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CENTRAL SHABA AGRICULTURAL DEVELOPMENT PROJECT

CONTRACTOR STATUS REPORT
(Contract No. 660-0105-C-00-8014-00)

Submitted by:

Checchi and Company Consulting, Inc.
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INTRODUCTION

The Central Shaba Agricultural Development Project (Project 0105) was launched by the U.S. Agency for International Development and the Government of Zaire in 1986. The project was envisioned as a 15-year undertaking, the first phase of which was to conclude after seven years on September 30, 1993. It was designed to build on lessons learned from a prior ten-year road improvement and extension effort in the northern part of the Shaba Region, the North Shaba Rural Development Project (Project North Shaba or PNS).

The Central Shaba project design incorporated three complementary components: extension services; roads maintenance and improvement; and seed production and distribution. In early 1988, a contract to provide technical assistance to the extension component was awarded to Checchi and Company Consulting, Inc., in association with Development Assistance Corporation (DAC). Separate contracts for the roads and seed components were awarded respectively to Louis Berger International, Inc. and a local company, Mbeko Shaba.

The primary focus of this report is the activities carried out under the Checchi contract. However, in light of the important linkages among all three project components, background information and analysis are also provided for the roads improvement and seed activities.

The report covers the 41-month period from May 1, 1988, when the first three members of the Checchi/DAC technical assistance team were mobilized, through September 30, 1991, when field activity under the contract was suspended due to the deteriorating security situation in Zaire and the Checchi team was evacuated to Washington. Some discussion is included of activities initiated by A.I.D. Personal Services Contractors during the 18-month period (November 1986-April 1988) prior to Checchi's involvement in the Central Shaba project.

2

A. SUMMARY

1. **Project Name and Number**

   Central Shaba Agricultural Development Project (660-0105)

2. **Contractor Name and Number**

   Checchi and Company Consulting, Inc. (Prime Contractor)
   Development Assistance Corporation (Subcontractor)

   Contract No. 660-0105-C-00-8014-00

3. **Contract Data**

	Effective Date	*Incremental Amount*
Base Contract	02/26/88	3,321,148
Modification No. 1	09/11/89	0,519,285
Modification No. 2	12/21/89	-
Modification No. 3	02/08/90	0,259,405
Modification No. 4	07/08/91	-
Total Contract Value		4,099,838

   Note: Total does not include pending Checchi claim for $34,943 in additional fixed fee.

4. **Scheduled Contract Completion Date**

   June 26, 1993

   Note: This date was expected to be extended to September 30, 1993, corresponding with the Project Activity Completion Date (PACD).

3

B. PROGRAMMATIC STATUS

1. Summary Description of Project

The purpose of the Central Shaba Agricultural Development Project is to increase production of corn and other food crops in the Shaba region, relying to the extent practicable on mobilization of private sector interests to induce and support small cultivator productivity. Principal interventions include rehabilitation of link roads, feeder roads, bridges and ferry crossings; extension of improved technical packages among area farmers; training of extension agents; and establishment of a private sector capability to produce and distribute improved seed varieties and plant cuttings for area crops. Related objectives are reduction of post-maturity corn losses and strengthening the capacity of rural private voluntary organizations to provide extension services.

2. Summary Description of Contract

Checchi was contracted to assist in creating and implementing two service components of the project's agricultural extension system: the agricultural extension service (Service de Vulgarisation Agricole - SVA) and the data collection and analysis service (Service de Collecte et Analyse des Donnees - SCAD). Contract objectives include training of farmer leaders in improved cultivation practices, preparation of PVOs to engage more effectively in agricultural extension, recommending appropriate strategies for reducing post-maturity losses of corn, providing data on project area production and related matters, and working with private sector interests to progressively develop the market for improved seed.

The initial technical assistance team consisted of an Administrative Team Leader, a Senior Extension Specialist, an Extension Specialist, and an Information Specialist. Contract modifications have given Checchi responsibility for providing additional expatriate staff (an Administrative/Financial Advisor, an Assistant Information Specialist, a Grain Storage/Structural Specialist, and a Roads Contract Supervisor) and for commodity procurement.

The modified contract calls for Checchi to provide 292.5 person-months of technical services, inclusive of the eight above-listed positions and 30.5 person-months of short-term expertise. In mid-September 1991, Checchi received a letter from the USAID Contracting Officer requesting a revised contract budget for extending contract performance to September 30, 1993 with commensurate level of effort adjustments. The letter also instructed Checchi to make the necessary arrangements to employ the project's Zairian staff directly under the contract. The salaries of these local staff, totalling 49 technical, administrative, and support personnel, have until now been paid with Government of Zaire counterpart funds.

The ordered evacuation and subsequent suspension of contract activities precluded action on these anticipated contract modifications.

3. Expected Contract Outputs

The Statement of Work incorporated in the Checchi contract lists five principal objectives for the technical assistance contractor, as follows:

- Train at least 1,000 farmer leaders in improved cultivation practices;
- Strengthen the technical capacity of interested rural PVOs to deliver extension services;
- Recommend and implement appropriate strategies for reducing post-maturity losses of corn;
- Set up a project information service to provide data on project area production and related matters; and
- Develop a technical relationship with the private sector involved in seed marketing for the purpose of increasing public knowledge of the value and uses of improved seed so as to assure a progressively developing market.

As the project has evolved, these objectives have been refined and tied to targets or outputs established for the project's extension service (SVA) and information service (SCAD). Major SVA output measures and PACD targets currently include:

Measure	*PACD Target*
Villages reached by extension activities	372 villages
Contact farmers selected and trained	1,000 contact farmers
Farmers assisted to improve production practices	15,000 farmers
Railheads with covered loading docks	8 railheads
Corn seed distributed	50 tons/year
Manioc cuttings distributed	400,000 meters/year
Peanut seed distributed	25 tons/year
Increase in project area corn production	25,000 tons/year
Increase in project area manioc production	100,000 tons/year
Increase in project area peanut production	10,000 tons/year
Extension agents and PVO personnel participating in in-service training programs	50 in two sessions/year

4. Progress to Date

a. Evolution of Sectoral and Project Environment

The purpose of the Central Shaba Agricultural Development Project, as originally designed, was to increase production of corn in the Shaba region. Expected beneficiaries included the small farmers of central Shaba and the corn consuming populations of Shaba and the Kasais. Project activity covered two administrative zones and parts of two others, extending over an area comparable in size to the State of Ohio.

The project was launched at a time when USAID and other donors were relatively optimistic about prospects for stabilizing Zaire's economy. The GOZ had adopted a market-oriented exchange rate policy, had lifted controls on farmgate prices for food grains, and was encouraging the private sector to play a growing role in providing agricultural services. Significant PL 480 program resources were available to finance the project's local currency costs, including the salaries of Zairian technicians and administrative staff.

In the intervening years, deteriorating economic conditions and reduced availability of local currency funding have affected both the scope and outlook of the project. During the recent period of hyperinflation which began in mid-1990, the costs of imported fuel and vehicle spare parts have skyrocketed. These transport cost increases, combined with shortages of trader credit and SNCZ railcars, appear to have dampened the market for corn in many parts of the project area. Without assurance of a ready market for their crops, some farmers have shown a growing reluctance to invest resources in improved seeds and production methods.

Better knowledge of project area soils and farming systems led to the decision in 1989 to broaden the project purpose to include increased production of manioc and peanuts in addition to corn. Another major decision, taken by USAID in early 1991, was to reduce the size of the project area in order to enhance project impact and lower project support costs in line with decreased local currency funding availability. As a result of this decision, the Zairian project staff was cut from 79 to 49 and expatriate advisors were withdrawn from the northern (Kabalo) and southern (Malemba-Bukama) parts of Central Shaba. The restructured project area represents approximately 40 percent of the original project area and includes those zones with the highest agricultural production potential and population density.

Progress toward achieving objectives of the extension services component of the Central Shaba Project has also been impeded by the failure of the roads and seeds components to develop as anticipated in the project design. The evolution of these two components is discussed below in terms of its impact on the execution of Checchi contract activities.

