive Council.

Other divisions have not used DSA's data because (a) they did not know it was available, and (b) they had their own data collection network. Also, DSA's activities have gone unnoticed by INS, supposedly responsible for overall statistics coordination in Zaire. DSA has not received the clear mandate to be the main actor in collection, centralization, analysis and publication of statistics.

Other potential users have not been specifically identified either; stats are sent to the Ministries, never filtering down to interested parties.

Project objectives were too ambitious, and results are extremely limited. Lack of rigor in methodology and survey management. Ill-suited institutional framework, and lack of coordination within the DOA.

- Lessons learned:

- Overly ambitious projects must be avoided;
- Lack of monitoring and evaluation of activities, repeated mistakes;
- Absence of a clearly expressed demand for DSA product;

- Uselessness of training actions not followed by applications in the field;
- Strong will of Govt and of DOA to forge ahead and continue in the direction of strengthening limited accomplishments.

B. Service d'Etudes & DSA

DIVISION DE LA STATISTIQUE AGRICOLE (DSA)

Cit. Mingiedi, Director DSA:

Common producers/users: his Service, Dept. of Plan, Dept. of Economie Nationale, OZAC, OZACAF, BCA, Banque du Zaire, Commerce Extérieur, SOPIDE, Agribusinesses (e.g. plantations). Expressed needs for ag. statistics: Conseil Executif, for Plan. Main users of

agricultural statistics are the DOA, Dept. du Plan, Banque du Zaire, SOPIDE; projects are also both users and producers of statistics. Current sources of ag. statistics: rapports de Regions, and enquetes spécifiques. Bureau "dépouillement" is in charge of visiting large companies to obtain data (??). Information collected by various actors is "not available" to DSA (What does it take to go and get it?).

Composition of Commission Statistiques Agricoles: Service d'Etudes et Planification, DSA, Direction Générale Administration des Projets, Direction des Prix, Marchés, etc., Direction de la Production Végétale. One basic purpose of the Commission: to identify needs of other sections in DOA. Mingiedi wants DSA to be "rattachée directement" to Secrétariat of State for Agriculture. With respect to delays in communications: would have agronomes fill in and read questionnaires over the radio to Region or Kinshasa. (The fact that no radios are available to them does not seem to upset him; one can use the ones of other services, projects or religious and other NGOs.)

Bureau de Dépouillement:

JOHN GOLD: This Bureau is the central document storage place for the division. One of the main problems is that the various Bureaus do not have very clear "attributions" (assigned responsibilities and duties), so that work gets shifted around from one Bureau to the next. Since work seeks the path of least resistance, a lot of it ends up in the Bureau Informatique.

Users of Agr. Statistics: At least one person comes by every day to collect statistics from DSA; they are from other Govt agencies, the private sector, projects financed through foreign aid, donor agencies (FAO, World Bank), and students from the University. The Bureau receives and stores Regional Reports - last one in is from 1980. The most recent inventory of documents was done in January 1984. The B. de Dep. is also supposed to keep questionnaires from previous studies. Price Data: Collected by "agronome de zone" on a monthly basis for agr. products on rural markets. They have 1978, 79, 80, 81, 82 and all of 1983; they estimate that about 6 to 8 percent of it is communicated to them. The stuff transits through the Secrétaire d'Etat to the Service d'Etudes. May also get an odd report from the Présidence or a project. Need to computerize depouillement's inventory and make an index.

File on Projects:

No data is coming in from the field or anywhere else to keep people busy; some data is "expected" to come from projects later on this year; the DAGP does not seem to be moving ahead with statistics.

A survey of the "customers" coming into this bureau for statistics would constitute a powerful argument of the strengthening of DSA. I suggested opening up a notebook recording visitors, agency or

company and type of documentation sought. (Nsavar said he'd had precisely the same idea and that they are "just about" to do so.)

Clt. Nsavar, Director, Bureau de Depouillement

Has been with DSA (or equivalent office) since 1973. Users of Agr. Statistics come from: international donor agencies (for project identification docs), the University (students and researchers), people from the Institut Pedagogique National. Also other government agencies: Economie Nationale, Commerce Extérieur, Service Informatique de la Présidence, people from Banks, the FAO, etc.

Banque du Zaire also inquires, and FAO sends forms to make up the Production Yearbook.

Sources of Documents:

People from the Division should attend the regional ag. conferences (there is always some data available there). Projects should also be a good source; so far they only have data from one project (project maïs) for one year. They used to get some from OZAC, ONATRA, but the contact has been interrupted.

It would be a legitimate task of the DSA to go and seek statistical information from parastatals, private companies, and various branches of the Govt.

Priorities:

1. Improve exploitation of documents currently on hand;
2. Increase the flow of documents from the Regions.

Bureau de Depouillement has Chief, Conseiller (John) and 8 agents, one of whom does accounting "caisse", another has been assigned to the Conseil National de Recensement at INS, and another is being trained in Rumania. Chef de Bureau has BA in Science Economique plus one year's training in France.

Partial list of documents available at the Division of Statistics

1. Usage de la Cartographie et de la Télédetection en Statistique Agricole, (13 pp.).
2. Méthodes de Collecte des Statistiques Agricoles au Zaire, (54 pp.).
3. Autres Types de Sondage, (11 pp.).
4. Recensement de l'Agriculture - Guide de l'Enquêteur, (46 pp.)
5. Techniques de Contrôles et Dépouillement - Manuel Préliminaire d'une Enquête, (12 pp.).

6. Contrôle des Mesures Relatives à une parcelle, (3 pp.).
7. Stratégie d'une Enquête Agricole par Sondage, (11 pp).
8. Stratégie d'une Enquête Agricole par Sondage en Milieu Sous-Développé - Phase d'Exploitation des Données (16 pp).
9. Théorie des Sondages: Généralités Introductives (9 pp).
10. Théorie des Sondages: Le Sondage Aleatoire Simple (9 pp).
11. Sondage a deux degrés et Utilisation des Tables des Nombres Aleatoires, (14 pp.).
12. Guide du Formateur, (12 pp.)

The documents, and many others of a technical nature have been prepared by staff of the Division de Statistiques Agricoles. There is nothing particularly striking (one way or the other) about the quality of the work and the amount of training underlying it, compared to the situation in other African nations. In my opinion, the level of statistical sophistication indicated should be quite adequate for sample frame construction, stratification and selection, training and supervision of field enumerators, and labor-intensive tabulation and basic analysis such as contingency tables, analysis of variance and correlation.

The training situation is unfortunate in two major senses: (a) not enough use has been made of the conventional, or straightforward, training in agricultural statistics provided, and (b) the available skills will only partially answer the new approaches likely to be followed by the Department of Agriculture. For instance, increased use of microcomputers to centralize and synthesize statistical information from various sources is, in my judgement, the best way to make use of these machines in the short-term. It addresses a crucial need in the most efficient way. Of course, conventional training in agricultural statistics does not prepare one to handle and make good use of a relational data base package such as dBase II, although some additional training may overcome that problem. By the same token, the training received by most staff - adequate as it was - did not extend to the use of microcomputers for data analysis. This is not a trivial matter, and some programming training is going to help (dBase II works partly as a high-level programming language), but not much. There are several reasons for this: (i) statistical analysis packages able to handle large data sets are not easy to use, and part of their usefulness includes graphic capabilities, an additional element to be mastered; (ii) more importantly, the statistical package must be able to access and process files having the specific structure of dBase II. Although one can do some simple subtotalling and summing with dBase II, it is not statistical package in any sense of the word, so a separate package is required. One can either do some advanced programming to reformat dBase II files for analysis by the statistical package, or obtain a package

designed to analyze dBase-formatted data. One example of such packages that I have seen used recently is AbTab, made by the company which came out with dBase II. However, AbTab is quite difficult to use, even when one has had experience with dBase II. Furthermore, the efficiency of data analysis is much improved when the analyst has precise knowledge of how data base files are organized, how one may stratify, combine and transform them for statistical purposes. Ideally, the data base manager and analyst are the same person, or are different persons trained in both aspects of the work.