(i) Road Improvement Component

Recognizing that the project purpose of increasing corn production in the Shaba region could not be achieved without an adequate road network linking farmers and their markets, USAID allocated over 65 percent of the Central Shaba Agricultural Development Project's dollar budget to road maintenance and improvement activities. The project agreement called for the Government of Zaire, through the Roads Office (OR) of the Ministry of Public Works, to improve some 1,000 km of link roads along the axis Katshi-Budi-Kabongo-Mwanza-Kabondo Dianda connecting northern and central Shaba with population centers in the southern part of the Shaba region, and another 1,000 km of feeder roads in the project area. Personnel and fuel were to be supplied by OR, while USAID was to provide technical assistance, equipment, and spare parts. In 1988, a contract was awarded to Louis Berger International, Inc. to supervise one of four sections of the rehabilitation program, covering about 320 km of link road between Katshi and Mwanza.

When the LBII contract was terminated in March 1991, less than 100 km of this link road had been properly rehabilitated and no improvement work had been initiated on feeder roads. Reasons for this disappointing performance included lack of supervision by senior technical assistance staff from their base of operation in Lubumbashi; diversion of OR fuel supplies to other purposes due to lack of inventory controls; and the inability of OR to adequately compensate its workforce resulting in low morale and the sale of project fuel to supplement their pay.

The failure of the roads component to progress according to plan had a negative impact on the extension services component. The poor condition of project area roads made it difficult for SVA extension personnel to interact on a regular basis with many contact farmers and discouraged traders from travelling to some extension areas to purchase the farmers' crops. In some areas, corn and manioc cossettes rotted or were attacked by weevils while stored in traders' cribs for months on end awaiting evacuation. Farmers questioned why they should increase their production if there were no market for their crops, and traders frequently complained about the worthlessness of the roads improvement program.

Following termination of the LBII contract, USAID agreed to finance an amendment to an existing contract between OR and Maurice Dellens Zaire (MDZ), a private sector construction company, to improve road access to markets in the Kasais. This amendment called for the rehabilitation of 587 km of roads including: (i) the Kamungu-Kintenge feeder road; (ii) the Mwadi Katoloka-Kasai link road; and (iii) the road connecting Kabondo-Dianda with the Kabwa ferry. Contract payments were tied to performance and a Roads Contract Supervisor (Georges Appelmans) was engaged through Checchi to monitor work quality and equipment maintenance.

During the five month period (May-September 1991) that the MDZ team worked under Mr. Appelmans' supervision, rehabilitation work on 90 km of link road between Kamungu and Kitenge was almost completed, the Mwadi-Katoloka ferry was installed, and work was begun

on the link road from Kabonda-Dianda to the Kabwa ferry. Unfortunately, this progress was interrupted by the September 29 evacuation of Mr. Appelmans and the subsequent departure of MDZ's expatriate technicians.

(ii) Seed Component

In 1988, USAID contracted with a private seed company, Trabeza Mbeko Shaba (TMS) to produce and distribute improved seed varieties in the project area. The contract offered a package of technical assistance and financial incentives to TMS, which operated an input-intensive, mechanized seed farm and processing facility at Fungurume, about 700 km from the project area in southern Shaba. However, in order to reduce production and transport costs and to ensure that the seed varieties were adapted to growing conditions in central Shaba[1], it was expected that TMS would establish seed multiplication operations within the project area.

For the 1988 growing season, TMS purchased 20 tons of Salongo II corn seed from the National Maize Program (PNM) seed farm in Kaniama. Due to the late delivery of the seed and insufficient means of transporting seed to project extension areas, only half of this amount (10 tons) was sold, mainly in villages that were located along main roads. The reluctance of TMS to distribute seed to remote villages was again demonstrated in 1989, whereupon project extension agents took over the responsibility for selling 80 percent of the seed available.

As it was clear that TMS was unwilling to make the necessary investment in what was perceived as an unprofitable business, USAID terminated the TMS contract and authorized the project to multiply seed at Niembo station for distribution through the private sector. In preparation for the 1990 agricultural campaign, 80 tons of good quality seed were produced at Niembo for delivery to private vendors.

The multiplication of seed at Niembo station was considered to be an interim measure pending development of a sustainable seed production capability in the project area. In March 1990, the project contracted with a successful local corn grower, Mr. Mikombe, to establish a seed operation at his 30 ha farm located 6 km south of Niembo station. The first task of the new seed farm (Ferme Semenciere Nyembo Kabongo - FSNK) was to process and pack the 80 tons of seed that had been produced by the project at Niembo. After that, production and distribution strategies were developed with the help of SVA staff. In view of the high costs and unreliable supplies of production inputs (fertilizers, herbicides, etc.), equipment, and spare parts, it was decided to contract with local farmers to multiply seed

[1]Whereas corn variety Shaba I is well-adapted to the high-altitude growing conditions at Fungurume, other varieties (Kasai I and Salongo II) produce higher yields at the lower altitudes found in many parts of the project area, especially around Kabalo and Kinkondia.

using low-input, labor-intensive technologies. The sales strategy involved working through private sector vendors, including traders, religious missions, and farmers organizations, in the project area.

The results of these seed multiplication and distribution strategies are presented and discussed in Annex 1 to this report. Because of the problems encountered in getting the seed component started, the project's seed production and distribution targets could not be met and project farmers in several extension areas are still using degenerated corn seeds. SVA personnel had to become directly involved in multiplication and distribution activities, taking time from their extension responsibilities. Moreover, the role of the Checchi technical assistance team went far beyond the development of a technical relationship with private sector seed marketing entities as was called for in the contract scope of work.

b. Description of Contract Execution

Status reports on various aspects of contract execution are appended to this document as follows:

Annex 1:	Agricultural Extension Service (SVA)
Annex 2:	Data Collection and Analysis Service (SCAD)
Annex 3:	Roads Rehabilitation Contract Supervision

These status reports describe achievements toward accomplishing the outputs and objectives of each project activity, pending actions, implementation problems, and lessons learned. The first two annexes are presented in English while the third is written in French with an English summary.

C. ADMINISTRATIVE STATUS

1. Personnel

As of December 31, 1991, Checchi has provided 260 person-months of technical assistance services under the contract, exclusive of home office supervisory and backstopping services. A listing of long-term personnel provided by position and level of effort follows.

Long-term Personnel	*Position*	*LOE*
*Minh Nguyen	Administrative Team Leader	44.0 p/m
*Dai Nghiem	Senior Extension Specialist	43.0 p/m
Jacques Bussieres	Extension Specialist	36.0 p/m
*William Guyton	Information Specialist	23.0 p/m
*Guido Verhulst	Assistant Information Specialist	22.0 p/m
Stephen Connolly	Administrative/Financial Advisor	20.0 p/m
*John Hannum	Administrative/Financial Advisor	9.0 p/m
Helmuth Bixhain	Grain Storage Structural Specialist	8.0 p/m
*Georges Appelmans	Roads Contract Supervisor	4.0 p/m
Subtotal LOE:	Long-term Personnel	210.0 p/m

The activities and level of effort of short-term specialists provided by Checchi under the contract are listed below. It is noteworthy that several of these short-term specialists were subsequently engaged for long-term technical positions under the project.

Short-term Personnel	*Activity*	*LOE*[2]
Guido Verhulst	Data service support	10.5 p/m
Arthur Westneat	Data service support	3.0 p/m
William Guyton	Data service support	1.8 p/m
Ted Wittenberger	Grain storage consultancies (2)	3.4 p/m
Arpi Hamalian	Extension training consultancies (2)	2.5 p/m
Helmuth Bixhain	Construction site supervision	3.0 p/m
Stephen Snook	Construction site supervision	3.0 p/m
Lee Forsythe	Construction site supervision	5.0 p/m
Ruth Snyder	Extension service leader	8.2 p/m
George Appelmans	Roads contract supervision	5.0 p/m
Patricia Prunier	WID training consultancy	2.6 p/m
Subtotal LOE:	Short-term Personnel	48.0 p/m

[2]Level of effort for short-term personnel is expressed in 22-day work months, although the majority of these personnel were authorized to work a six-day week.

Long-term personnel who were part of the ordered evacuation to the U.S. at the end of September 1991 are noted by an asterisk (*). No short-term personnel were on assignment in Zaire at the time of this evacuation.

The six evacuated long-term personnel were on evacuation status in Washington during October and November. Three Checchi team members (Minh Nguyen, William Guyton, and Guido Verhulst) were authorized to remain in Washington through December 20 and a fourth (Georges Appelmans) has been asked to assist with aspects of the MDZ roads rehabilitation contract through February 29, 1992. In accordance with Checchi and DAC overseas personnel policies, all U.S. and TCN employees with the exception of Roads Contract Supervisor Georges Appelmans were given 30-day termination notices at the end of November.