The gap between the level of the largely unused pool of talent and future activities may increase if the Department decides to pursue the remote sensing approach. Although the concept is not foreign to some of the staff, the actual analysis of Landsat imagery is well beyond local resources in equipment and expertise. Of course, local talent would be very useful in the design and implementation of the necessary supporting activities. Satellite imagery can only be used in conjunction with extensive ground level sampling and aerial photography. Under the guidance of a remote sensing team, the staff would be quite able to undertake ground surveys, and perhaps some of the aerial photography interpretation. The rest of the work and the final interpretation would have to be totally in the hands of the remote sensing team, with the implication that much further training would be required to include Zairian technicians in future ventures of this kind.

C. Direction des Prix, Marchés et Credits: Cit. Mansinsa,
Director; (Mr. Thorigné, Conseiller of FAO)

Are now collecting statistics on agricultural products, at the consumers level and in Kinshasa only. Will later expand to gathering "producer" prices in rural areas -through agron. de zone. Price data is also being collected by the Dept. Econ. Nationale, INS, IRES (Université du Zaïre). Data users need price data right away for it to be really useful; INS takes too long and is too expensive. DPMCC decided to go and collect stuff themselves since January 1982. Now have weekly data for Kinshasa markets, are doing a monthly summary and a quarterly price analysis.

Dept. of Plan has expressed need for data on movements of agricultural products from rural to urban areas (to Kinshasa and the five capitals of the southern zone). Also want to identify movements from surplus to deficit regions.

DPMCC will later try to obtain import/export data from OPIDA. This Direction is interested in credits for the marketing campaign only. For information on "credits vivriers," one should see the Association Zairoise de Banques (including BCA -in the future). DPMCC's main role is to act as intermediary between private agents and parastatal services (e.g. insure transporters get fuel at the official price). This office would also give SOFIDE estimates of how many trucks are needed each year to transport agricultural products. SOFIDE would then include this into their plans for loan budgeting.

Mansinsa emphasized the need for speedy communication of price data, e.g. radio.

D. Centre Documentation Agricole: Director, Cit. Mbaya:

CDA created in 1974 at the request of Executive Council and financed by UNDP/FAO, GOZ and Belgium. Goal: Collect, inventory and microfilm all docs. produced in Zaire and outside on agricultural sector, and produce indexes for use. CDA created a data base, using the SPIZ computers (Mont Ngaliema). Sources of documents: GOZ agencies, parastatals, and projects. Indexes 1 and 2, published in 1976 and 1977, list 1,330 documents published after independence. (Problem: This is not on the data base at SPIZ; during changeover to HP 3000, IBM tapes for these two indexes were accidentally erased). Indexes 3 and 4 are in the data base, and include 1,050 documents, but this has not been published (must use the computer printout). Are working on Index No. 5 right now.

CDA is currently also creating a data base, inventory of agr. research in Zaire for the CARIS FAO project (got about \$5,000 from FAO to help). Have computer reel tapes from Belgium of index of ag. research before independence (nothing done with it since 1975).

Sources of Documents: Bureau d'Etudes, sectoral projects (programme national maïs, programme manioc), articles in Zairian periodicals, Univ. Agronomique de Yangambi, Faculté de Médecins Vétérinaire, Lubumbashi, INERA reports.

Users: DOA technicians, students, FAO missions, very few people from large private companies, but some independent agents (small enterprises).

Quite a few of the documents microfilmed are borrowed (40%) and returned to sources.

CDA also had extensive printing capacity, largely unused.

VII. AGRICULTURAL PROJECTS

FROM PLAN DE RELANCE:

Anticipated Production from all Dev. Projects as % of Total

Maize	45	Rice	22
Wheat	30	Peanut	12.5
Soybeans	15	Vegetables	20
Sugar cane	65	Manioc	15
Voundzu beans	7		

*Evaluation of the PIP revealed that a large number of projects cannot provide the basic data necessary to evaluate their contributions." (p. 29) Number of agricultural projects under PIP: 47.

Assessment of PIP Projects:

- 17% are satisfactory.
- 38% will require much better supervision by their Depts. and the Dept. of Finance & Budget.
- 45% of projects have such major problems that their continuation is subject to an Executive Council decision.

Typical Problems in PIP Projects:

- Insufficient design: no data, poor management, undefined objectives and approaches;
- Institutional and organizational problems;
- Programming is nonexistent, irrational or ignored;
- Lack of rigor in financial management: misallocation of project funds, gap between expenditures and achievements. (p. 36).

On Lack of Overall Policy:

- Projects are separate entities without apparent framework. The lack of integration of projects within a macroeconomic framework is directly due to the lack of precise development objectives and strategies. (p. 40).

Measures to be undertaken:

(1) Establish "cellule de planification" in each Dept.; (2) Training in project management; (3) More rigorous management and motivation: upgrade salaries of employees in the public sector; (4) Project monitoring: Dept. of Plan to receive "fonds de suivi des projets," each Dept. must also budget for a project monitoring unit.

Assesment of Agricultural PIP Projects:

- 20% satisfactory (in value terms)
 - 57% (in value) will require much better supervision.
- The rest (23% in value) are projects for which the Exec Council has decided to suspend financing.

PROBLEMS WITH AGR. PROJECTS:

- Objectives not precise & quantified;
- Authority at top not well established;
- Assignment of Zairian cadres to projects not linked to skills and expertises;
- Questionable expertise of some foreign advisers (and of some Zairian project advisers as well);

- Lack of DOA supervision of key project components; some have abandoned projects altogether;
- Project budgets not carefully prepared, flow of funds interrupted;
- Lack of data for monitoring/evaluation;
- Projects have great difficulty obtaining inputs.

Project Monitoring and Evaluation

This provides a source of useful agricultural statistics. Each project must set up a monitoring and evaluation cell in charge of defining resources needed and available, appropriate survey methods.

A framework for this could be established jointly by the DSA and the Division de l'Administration Générale des Projets. Might start with North-Shaba and PMKO, where this has already been started.

IDA INVESTMENT IN AGRICULTURE:

Already invested in Ituri (smallholder and livestock). PID for other projects under way, incl. Integrated Rural Development project in Kivu, support for agr. research program, development seed production, development maize production thru input supply system and infrastructural support.

VII. Recommendations

The DSA must take better advantage of the vast quantity of data related to agricultural production, marketing and transport available from the multitude of government and nongovernment users/producers. An idea of the extent of this information has been given in Sections V and VI. As a first step, this consists of obtaining recent documents from various services and organizations in Kinshasa itself.

This may well require some attitudinal change on the part of DSA staff; this type of secondary information, available at the source, will not be forthcoming simply on the basis of a written request. Experience has shown that is not even the case within the Department. The DSA must take the initiative in building up a network of sources of secondary data, and actively pursue the collection of data from those sources.

There will naturally be some reluctance on the part of organizations to communicate information, and some will not provide any, but much can be done in this direction; even during my short survey of various organizations in Kinshasa, I was able to obtain documents not currently available at the DSA.

There are two important factors that would make the task of obtaining data easier and more efficient: the DSA must receive a clear and widely advertised expression of administrative support from the GOZ; and the DSA must go through a minimum of data processing and publication (partly

aimed at the suppliers of secondary data) to emphasize the fact that information given to them will not merely sit on shelves for an indefinite period. Although DSA must take the initiative in approaching sources, a minimum of confidence must soon be established that it can do something useful with data.

The DSA is already working closely with the Direction des Prix, Marchés et Crédits de Campagne, obtaining and analyzing price data from them. The same type of relationship should be established with other members of the Commission des Statistiques Agricoles, then with other GOZ services closely connected with data collection (e.g. INS, Service Présidentiel Informatique), then turning to parastatals and private companies.