Exhibit 1 provides information on the location, status, current salary, and projected termination cost of each employee. It is proposed that each employee whose contract is being terminated prematurely receive a minimum of one month severance pay per year of employment under the contract, during which period he would remain on his employer's payroll. This proposal is in accordance with the personnel policies of both Checchi and DAC.

2. Real Property

a. Leases

As of the date of the evacuation, there were leases in force between Project 105 Ag and (i) George A. Forrest, covering the premises at 301 Ave Kahozi, Lubumbashi, occupied by Guido Verhulst and (ii) Mme Tobie-Mul, covering the premises at 1 Ave Roche, Lubumbashi occupied by John Hannum. Although both leases were entered into by the project before the premises were taken over by Checchi personnel and the lease agreements were never amended to reflect this change, Checchi has been responsible for making the quarterly rental payments. The last payments were made in early October covering the quarter ending December 31, 1991. Checchi does not have copies in Washington of the original lease agreements.

At Checchi's request, Bruce Spake has been coordinating with the project office in Lubumbashi the force majeure cancellation of these two leases. Checchi received a message from Mr. Spake on December 6, 1991, stating that, to the best of his knowledge, both premises had been returned to their owners without any problem. Checchi has also notified Mme Tobie-Mul of the cancellation through Banque Belgolaise in Brussels where she has a foreign currency account.

Checchi understands that the lease on the project office in Lubumbashi (102 Ave Kasai) has been terminated with 30 days notice. Checchi was not a party to this lease, nor had it assumed responsibility for the rental payments as of the date of the evacuation.

11

Checchi and Company Consulting, Inc.
Contract No. 660-0105-C-00-8014-00

STATUS OF U.S. AND TCN CONTRACT PERSONNEL

Exhibit 1

Name	Position	Current Status & Location	Monthly Salary	Accrued Leave**	Contract End Date	Est Cost Termination
U.S. Personnel						
M. Nguyen	Administrative Team Leader	30-day termination notice given 11/30/91; returned to home of record on 12/15/91	$5,395	41.3	4/30/92	
D. Nghiem*	Senior Extension Specialist	30-day termination notice given 11/30/91; returned to home of record on 12/01/91	$3,645	24.0	4/30/93	
W. Guyton	Information Specialist	30-day termination notice given 11/30/91; returned to home of record on 12/15/91	$2,275	23.8	1/31/92	
J. Hannum	Admin/Financial Advisor	30-day termination notice given 11/30/91; returned to home of record on 12/01/91	$3,500	14.8	3/31/93	
TCN Personnel						
G. Verhuist	Asst Information Specialist	30-day termination notice given 11/30/91; returned to home of record on 12/21/91	$2,853	8.7	2/28/93	
G. Appelmans	Roads Contract Supervisor	on SEA status in Washington through 2/29/92	$4,463	8.7	8/31/92	

*DAC employee.
**as of December 31, 1991.

b. Non-Expendable Property

A physical inventory of A.I.D.-financed property in Checchi's custody was conducted in June 1991 and presented in a report to USAID Zaire. An updated version of that inventory, which includes the three new vehicles received prior to the date of the evacuation, is provided in Annex 4. All project property in Niembo and Kitenge is still under the control of SVA Director Mubwa. Project property in Lubumbashi is at SHADO, under the control of Nkulu.

c. Procurement

No contract-financed offshore procurement actions were in process at the time of the evacuation. A procurement of motorcycle parts being handled by CMS reportedly was in route to Lubumbashi via Durban. These parts are essential to the continuation of project extension activities.

3. Participants in Training

There were no contract-financed participants in training at the time of the evacuation. Project counterpart funds were being used to pay the salary, tuition, fees, and travel expenses of extension agent Maloba Ilunga, who has expected to complete a three-year ingenieur technicien degree program at Yangambi University in December 1992.

4. Records Management

A list of all reports, plans, and other written materials which have been submitted to A.I.D. under the contract is provided in Annex 5. Checchi is current with all contractual financial and performance reporting requirements. Contractor records left in Lubumbashi have been secured at SHADO. All records remaining in Niembo are under the control of Director Mubwa.

Annex 1

AGRICULTURAL EXTENSION SERVICE STATUS REPORT

Annex 1

CENTRAL SHABA AGRICULTURAL DEVELOPMENT PROJECT
AGRICULTURAL EXTENSION SERVICE (SVA)

STATUS REPORT

A. ORGANIZATION AND PERSONNEL

Before the Central Shaba Agricultural Development Project was redesigned, the project area was divided into four operational extension zones: Kabalo, Mulemba-Bukama (zone Sud) Ankoro, and Kabongo. Each zone had a Zairian chef de zone. Senior extension specialist Dai Nghiem was posted in Kabalo, and extension specialist Jacques Bussieres was posted in the southern zone (Zone Sud) at Kinkondja. Extension efforts in Kabongo and Ankoro zones were supervised directly by the Zairian technical director of SVA and his counterpart Checchi administrative team leader Minh Nguyen.

At full staffing, the agricultural extension service (SVA) consisted of Director Mubwa, three Checchi/DAC expatriate extension specialists, six management-level staff (the four chefs de zone, the head of the Niembo station, and the head of PVO development and storage activities) and 21 extension agents, including four women[3]. These extension agents worked together with four groups of Peace Corps volunteers (a total of 11 men and 17 women) in 14 extension areas covering 372 villages.

B. ACHIEVEMENTS

1. Selection and Training of Contact Farmers

The extension agents and Peace Corps volunteers were based in villages within each extension area, where they were responsible for selecting contact farmers and training them to prepare demonstration or observation fields based on recommended technical practices. The agents were expected to make regular visits to these contact farmers and to encourage them to discuss project-recommended innovations with other farmers. Given the expanse of the project area and the limited number of extension staff, the involvement of contact farmers was key to the extension of project recommendations.

During the 1988/89 agricultural campaign, SVA identified and trained 1,104 contact farmers. In both 1989/90 and 1990/91, approximately 1,400 contact farmers (including approximately

[3]After the size of the project area was reduced in early 1991, six local hire positions were eliminated, including the chef de Zone Sud, the head of the Niembo station (who was transferred to the extension staff), and five extension agents.

15

350 women) received training from SVA extension agents. Several contact farmers had to be replaced by other farmers.

Following selection and initial training of the contact farmers, emphasis was placed on increasing these same farmers' technical knowledge rather than on recruiting additional farmers. The extension agents and Peace Corps volunteers enjoyed working with the contact farmers, since most of them had the motivation and capacity to transfer technical messages to their neighbors. Normally, contact farmers were given priority when improved seeds and manioc cuttings were distributed, and they were happy to work with the project.

Due to the reductions in extension personnel and the size of the project area that took place in early 1991, SVA planned to reduce the number of contact farmers by 50 percent, to 700 persons, for the 1991/92 agricultural campaign.

2. Installation of Demonstration Fields

Demonstrations have been used extensively to communicate technical messages from contact farmers to their neighbors and are considered to be the project's most important extension training tool. These demonstrations permit the observer to make side-by-side comparisons of the results of traditional versus improved production practices and/or the performance of improved seeds versus local varieties.

During the past three agricultural years, a total of 1,477 fields were installed to demonstrate the effect of using improved seeds and cultivation practices on different crops. Of this total, 1,044 fields were harvested. Demonstration fields for manioc clones or manioc cultivation were harvested only where the manioc had reached the age of 20 to 24 months. Also, due to reduction in size of the project area, a number of the demonstration fields installed in Kabalo and in the southern zone could not be harvested.

Analysis of demonstration results shows that improved cultivation methods extended by the project produce significant yield increases over traditional practices, averaging 40 percent for corn, 60 percent for peanuts, and 55 percent for peanuts intercropped with manioc. The analysis also shows that using improved corn seed varieties results in yield increases of 30-35 percent over degenerated seed varieties, and that by using improved manioc clones, farmers in the Kabongo zone obtained overall yield increases of 54 percent.

In addition to these production increases, the demonstrations on intercropping showed farmers how to reduce labor requirements for land preparation and weeding, since the land needed to be prepared only once for all cultivars intercropped.

3. Dissemination of Extension Information

To exploit the results of the demonstration fields installed, SVA organized 1,200 demonstration days annually for a total of 15,000 farmer participants. About 35 percent of

16

the participants in demonstration days were women.

SVA staff prepared, printed, and distributed technical information sheets (fiches techniques) providing simple, step-by-step instructions on the recommended cultivation practices for project area crops, including corn, manioc, peanuts, soybeans, and rice. Manuals and agricultural calendars were also distributed to contact farmers to assist them in keeping track of field operations. During agricultural years 1988/89 and 1989/90, a total of 15,000 crop sheets and 500 agricultural calendars were given out.