One must keep in mind that information gathered by users/producers aims to answer primarily their own needs, and is often quite specific to some aspect of the agricultural sector. Furthermore, information given the DSA may be incomplete and slanted or in some sense erroneous. It should be treated with caution, but it should be treated. Right now the DSA has next to nothing to work with.

A major and well-known problem in agricultural statistics is that information collected at the lower (field) levels does not circulate well and rapidly to the top of the Department and back down to the DSA. By many accounts, there is a great deal of information gathered by various agricultural services of the government at the regional capital level. This information has not reached DSA either because it never left the Region or because it got lost along the way. A tour of regional capitals by a number of DSA and SEP staff would almost surely allow them to bring back large quantities of information not currently available. The suggestion made by some staff that someone from DSA and/or SEP attend the Regional Agricultural Conferences is excellent. Statistics are always an important topic of discussion and much data is said to be presented at the time; attendance should be conditional on the gathering of statistics presented or discussed at these conferences.

The importance of agricultural projects to this author is such that a special section (VII) was devoted to them. They constitute at the same time a large share of public and donor investment in the agricultural sector, a significant proportion of national agricultural production and an important potential source of information on many aspects of rural life (the Ituri livestock and smallholder project is a good example).

The projects are important enough that a significant improvement in their design, monitoring and evaluation should be a major tenet of agricultural policy in Zaire. Project staff must be responsible for primary data collection in the areas they cover; they are right in the field, know the area well, have established rapport with the population, etc. SEP/DSA should be able to provide, in exchange for data from projects, a limited amount of technical assistance or guidance on methodology, if needed, and feedback. Information must at least be

tabulated and roughly analyzed (contingency tables, measures of central tendency and dispersion), to help build up internal and external confidence in the DSA's ability to use data they are given.

Secondary information obtained from various government and nongovernment sources in Kinshasa, the Regions, and projects must be checked against and complemented with primary information gathered by the DSA itself. The primary role of the DSA should be to provide the SEP with the necessary data to respond to specific requests from the Department, as well as the data elements required for planning, relying principally on well organized, centralized secondary data. Primary data collection by the DSA is legitimate only insofar as it complements and corroborates data available from the many other sources. DSA cannot and should not replace or duplicate the data gathering work of other services in the Department (e.g., Production Végétale, Production et Santé Anima^l) or other sources. In fact, concertation is useful. Efforts of the Commission de Statistique Agricole may be continued, but the purpose for which line services collect data cannot be interfered with -- and the way in which they do collect it probably cannot be changed in the short term. The emphasis should be on obtaining from them what they have (still a challenge) before suggesting procedural or format changes in their data collection. Institutional sensibilities require a step-at-a-time approach.

We must assume the DSA is bent on polishing its image as a source of information on agriculture. Over the last few years they have not published anything of consequence, but they have accumulated assets which they are eager to use to regain some modicum of respectability. These are equipment from the previous UNDP/PAO project, and a certain amount of training (despite the fact that the retention rate of the technicians trained prior to 1981 at DSA/SEP is about 35% now). There is a real danger that the DSA will see a combination of bad image, expressed needs for agricultural data and the availability of staff and equipment as a compelling reason to launch a primary data collection effort.

Either the DSA attempts this with most of its resources, in which case it would have to neglect the collection and analysis of secondary data, or it will attempt to do both things at the same time, and overextend itself. The best course of action would be in a first period, going, say, to late 1984, to organize the collection and manual sorting of documents from secondary sources, in Kinshasa. The computer system should be used to inventory and index documents coming in. Identification of where information fits in the structured data base can also be done at that time with some experimental data entry (the rest of the computer equipment will not be available until late-summer). During that same period, contact should be made with regional capitals and project headquarters with an eye on future data collection from these sources.

Some time late in 1984 the DSA should launch a secondary data collection effort at the Regional capital and project level. By then, the computer system should hopefully be extended and able to handle more data. Based on information obtained from secondary sources in Kinshasa, from regional capitals and from project headquarters, a small scale primary data collection effort could be launched in early 1985. It would have the advantage of resting upon a better understanding of the overall agricultural situation (from analysis of many secondary sources) and of being able to draw from the INS demographic census of July 1-15th 1984 (although the data will by then be only partial and preliminary).