4. Multiplication of Corn Seed (emergency measure)

Due to the non-performance and subsequent termination of the TMS seed contract, SVA was requested in 1989 to undertake emergency measures to produce corn seed at Niembo Station and through contract seed growers. At Niembo, 24 ha were planted with Kasai I and Salongo II seed varieties, producing 52.7 tons of selected seed. An additional 22 tons were produced by contract seed growers, bringing the total amount of corn seed available for distribution to 75 tons. All seed was certified by the National Seeds Service (SENASEM). The seed was treated with Super Homai and packed in 5 kg and 10 kg sacks. Approximately 60 tons were delivered to corn seed vendors for sale to farmers.

5. Multiplication and Distribution of Other Improved Seeds

To achieve the project's broadened purpose of increasing production of other food crops in addition to corn, improved varieties of peanut, rice, bean, and soybean seeds and manioc clones needed to be tested, multiplied, and distributed. Since the private sector seed enterprise was to be responsible only for corn seed production and distribution, these tasks had to be carried out directly by SVA.

SVA began by growing well-adapted varieties of peanuts, soybeans, and rice at Nyembo station and distributing the output to farmers for multiplication with the understanding that the project would recover 2 kg of good seed for every 1 kg of seed delivered. To meet the overwhelming demand for peanut seed, the project also bought seed produced by contract seed growers in order to have a sufficiently large stock of peanut seeds available every year for distribution.

To date, the project has produced and distributed 95.22 tons of peanut seed, 11.41 tons of rice seed, and 12.7 tons of soybean seed. Details are shown in Exhibit 2.

The manioc multiplication program was carried out at both Nyembo station and in the extension areas. At Niembo, manioc plants were cut for distribution at the age of 12 months and the manioc stumps were allowed to regenerate for a second time. With this method, the project was able to produce a very large quantity of manioc plants each year.

At the village level, SVA found that manioc plants were harder than expected to recover because the farmers did not want to harvest the entire field. Therefore new directives were developed whereby the manioc plants would first be given to PVOs, cooperatives, farmer groups, or contact farmers for multiplication. Cuttings would then be distributed to individual farmers in small quantities sufficient for planting on about 200 square meters of surface area. Once these plants were harvested, the farmers would be able to enlarge the surface area devoted to manioc production.

Since 1988, Niembo station has distributed 455,026 meters of manioc plants, not including plants produced and distributed in the extension areas. An additional 600,000 or more meters had been programmed for distribution during the 1991/92 agricultural season.

6. Organization of the Private Sector to Sell Corn Seed

After the termination of the TMS contract, the decision was made to enlist private organizations operating in the project area, including food crop traders, religious missions, farmer groups, and cooperatives, as seed vendors. The role of the SVA extension agents and Peace Corps volunteers was to promote the seed by explaining to farmers the benefits of using improved seed varieties; they were not involved directly in seed sales.

During the 1990/91 growing season, 24 vendors were selected and contracted to sell corn seed at the best price they could obtain. This experiment had both negative and positive results. The big merchants, discouraged by delays in evacuating corn by rail, stopped buying corn in the project area and thus could see no benefit in providing trucks just to deliver seed to farmers. The farmer groups and religious missions, on the other hand, showed a willingness to use their own transport means (including bicycles) to distribute seed to distance villages. The final result was that only 48 percent of the corn seed delivered was sold. The lack of credit facilities, the inefficiency of the SNCZ, and the poor road conditions were other factors contributing to the poor performance of seed sales.

For the 1991/92 growing season, 25 tons of seed had been distributed to nine cooperatives and seven traders by mid-September 1991. It was recommended that the seed vendors fix the sales price at five times of price of corn. Regardless of the selling price, the vendors were to reimburse the project at the rate of Z 500 per kg of seed sold. (During the 1990/91 campaign, the selling price was Z 120/kg of which the project was reimbursed Z 45.)

When the Checchi team was evacuated at the end of September, seed sales were not progressing very well. Extension agents were predicting that the vendors would not be able to sell all the seed because many prospective buyers had not sold the previous year's corn crop and thus had neither the money to buy the seed nor the incentive to increase their production.

7. Creation of the FSNK Seed Farm

In March 1990, Mr Mikombe, owner of a farm located 6 km south of Niembo, signed a contract with the project to establish FSNK (Ferme Semenciere Nyembo Kabongo) and develop it as a seed production operation. SVA director Mubwa and his counterpart Minh Nguyen were given the responsibility of helping this seed farm set up a production plan and of supervising the seed production program.

At the beginning of the 1990/91 season, FSNK planted 45 ha of seed corn at Niembo and contracted with local growers to plant an additional 11 ha in different blocks in the Niembo area. Multiplication activities went well and the seed produced was of good quality. The National Seed Service (SENASEM) organized a training session for seed farmers at Lubudi and subsequently visited Niembo. Although SENASEM noted that FSNK had failed to submit the monthly reports needed by SENASEM to certify the seed production, it confirmed that the Niembo fields met all seed production requirements.

Initially, it was estimated that FSNK might need to produce 100 tons of seed annually. However, because of the reduction in the size of the project area and the results of last year's seed sales, this demand estimate was reduced in early 1991 to 50 tons. Following the catastrophic 1991 corn marketing campaign, SVA instructed FSNK to treat and deliver only 28 tons and leave the balance untreated until the demand of improved seed increased.

In general, the project has been pleased with the performance of FSNK and, prior to the evacuation, had decided to give the farm responsibility as well for manioc multiplication activities. The farm manager, Mr. Kilumba, has good management skills and collaborates effectively with project extension agents. Unfortunately, FSNK's owner and general director, Mr. Mikombe, is also a busy crop trader who has not had much time to establish effective working relationships with SENASEM or to communicate with SVA on various issues related to the seed business. He has counted heavily on project financial and technical support since, under the current situation, seed production costs are too high and farmgate prices for corn are too low for the seed business to be profitable.

8. Strengthening of PVOs

Project staff have devoted considerable effort establishing collaborative relationships with PVOs and other non-governmental organizations in the project area. Officially recognized PVOs that the project has worked with include CAFCAB (Centre Agricole pour la Formation de Culture Attelee) and IRIZ. These two PVOs, which receive financial support from both overseas and local sources, are quite strong and well organized. The project has trained several CAFCAB and IRIZ extension agents. Both organizations have been involved in selling seed to farmers in the project area.

The collaboration between the project and CAFCAB has been excellent. Both SVA and CAFCAB share the objective of helping farmers to organize and increase their production.

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Prior to the evacuation, CAFCAB had agreed to hire one project extension agent who had been effective in helping to train members of 13 farmer groups that had been created and provided with animals by CAFCAB.

As the goal of IRIZ is to improve the nutritional level of the population, SVA collaboration with IRIZ extension workers has focused on increasing production of beans and soybeans. Following the reduction in the size of the project area, SVA had been working with IRIZ only in the Mbeya extension area. However, since IRIZ wanted to continue its extension efforts in the Ankoro area, the project had decided to enter into a protocol agreement with this PVO to support continuation of its Ankoro extension work.

SVA has also worked closely with a number of religious missions in the project area. The project collaborated with the Methodist mission at Luena in providing technical support to Nyembo Bukama Agricultural school. It also successfully involved this mission as well as the Catholic missions at Budi, Malemba, and Kayeye in selling corn seed and marketing soybeans produced by farmers in the Kayeye and Budi areas. There were plans to work with the Adventist missions at Kamungu and Kitenge.

In summary, the project has been successful in building the interest of some PVOs in carrying out extension work. Unfortunately, none of these PVOs has the financial capability to undertake a full scale extension program. Although CAFCAB is the strongest non-governmental organization in the project area and has received good financial support from the Catholic mission at Budi and a Dutch PVO, it still needs assistance from other organizations including USAID.[4]

9. Training of Extension Personnel

SVA has devoted considerable effort to the training of extension agents and PVO personnel. In addition to the induction training provided to all newly hired extension agents and Peace Corps volunteers, on-the-job training was routinely given by SVA senior staff and extension supervisors during their visits to extension areas. Moreover, during the first three years of the contract all extension personnel and volunteers gathered at Niembo twice each year to receive intensive in-service training on topics including the following:

- recommended cultivation methods for major food crops (corn, manioc, rice, soybeans, peanuts, beans);
- methods of intercropping manioc with peanuts, manioc and soybean, and corn and manioc with peanuts;

[4]CAFCAB has, in fact, completed a written application for a USAID grant through USAID's Small Project Support Project.