Given the size of the task and resources available at SEP/DSA, as well as legitimate information needs, one has to set priorities in terms both of analysis of secondary data and of collection of primary data. Given what I take to be main policy orientations in Zaire, I would put the emphasis on information on transport and movements of agricultural products, and general performance of the modern agricultural sector when it comes to secondary sources available in Kinshasa. From regional capitals and projects, one should first extract information on crop production and movements of products to cities and other regions.

As far as primary data collection is concerned, DSA should first continue with the analysis of price data communicated by the DPMCC - and advertise this information. When the time comes to do primary data collection in the field, the overall approach mentioned by the DSA appears reasonable, provided the level of complexity does not exceed the limited talent of agronomes de collectivite and agronomes de zone. Primary data collection should center around local prices, rainfall, condition of crops, agricultural products marketed, number of farming households, crop calendar, areas cultivated, total production.

Primary data collection by the DSA, built upon the secondary use described above, should be led off by a pilot study done in a region where transportation and communication problems will be manageable; Bandundu would be appropriate. I believe that more extensive programs of primary data collection by the DSA must not be undertaken until the Division has proven ability to obtain and process secondary data, use it as background, and to collect and analyze primary data on a small scale here again I mean basic analysis here again: contingency tables, measures of central tendency and dispersion, with appropriate graphics.

APPENDIX A

Terms of Reference

Under the direction of the Agricultural Economist as Team Leader, this consultant will provide technical assistance on agricultural statistics to USAID/kinshasa in Zaire.

The Scope of Work will include the three major tasks listed below. The consultant's analyses and recommendations will be incorporated in such memoranda and reports as the Team Leader may direct.

- (1) Through discussions with the GOZ, and particularly the Directorate of Studies and Planning of the DOA and Plan, with major donors, particularly the UNDP/PAO and World Bank, and with representatives of commercial agricultural production enterprises and business interests, identify the major users of clients for agricultural sector statistics on a continuing basis.
- (2) Define the needs of the various clients in term of the kinds of data and depth and breadth of coverage needed.
- (3) Determine the minimum data requirements for satisfying those needs in terms of coverage by commodities and by geographical areas, marketing and transportation infrastructure and services, institutional services, demography, manpower, technology, etc.

APPENDIX B

Commis. Stats. Agricoles

General Meeting, May 10

Members present: B. Badjeck (IBRD), Mingiedi (Chief DSA), Lukusa (Collection), Ngonde (methodology), Gold (compilation), Frazier (Data Processing), Wherry (AID), Noudeu (Division of Planning & Strategy), Ntumba (DPMCC), J. Bertrand.

Lukusa: DSA can't produce good statistics, or stats at all. There are problems with the data collected by "encadreurs de bases", e.g., DSA does not know how yields are calculated (estimated?). DSA should give additional training and instruction to "agents de base"; this is also the case for prices, which they are supposed to collect in a way agreed upon with DPMCC.

Program of work: Have identified 55 zones, but will have to start with fewer (21?). Data to be collected:

- Monthly: rainfall, incidence of plant and animal diseases, price and marketing information.

↳ Quarterly: agricultural calendar, inputs, number of farmers, areas cultivated, production.

- Yearly: livestock numbers, milk production, poultry, marketing credits.

Procedure: Monthly data collected by "agents de base" would be sent to Kinshasa by radio -using existing non-DOA networks (Mingiedi says arrangements have been made with organizations involved(?)). Every three months DSA agents would go to the field to control and collect data from "agents de base."

NOTE: this way of obtaining information directly from agents and having it flow to Kinshasa would bypass the usual hierarchical transmission and would require approval by the Conseil Exécutif. (I would guess that the Conseil is very unlikely to let this happen, even if they agree to it "in principle").

Badjek: has this new methodology been tested?

Mingiedi: this is not really a methodology, rather, a new procedural approach, providing field agents with better instructions and equipment, and a way to send data more rapidly.