- soil conservation;
- improved seeds and their importance;
- storage technology;
- conservation of manioc plants;
- implementation of seed multiplication and quality control programs with contract growers at the village level;
- installation of demonstration and observation fields;
- conducting group discussions;
- organization of extension meetings and field days;
- criteria for selection of contact farmers;
- working with women contact farmers;
- participation of women in development activities;
- extension training methods and preparation of training materials (flip charts, slides, fiches techniques); and
- natural resources management for environmental sustainability.

At the conclusion of each training program, extension agents and Peace Corps volunteers spent two days with senior SVA staff reviewing and evaluating the performance of the previous agricultural campaign and programming activities for the next season.

The training sessions were led by SVA staff assisted in several instances by short-term specialists. On three separate occasions (May 1990, April 1991, and August 1991), U.S. or Canadian experts were engaged to lead training sessions on the integration of women into project activities. The training provided by these WID experts was criticized by many participants for its lack of relevance to the project context and for its failure to present practical steps for addressing women's needs. By contrast, the November 1989 training in extension methodology delivered by two Israeli trainers was appreciated for its practical, grassroots-oriented content.

In general, participants welcomed the opportunity the training programs afforded them to upgrade their skills and share their experiences with their colleagues. Since most of the extension agents had only three years of vocational training in agricultural high schools and

most of the Peace Corps volunteers had no background in agriculture, the training in improved cultivation methods and extension techniques was very necessary. Furthermore, as the project evolved to include food crops other than corn and to strengthen the role of women and PVOs, it was important for project extension workers to receive training in recommended production practices for these other food crops and in approaches for reaching these other target groups.

A number of SVA staff also attended training courses outside the project area. The Extension Director and five chefs de zones received training in extension methodology in Israel. Two groups of ten extension agents participated in training programs organized at RAV's Mwazi and Gandajika research stations. The SVA Director completed the University of Pittsburgh's francophone program in development management during the summer of 1990.

10. Storage Interventions

It has been estimated that 30 percent of the corn production in the project area is lost post-maturity as a result of improper storage practices at the village level or while awaiting shipment at the railheads. Lacking adequate storage facilities, farmers prefer to leave the matured corn ears to dry on the stalk where they are vulnerable to attack by weevils and rodents. Corn purchased by traders is often trucked to the nearest railhead where it may be left unprotected for weeks or even months before SNCZ has the space or locomotives available to ship it to markets in south Shaba and the Kasais.

To address problems at the village level, a short-term specialist in storage technologies was engaged to assess the situation and recommend appropriate interventions. On a subsequent short-term assignment, this specialist designed and supervised the construction of four prototype storage facilities for testing at Niembo Station. For various reasons, none of the models built was found to be acceptable for extension to project area farmers. It was decided instead to focus on convincing farmers to improve existing storage models. Although demonstration projects were established by several extension agents and Peace Corps volunteers in 30 villages, these efforts were not pursued on a consistent basis due to lack of support from USAID. It was argued that village-level storage facilities would not be necessary once the roads had been improved and traders were able to evacuate the corn. However, this argument ignores the tendency of farmers to store their products until the price goes up as well as the tendency of traders to buy first from villages located along main roads, creating a need for storage facilities in less accessible villages.

To address problems at the railheads, the project planned, financed, and supervised the construction of nine covered loading docks (CLDs) at eight major railheads in northern and

central Shaba, with a total storage capacity of 20,000 tons of corn. This intervention was successfully completed[5] and was applauded by the traders and SNCZ.

11. Adaptive Research

Very little agricultural research had been conducted in Central Shaba prior to project implementation. The recommendations of the national commodities programs such as PRONAM (manioc), PNM (corn), and PNL (legumes) could not be applied uniformly throughout the project area due to the great variations in ecological conditions. For example, recommendations that could be applied in forest zones would not be suitable for the savanna.

In order to select the most productive cultivars for the project and to determine the cultivation practices which give the highest yield, the project has collaborated with the above commodity programs to obtain materials for adaptive research trials. So far, the project has conducted variety trials for PNMXT, PNMVT, manioc clones, beans, soybeans, peanuts, and rice in addition to trials on spacing for corn, soybean, and rice; on intercropping of manioc and peanuts and manioc and soybeans; and on the effect of lucaena on corn yields. Results obtained from this adaptive research program have helped the project to select the most productive varieties of peanuts, beans, soybeans, rice, and manioc for multiplication and distribution.

12. Summary

In spite of the deteriorating economic environment and other implementation problems which are discussed below, the SVA has made significant progress during the past four years. At the time of the evacuation of the expatriate staff, the extension programs were very well established, were operating effectively, and were expanding their efforts to achieve the objectives of the Central Shaba project. Efforts to promote diversification of the cropping system have had an especially positive impact in increasing manioc and peanut production. The quantity of these crops that are marketed has increased in the past two years and a large stock of improved materials has been introduced in the project area.

Following is a summary of the major outputs of the extension services component:

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[5]The cement floors at two CLDs (Kime and Kitenge) could not be completed due to the January 1991 labor strike; however, both facilities are adequate for storage purposes.

Central Shaba Project Agricultural Extension Service
Outputs by Agricultural Year: 1988/89–1991/92

Output Indicator	Unit	Agricultural Year 88/89	89/90	90/91	91/92
1. Improved seeds distributed to farmers					
a. corn seeds					
distributed by TMS	tons	10.30			
distributed by project	tons	15.50	19.24	27.28	
b. peanut seeds	tons	9.05	23.42	37.40	25.35
c. rice seeds	tons	2.36	4.68	3.30	1.07
d. soybean seeds	tons	1.30	6.90	4.50	
e. manioc cuttings	meters	59,625	207,476	187,925	600,000
2. Improved production practices employed by project farmers					
a. total farmers assisted	no.	12,057	15,586	14,625	12,000
b. female farmers assisted	no.	3,472	3,640	4,851	
3. Contact farmers trained					
a. total contact farmers trained	no.	1,104	1,581	1,400	700
b. female contact farmers trained	no.	290	410	354	
4. Project personnel trained					
a. short-term U.S. training	no.			1	
b. short-term Third Country training	no.		1	5	
c. in-service training (session 1)	no.	28	55	40	
d. in-service training (session 2)	no.	54	35	38	
5. Storage improvements					
a. railheads with covered loading docks	no.		2	6	

C. IMPLEMENTATION PROBLEMS

1. Shift of Project Emphasis

In implementing the initial project activities, SVA agents found that the soils in parts of the project area were not suitable for corn production but were well adapted for manioc and peanuts which were being grown as cash crops. Based on this finding, it was recommended that the purpose of the project be broadened to include increased production of other food crops in addition to corn.

As a result of this change, SVA became involved in testing and demonstrating improved cultivation practices for manioc, peanuts, soybeans, and rice and in multiplying seed and cuttings for these crops. Taking on these additional responsibilities almost tripled the tasks of the extension service.

2. Limited Number of Extension Agents

The SVA consisted of a limited number of extension agents whose main responsibilities were to recruit contact farmers and train them to extend recommended technical practices through their neighbors. The target number of SVA extension agents (21 including 4 women) was low relative to the large size of the project area; consequently each extension agent was required to cover a vast extension area and, in some villages, farmers were not reached by the project agents.

3. Lack of Information

The most important objective of the project's data collection and analysis service (SCAD) was to help SVA design effective extension programs by gathering necessary information on cropping patterns, yields, surface area under cultivation, farming population characteristics, and farmers' needs. However, due to difficulties in getting SCAD established, this information was not available and SVA had to base its initial work plans on the lessons learned from Project North Shaba. This experience was found not to be applicable to some parts of the Central Shaba project area with the result that extension activities had to be modified and SVA had to struggle to learn by mistake.

4. Road Conditions

The project design called for rapid improvements to be made to project area roads order to facilitate the supervision of contact farmers and the evacuation of agricultural produce. For reasons discussed in Section B.4.a of this report, the road component got off to a very slow start and by the end of March 1991 only about 100 km of link road had been properly rehabilitated. The poor condition of the roads, particularly during and immediately following the rainy season, had a negative impact on extension supervision and seed distribution activities and discouraged traders from buying farmers' crops.

5. Poor Performance of the Seed Company

The poor performance of the seed company had a very negative effect on corn production in the project area. Whereas TMS had been expected to sell from 50-100 tons of improved corn seed annually, during the first two agricultural years only about 45 tons was distributed to farmers of which 35 tons was supplied by the project rather than by TMS. For the 1990/91 agricultural campaign, the project was able to distribute about 28 tons of corn seed, still far short of the annual target. One consequence of this shortfall was that many farmers did not have access to the improved seeds needed to achieve anticipated productivity increases. Another consequence was that SVA personnel were forced to intervene in seed multiplication and distribution activities, taking time from their extension responsibilities.

6. Inefficiency of SNCZ

During the past three years, SNCZ has not been able to handle the demand for rail transport of agricultural produce due to shortages of railcars, fuel, and locomotives. Corn and manioc cossettes delivered by traders to project area railheads have often remained there for three to seven months awaiting space on railcars and/or locomotives to move the railcars out. This constraint has discouraged traders from buying more produce, making it difficult for SVA agents to motivate farmers to invest in improved seeds and production practices for cash crops.

7. Communication Constraints

The almost total absence of mass media communications facilities and equipment in the project area has limited the channels available for SVA to reach farmers with extension messages and to reinforce these messages. A well-modified training and visit extension system based on contact farmer demonstrations and field days was considered to be the best approach available to transfer technical information to farmers; however, given transport and staffing constraints, the number of farmers that can be reached directly by this approach is small relative to the size of the farming population in the project area.

8. Organization of the Project

The Central Shaba project was structured to protect against the administrative weaknesses of Project North Shaba by giving USAID more control over budget management and the use of project property. The two technical services (SVA and SCAD) were dependent on the logistics and administrative service (SLAA) for all matters requiring CPF financing including procurement of materials and supplies and hiring and payment of Zairian staff. Oversight and guidance of all three services was provided by CAP (coordination des activites du projet) comprised of representatives of the Ministry of Agriculture (Mr. Mansinsa) and USAID Kinshasa (Field Project Officer Spake).

Each service operated independently and the lines of authority among SVA, SCAD, SLAA, and CAP were blurred. Because of its control over project finances and its location in Lubumbashi where it was able to communicate directly with USAID Kinshasa, SLAA was in a position to make day-to-day management decisions without consulting with the project's technical leadership and without keeping SVA informed about decisions coming from Kinshasa. Moreover, the SVA Technical Director (Mr. Mubwa) had no formal decision-making authority over technical or administrative matters, especially as concerned SCAD and SLAA, and was uncertain about his role in project implementation. The only unit in a position to exercise control over all project activities was the USAID Field Project Officer representing CAP. The project organization chart and written guidelines concerning the delegation of decision-making authority at the field level and the use of project counterpart funds and property were not made available to project personnel.

The project's ad hoc organizational structure and management system had the effect of weakening the status and authority of the SVA's direction (DVA) in the field. Moreover, although the functions of SCAD and SLAA were necessary to provide support to SVA's extension efforts, the independent status of these two units meant that the DVA had no control over their activities in the formal sense, although the expatriate advisors assigned to all three services were able to collaborate effectively based on personal relationships.

9. Parts and Fuel Shortages

SVA was fortunate to have been equipped with adequate means of transportation to carry out its extension activities. This equipment included motorbikes for the chefs de zone and SVA extension agents, bicycles for the Peace Corps volunteers and extension assistants, and vehicles for the Zairian Extension Director and the expatriate extension specialists. However, due to delays in procuring spare parts for the motorbikes which were ordered by USAID Kinshasa, the extension agents were frequently obliged to use bicycles which made it difficult for them to cover their assigned extension areas. During the later stages of the project when CPF availability was curtailed, insufficient fuel supplies precluded distribution of large quantities of manioc plants to farmers in the project area.

D. PENDING ACTIONS

The following actions were pending at the time the Checchi team was evacuated from the Central Shaba project area on evacuation status:

- 28 tons of corn seed and 27 tons of peanut seed had been delivered to extension areas and were awaiting distribution.

- At least 600,000 meters of manioc plants were ready at Niembo station to be distributed to farmers during December 1991 and January 1992. SLAA had been requested to purchase 8,000 liters of diesel fuel and two trucks were to be made available to carry out the distribution.

- For the agricultural year 1991/92, SVA had planned to install 284 demonstration fields and to organize 540 field days. One training session for project agents was programmed to take place during dry season of 1992.

- The SVA staff member in charge of the PVO and coop development was programmed to be sent to Israel to receive training in cooperative development.

- Two groups of eight extension agents were supposed to go to Gandajika and Mwazi to receive training organized by RAV.

- Hundreds of demonstration fields on manioc clones and practices remained to be harvested.

- Directions for the 1991/92 corn seed multiplication program had not been finalized.

E. RECOMMENDATIONS AND LESSONS LEARNED

1. Overall Project Design

- Any future agricultural development project in Central Shaba should continue to promote diversification of the cropping system and the use of savanna area because the opening up of new areas for corn production may lead to intensive deforestation.

- Project activities should be confined to an area no larger in size than that of Project North Shaba. The original Central Shaba project area was much too large for either SVA or SCAD to cover effectively with their limited staff resources.

2. Extension Activities

- Collection of baseline data on farming system characteristics and farmers' needs should begin before extension activities get underway. The data collection and analysis service should focus on providing information that is needed for the design, management, and evaluation of project interventions; its resources should not be diverted to purposes that are not directly related to the project.

- Depending on soil conditions and other factors, farmers can increase their production by up to 100 percent through the use of improved seeds and project-recommended production practices.

- Using contact farmers to demonstrate improved technical practices is a very good extension approach. The contact farmers should receive recognition and compensation for their important role in the extension system. They should be given priority in obtaining improved seed.

- With good supervision and regular training, Peace Corps volunteers can perform effectively as extension agents. Most of the volunteers assigned to the Central Shaba project worked effectively with project area farmers and with SVA extension staff. They enabled SVA to reach more farmers with extension messages than would have otherwise been possible with the limited number of agents that SVA was authorized to employ.

- The extension service should not attempt to introduce storage models at the village level which require large investments and imported construction materials, or which are built with materials (i.e. bamboo) that are not always available in the villages. Efforts should nevertheless be made to improve storage facilities at the village level utilizing simple technologies and local materials.

- Efforts to encourage farmers to use improved seeds and better production methods will be wasted if farmers could not sell their produce. On the other hand, extension services are a vital part of any agricultural development program. It should not be assumed that production will increase solely as a result of improvements in road conditions or improved seed availability. Farmers need to be shown how to increase their yields in order to exploit these new opportunities.

3. Seed Marketing and Distribution

Given Zaire's unfavorable economic environment and the poor condition of the road system in Central Shaba, seed production and distribution is not a viable enterprise for the private sector without a heavy subsidy. It is the government and the donors that should take the lead in creating a seed production and distribution system that can eventually be privatized. In this regard, it should be noted that only a negligible amount of the thousands of tons of corn seeds produced by the GOZ from 1975-82 ever reached farmers in the Shaba area due to poor distribution planning and lack of motivation on the part of food crop traders, most of whom are profit-oriented foreign businessmen.

- In order to boost food crop production, sufficient quantities of improved seed must be available for distribution at the beginning to arouse farmers' interest and create demand for future seed businesses. If the private sector is not willing to make this promotional investment, it must be made by the government and foreign donors.

4. Project Organization and Management

The project organizational structure, responsibilities of each organizational unit and staff position, and operations and procedures (including guidelines on the use of counterpart funds and project property) should be clearly defined in writing. All project personnel should have access to this information and should be informed of any changes.

- The title of Project Director should be held by a host country national. This individual, and other appropriate senior-level host country staff, should be involved in decision-making in order to instill in them a sense of ownership (or stakeholding) in project achievements and mistakes.

- The project coordinating committee (CAP) should hold semi-annual meetings for the purposes of information exchange and problem-solving. USAID Kinshasa, SHADO, Office de Routes, the Ministry of Agriculture, SVA, SCAD, and SLAA should all be represented at these meetings.

- The project's agricultural component (including SVA, SCAD, and SLAA) should be managed as a single unit and not as three independent entities. The management unit should be headed by SVA with SCAD and SLAA in supporting roles. Monthly meetings to coordinate field activities should be attended by senior-level representatives of all three services and the roads contract supervisor.

- Channels of communication between USAID and the management unit should be well established to ensure that all information is shared with field personnel.

5. Miscellaneous

- Every effort should be made to promote the involvement of the private voluntary organizations in project activities through institutional strengthening, training, and financial support. Unless this is done, these organizations will not be strong enough to sustain the extension efforts once project assistance is withdrawn.