Noudeu: Information collected on yields in the traditional sector is fine, but it cannot be aggregated since one does not know total area cultivated by crop. One should concentrate on projects, (invoking the high absolute and relative amount of resources spent on projects in the agricultural sector).

Mingiedi: No, because projects are not representative of production within the traditional sector. The Conseil Exécutif is interested in overall agricultural production in Zaire. In any case, DSA has prepared a questionnaire to be submitted to projects in the areas where they will have agents carrying out work (CCDAIK cited as example).

Badjek: No reason why one can't collect information from both the traditional sector and projects.

Nqonde: Questionnaires for projects have been prepared in cooperation with DAGP.

Lukusa: Actually, in addition to the traditional sector, a questionnaire has been designed for submission to religious organizations and plantation companies as well as to projects.

Cost of Data Collection:

Mingiedi: For 55 zones, 16 million Zs. Can get by with 2.5 million Zs for 3 Regions (?).

Field equipment: agronome de collectivite: bicycle; agronome de zone: Yamaha motorcycle.

Noudeu: Are you taking advantage of the demographic data collected by INS?

Mingiedi: DSA has asked for cartographic work, will have to pay for it.

Noudeu: The information you need is very basic: area cultivated by crop, production (and thus yields).

Remote Sensing: ERTS has already produced imagery for the PNS project, can be used as "base de sondage." (I doubt it can when it comes to smallholder agriculture).

UNDP/FAO Evaluation Mission:

DSA agrees with conclusions and recommendations of mission.

NOTE: DSA will not accept to do less than take full advantage of only "gains" achieved during the past few years: training and equipment for fieldwork. It's going to be very difficult to prevent a flurry of "activity."

Mingiedi: Plan of work: DSA first needs to obtain clear administrative authority over ag. statistics (to be obtained from Secrétaire Général - Noudeu also insisted on this). The project will continue for three years. DSA will provide further training for field and region personnel; will provide collect Regional Reports at the same time. This should start within a few weeks. DSA also intends to create "antennes régionales" (for what?).

NOTE: field personnel seems to answer at the same time to Production végétale, Prod. & Santé Animale, and Services Généraux; if that's the case. it is a rather unusual and rather inefficient administrative setup.

Price Data: DSA will rely on field agents to collect prices in rural areas (producer and consumer prices), while DPMCC will collect prices on urban markets throughout Zaire.

Noudeu: It would make sense to make an inventory of what is available in Kinshasa, in terms of agric. statistics, before you go and try to collect data from the regions.

APPENDIX C

Organizations and People Contacted

Service d'Etudes et de Planification:

- Cit. Nubenga, Director.
- Dr. Chan Nguyen, Chief of Party, Pragmat Corp.
- Mr. George Conde, tech. advisor.
- Mr. Paul de Vuyst, tech. advisor.
- Mr. Noudeu, tech. advisor.

Division de la Statistique (DOA):

- Cit. Migiendi, Division Chief
- Dr. George Frazier, T.A. bureau informatique.
- Mr. John Gold, T.A. bureau dépouillement.
- Cit. Nsavar, Chief, bureau dépouillement.
- Cit. Kabongo, Chief, bureau informatique.
- Cit. Ngonde, Chief, bureau méthodologie.

Direction des Prix, Marchés & Crédits de Campagne:

- Cit. Mansinsa, Director.
- Mr. Thorigné, Technical Advisor.

Service Présidentiel de l'Informatique au Zaïre:

- Mont Ngaliema: Cit. Mbumba, chief data bank program;
Cit. Mulunda, data collection.
- Downtown offices: Cit. Melameka, ingénieur informatique.

Institut National de la Statistique:

- Cit. M'Pila, chief, agricultural statistics division.
- Cit. Kazu, agricultural statistics bureau chief.

Centre de Documentation Agricole:

- Cit. Mbaya, Director.

Banque de Crédit Agricole:

- Cit. Mambu, Président Délégué Général.