- Due to the poor road conditions and the high prices of fuel and spare parts, the Shaba region counts heavily on the railroad system. However, the system is neither managed nor equipped to provide reliable transportation services and major investments will be needed to correct these problems.

Annex 2

DATA COLLECTION AND ANALYSIS SERVICE STATUS REPORT

Annex 2

CENTRAL SHABA AGRICULTURAL DEVELOPMENT PROJECT
DATA COLLECTION AND ANALYSIS SERVICE (SCAD)

STATUS REPORT

A. OBJECTIVES

The data collection and analysis service (SCAD) had three principal objectives in support of the Central Shaba Agricultural Development Project:

(1) to establish an information bank that would be used to monitor and evaluate project activities;

(2) to report timely and accurate information to USAID on the agricultural production and marketing situation in the project area; and

(3) to provide data to project management that would facilitate decision-making in project planning (i.e. the redesign and reorientation of project activities).

B. PERSONNEL AND JOB RESPONSIBILITIES

The data collection and analysis service was composed of two expatriates: Bill Guyton, an agricultural economist living in the project area and Guido Verhulst, a statistician posted in Lubumbashi; and seven Zairian staff. The Zairian staff, their related degrees, and positions are listed below:

Name	*University Training*	*Position*
Mutombo Ilunga	Geography	Logistics/map designs
Kanonge Kalenga	Statistics	Supervisor for Niembo Zone
Banze Ngoy	Statistics	Supervisor for Budi Zone
Mbuanya Kabambi	Statistics	Supervisor for Kitenge Zone
Mbuyamba Mbuyamba	Statistics	Supervisor for Kitanda Zone
Ilunga Ngoy	Statistics	Supervisor for Lusaka Zone
Ilunga Kazi		Data entry/secretarial services

C. ACHIEVEMENTS

1. Central Shaba Project Database

The data collection and analysis service has successfully established a database of agricultural production, marketing, and transportation information in the project area. Following are brief descriptions of each database component.

a. Transportation and Market Data

- SNCZ Rail Shipments (May 1990 - August 1991). This data set contains information of quantities, dates, and destinations of all agricultural produce shipped from railheads in the project area. Names of shippers are also included.

- Truck Crossings at the Mani Ferry (May - August 1991). Quantities of all produce shipped by truck across the Mani Ferry (northern extremity of the project area) and truck destinations are available in this data set.

- Traffic Circulation (February 1989 - March 1991). Traffic circulation data were collected at 31 points on project area roads during the first week of every month by types of vehicle (i.e., private trucks, Office de Routes trucks, USAID vehicles, jeeps, etc). This study was temporarily discontinued when the size of the project area was reduced in March 1991.

- Travel Time (April 1990 - September 1991). Travel times were recorded by project drivers travelling on roads leading to and within the project area. Four separate reports have been completed by Guido Verhulst that rank the conditions of each stretch of road and examine seasonal changes in travel times.

- Market Price Data (September 1990 - September 1991). Retail prices of major agricultural and manufactured goods were recorded the first week of every month in ten local markets. Comparisons were made with retail prices of goods in Lubumbashi collected by the Institut National de Statistiques (INS).

b. Agricultural Production Data

- Rainfall (September 1989 - September 1991). Monthly precipitation and number of days of rainfall were recorded in Niembo, Kinkondja, Kabalo, Budi and Kitenge.

- Yield Comparisons from Demonstration Fields (1990, 1991). Results from demonstration fields in the project area were collected from project extension agents and Peace Corps volunteers and entered in a Quattro spreadsheet program. Subsequent studies were conducted to determine the influence of planting and harvesting dates on yields.

- Extension Agent Reports (August 1990 - May 1991). Monthly extension reports were used to develop a database of information on planting dates and locations of project demonstration, observation, and field trials. Distribution and stocks of improved seed varieties and cassava cuttings were also recorded by agricultural center.

2. Project Area Population Study

The data collection and analysis service completed a comprehensive population study of the project area in December 1990 and submitted a final report on the study to USAID/Kinshasa in March 1991. The study provided population figures for all villages in the project area, disagregated by age and gender. Subtotals for each groupement, collectivité, and zone were tabulated in the appendices of the report. All villages were coded to correspond with quadrants located on the "Institut Geographie de Zaire" (IGZ) maps that were redesigned by SCAD in 1990. An "E" for "encadré" is found in the far righthand column of all appendices for villages participating in Central Shaba project extension programs.

3. Survey of Household Socio-Economic Characteristics

Following completion of the population study, SCAD began work on a household survey of the project area covering 250 households in 50 villages. The sampling strategy was developed in collaboration with the David Kingsbury and Eric Tollens and the survey instruments were approved by USAID in March 1991. In May, 50 village-level enumerators were selected and trained to administer the survey questionnaires. As of the date of the evacuation, questionnaires containing information on the characteristics of .. villages and ... households had been completed and submitted to SCAD for data entry and analysis.

The SCAD team hand-carried all completed questionnaires with them to Washington following the evacuation. The survey data are being analyzed by Guyton and Verhulst and two reports, covering village-level and household-level characteristics, will be submitted to USAID.

Unfortunately, the majority of the survey had not yet been completed when the Checchi team was evacuated from Shaba. Information on household production, field size, cropping patterns, and revenues and expenditures had not yet been collected.

4. Situation Reports

Another achievement of the data collection and analysis service was establishing a "quick reporting system" to keep USAID abreast of agricultural production and marketing conditions in the project area. Situation reports were submitted each month which included timely information on rail shipments of agricultural produce, truck traffic, current market

34

prices on agricultural and manufactured goods, rainfall distribution, and a summary of data collection and extension activities. This reporting system began in March 1990.

D. IMPLEMENTATION PROBLEMS

SCAD was not fully operational until February 1990, nearly two years after the initiation of contract activities. Several reasons have been advanced for this delay, but the primary difficulty was finding a qualified information specialist who was willing to live and work in the remote location of the project area. Lubumbashi, the nearest sizable city and supply center, was 800 km away and a two day drive from the project site. The position also required extensive travel within the project area over poor roads. Consequently, it was not attractive to many potential candidates.

There were several logistical and training problems encountered in the project area when the information service first began in early 1990. A lack of spare motorcycle parts and fuel shortages threatened to halt monthly data collection activities on many occasions. Additional difficulties included training the data collection supervisors how to ride and maintain their Honda XL motorcycles. The supervisors were university-level statisticians who had never lived in the bush nor ridden motorcycles. Their responsibilities required monthly trips of over 800 km to collect data and supervise survey enumerators and traffic counters. They were expected to master riding the motorcycles after a two week maintenance course that included lessons on how to change flat tires and make other minor repairs.

Another implementation problem was finding farm families who were willing to participate in the household survey without compensation. Survey enumerators were paid monthly salaries, but the 250 selected households grew increasingly impatient about answering questions during lengthly weekly interviews, without receiving financial benefits.

E. PENDING ACTIONS

If the Central Shaba Agricultural Development Project continues in the future, the data collection and analysis service should concentrate on the following activities;

1. Monthly Updates of the Database

SCAD's first priority should be to maintain the database of transportation, market, and agricultural data described in C.1 above. Considerable time and effort has been expended in establishing this database which, if maintained, can provide USAID and Zairian government agencies with valuable information on transport and agricultural conditions in Central Shaba.

2. Socio-Economic Household Survey

Three of the five household survey questionnaires had not been completed at the time of the evacuation. Important information was to be collected through these questionnaires on cropping patterns, field size, natural resources and household expenditures and revenues. Provided that sufficient funds and logistical support can be made available, the data collection service should try to complete these questionnaires during the current agricultural campaign. If this is not possible, the survey should be re-programmed for the 1992/93 campaign.

3. Future Studies

The data collection and analysis service had planned to carry out two important studies during the 1991/92 agricultural season: (1) a labor time study of project demonstration fields and (2) a village-level study of adoption rates for project recommended cultivation techniques. Both studies were intended to assist the project's agricultural extension service in evaluating the effectiveness of the extension messages being transmitted to local farmers.

A labor time study was conducted last year but results were inconclusive since many farmers did not complete their forms correctly. This season, it was SCAD's intention to supervise farmers more closely in order to obtain accurate results. Since all of the data collection supervisors are familiar with the labor time analysis, it would not be difficult to implement the study provided that the proper resources can be made available (i.e. watches for the farmers, printed forms, and a reliable means of transportation for the supervisors).