O.N.A.T.R.A.:

- Mr. Marijnissen, agriculture division.

I.N.E.R.A.:

- Père Vanneste, Director.

OZACAF:

- Cit. Bisuta, division agriculture.

SOPIDE:

- Cit. Mukena, division agriculture.
- Cit. Okenge, Director, Dept. Etudes.
- Cit. Tumbe, Service Informatique.

ISNAR Team:

- Dr. Francies Lebeau.
- Dr. Pierre Antoine.

World Bank Technical Assistance Program:

- Mr. Benjamin Badjeck, coordinator.

APPENDIX D

Documents Reviewed

- Propositions pour la Relance des Statistiques Agricoles, DSA, April 1983, (AID/RW).
- Rapport sur les Statistiques Agricoles au Zaïre, Banque Mondiale, Jan. 1984, (AID/RW).
- Zaïre Economic Memorandum - Recent Economic and Sectoral Developments and Current Issues, World Bank, Dec. 1982 (RRN).
- Proceedings of the Consultative Group on Zaïre, IBRD, April 1984, (RRN).
- Plan de Relance Agricole, 1982-84, GOZ Dept. of Agriculture, April 1982 (AID/RW).
- Evaluation du Plan de Relance Agricole, D. of Agr./Conseil Exec., Oct. 1983, (AID/RW).
- Plan Intérimaire de Réhabilitation Economique, 1983-85, GOZ D. of Plan, Oct, 1983 (AID/Nkiere).
- Memorandum on the Establishment of Regional Units of Planning and Development, R. Navin, AID, Oct. 1980, (AID/RW).
- Les Grandes Orientations de la Politique de Développement Agricole et Rural. GOZ D. of Agr. Working Doc. Dec. 1980, (AID/RW).
- The Economist's Quarterly Review, Nos. 3 & 4, 1983 (AID/Pgm).
- Zaïre's New Agricultural Policy, D. of Agr. document presented in Paris, May 23, 1981, (AID/Pgm).
- Information Dissemination Plan, Service d'Etudes et Planification, E. Scott, 19.. (AID/RW).
- Zaïre - Examen des Projets Agricoles. World Bank, May 1982, (AID/Pgm).
- Marketing and Pricing Policy - Proposed Guidelines and Recommendations..., Chan Nguyen, 1982. (AID/RW).
- Final Evaluation of Project 052 and Mid-Term Evaluation of Project 070 (incl. Annex E: organization of the Service d'Etudes); Morris/Rideout, 1983, (AID/RW).
- Scope of Work; Presidential Agricultural Task Force to Zaïre. AID S&T, Feb. 1984. (RRN).

- Programme de Travail en 1984 et Perspectives 1985; PAT 1244 ZR, World Bank, (AID/RW).
- Zaïre, Agricultural Situation - Attache Report, 1982, (RRN).

Colloque sur la Commercialisation des Produits Agricoles du 8 December 1983.
- Instructions aux inspecteurs régionaux de l'Agriculture et Développement Rural en matière de commercialisation des produits dans le cadre des "conférences agricoles régionales". Feb. 1984.

Institut National de la Statistique:

- Répertoire des Etablissements Recensés (Entreprises, 1980), April 1982.
- Recensement des Entreprises 1980 - Répertoire des Biens Produits au Zaïre, May 1982.
- Recensement des Entreprises - Guide de Déclaration, 1982.
- Recensement National des Entreprises - Rapport d'Etape, Sept. 1981.
- Recensement des Entreprises - Questionnaire, 1982.

Banque de Crédit Agricole:

- Ordonnance portant création et statuts d'une entreprise publique dénommée "Banque de Crédit Agricole". Oct. 1982.
- La Banque de Crédit Agricole, Dec. 1983.
- Communiqué de la Banque de Crédit Agricole, Dec. 1983.
- Banque de Crédit Agricole - Déclaration de Politique Générale, Dec. 1983.
- Les conditions d'intervention de la Banque de Crédit Agricole, Dec. 1983.
- Organigramme de la Banque de Crédit Agricole.