The adoption rate study, which was of particular interest to the extension service and USAID, was only in the planning stages when the Checchi team was evacuated. This study could only be carried out under the guidance of an experienced supervisor.

F. RECOMMENDATIONS AND LESSONS LEARNED

Ideally, a monitoring and evaluation unit should be operational several months before an agricultural project begins in order to provide project planners with quantitative information of the project area and to establish a database for time series analysis. In the case of the Central Shaba project, evaluating the impact of project activities was difficult since agricultural and transportation data were not collected prior to 1990. In the future, USAID projects in Zaire could derive the greatest benefits from a data collection and analysis service by installing the team before other project activities began.

A second lesson learned from experience with the Central Shaba project is the need for technical oversight of logistics support. Initially, SCAD relied on the project's administrative and logistics service (SLAA) for all financial and logistical support. The system worked well

with respect to finances and transportation needs but problems arose when SLAA personnel were asked to purchase technical materials for SCAD. The logistics staff often procured the wrong materials or were unable to locate needed materials in time for the different studies. In 1991, this problem was alleviated when Guido Verhulst and Mutombo Ilunga began overseeing the logistical support being provided to SCAD by SLAA in Lubumbashi. Mutombo spent nearly 50 percent of his time checking on orders and locating supplies needed for various studies. Without this oversight, the survey operations would have been severely handicapped.

A third suggestion for future USAID projects in Zaire is to limit the work program of the data collection and analysis service to project-related activities. On many occasions in Central Shaba, SCAD was asked to collect supplementary data on health, water, education, and natural resources. SCAD was able to incorporate questions dealing with these topics in the household survey but was unable to accommodate requests for other other non-project related studies due to time, personnel, and financial constraints. USAID may wish to consider establishing a permanent, independent data collection service in Shaba that could collect health, agricultural, and transport data for all projects in the region. Such a service could benefit a broader number of interest groups but would have to be carefully controlled and managed to insure that data was collected correctly and punctually.

Another lesson learned in Central Shaba was the need for improved communications among project personnel. The 800 km between the Lubumbashi and Niembo offices was both a physical and a communications barrier for project personnel. Inter-office radio transmissions were often misinterpreted or did not accurately articulate the intended message of the sender. This resulted in occasional friction between Lubumbashi and project area personnel.

Project activities were coordinated and attempts were made to improve communications at the monthly management meetings of the Unité Gestion du Projet (UGP) held in either Lubumbashi or Niembo. Unfortunately, the UGP only included representatives from the extension and logistics services. Many Zairian staff believed that SCAD was not formally a part of the project since they were not invited to participate in the UGP meetings and were not always well-informed about decisions made by project management.

Beginning in March 1991, weekly meetings were organized by Minh and Mubwa in Niembo to discuss work plans and staff relations. These meetings resulted in improved communication and cooperation between the different services in the project area and facilitated the coordination of project activities. The success of these small-scale meetings was encouraging and should have been replicated on a larger scale to encompass representatives from both the Lubumbashi and project area offices.

Annex 3

ROADS CONTRACT SUPERVISION STATUS REPORT

REPUBLIC OF ZAIRE
PUBLIC WORKS AND AREA
REMODELING DEPARTMENT

OFFICE DES ROUTES
SHABA CENTRAL 660-0105 PROJECT
ROADS COMPONENT

REHABILITATION OF A LATERITE ROAD : KINKONDJA - MALEMBA NKULU - MWANZA - KIKOSE

AMENDMENT No. 1

FUNDS : U.S.A.I.D.

SUMMARY OF THE FINAL REPORT

SURVEILLANCE MISSION

I. INTRODUCTION

The final report was written in French. An English summary was requested by Checchi and Company Consulting, Inc. May I ask those who are going to read it to be very indulgent for the mistakes I might have made in this translation.

This final report contains the followings items :

II. Project 660-0105 background
III. Private enterprise's contract and works
IV. Issue in case of a financial interruption
V. Invoice control
VI. Recommendations.

II. PROJECT 660-0105 BACKGROUND

I don't want to be very long about the four years on the project. I just want to say that I was engaged in some periods of the project. They are :

1. The construction of the base in Kabongo
2. The north part of the project in Kongolo (Section I)
3. The Kitanda bridge construction
4. The supervision of the private sector contractor's work in Kabongo.

The only phase which did not have results was the project in Kongolo, for the reasons you can find in the French report.

Concerning supervision of the private contractor's work in Kabongo, in the beginning M.D.Z. did not performed well and a reorganization of the initial team was required. After the reorganization was realized, it appeared that we would successfully rehabilitate the project roads. Then, we all were evacuated from Zaire.

III. PRIVATE SECTOR CONTRACT AND WORKS

The original project design provided for approximately one-third of project rehabilitation to be performed by a private sector contractor. A contract and a contract amendment were signed, for the rehabilitation of the roads, on February, 01, 1991, by M.D.Z., Office des Routes and approved by U.S.A.I.D.

Officialy, the work began on April, 15, 1991. As previously mentioned, the project got off to a bad start. It was only after the arrival of a new team that productive work was realized. However, after only five and one half months everybody was evacuated from Zaire.

3.1. Contract

The contract No ODR/DG/000/470/90 was signed on March, 23, 1991. An amendment (with the same reference number) was signed on February, 01, 1991.

3.2. Works realized from the beginning of the project until the evacuation (September, 29, 1991).

All information regarding completed work and the related costs are itemized in detail in the French language report.

3.3. Works to be done and budgetary situation

In the French report, tables Nr 3.3.1., 3.3.2, 3.3.3, 3.3.4, 3.3.5 and 3.3.6 will give all the pertinent information. All work is to be performed by M.D.Z. in case they can return to complete the contract.

3.4. Supplemental works

Supplemental works are definitely required for the successful completion of the contract. They are detailed in the French report under the numbers 3.4.1., 3.4.2., 3.4.3. and 3.4.4. One may find the budget for this work under the number 3.4.5.

IV. ISSUE IN CASE OF A FINANCIAL INTERRUPTION

Financial and material issues result in case of an interruption of the contract. To estimate them, a 'remise-reprise' is absolutely necessary on the project site. It's obvious that material issues are more important than financial issues because A.I.D. will lose all material and spare parts they have been paid for.

V. INVOICE CONTROL

5.1. Works completed by the Contractor from 09/01 until 09/29/91

An estimation of the completed work and the costs were executed so that U.S.A.I.D. can compare them with invoice number 5 of the Contractor. An accurate reference is given in the French report in numbers 5.1. and 5.1.3. Also a summary of all the invoices of M.D.Z. appears in paragraphs 5.2 and 5.2.1. of the French report.

5.3. Litigation

There were supplemental works which were required during the five and one half months of work that had to be carried out by the contractor. See number 3.4. in the French report

5.4. Return to the actual project

In case of a return to the project, the first priority for the work to be completed is : the two roads of Kabongo - Kamina and Niembo - Mwanza. An estimate of this work can be found in the French report in numbers 6.3 , 6.3.1. and 6.3.2.

VI. RECOMMENDATIONS

Recommendations are proposed to prevent mistakes made in the start-up phase in number 7. of the French report :

1. the elaboration of a project
2. a detailed examination of the contract
3. the choice of the contractor
4. the control of the works.

REPUBLIQUE DU ZAIRE
DEPARTEMENT DES TRAVAUX PUBLICS
ET DE L'AMENAGEMENT DU TERRITOIRE

OFFICE DES ROUTES
PROJET SHABA CENTRAL 660/0105
COMPOSANTE ROUTIERE

REHABILITATION DE LA ROUTE EN TERRE KINKONDJA - MALEMBA NKULU - MWANZA - KIKOSE

AVENANT No 1

FINANCEMENT U.S.A.I.D.

RAPPORT FINAL

MISSION DE SURVEILLANCE

Washington, décembre 1991

Georges APPELMANS

44

SOMMAIRE

I. Introduction

II. Historique

III. Contrat et travaux de l'Entreprise privée

IV. Conséquences

V. Contrôle des facturations

VI. Reprise des travaux

VII. Recommandations

VIII. Annexes

I. INTRODUCTION

Suite aux événements politiques que connaît actuellement le Zaïre, le Gouvernement Américain a décidé de suspendre momentanément son aide. De ce fait, tous les projets U.S.A.I.D. sont provisoirement interrompus.

A la demande de l'U.S.A.I.D. de Washington, chaque responsable, ayant participé à la réalisation de projet, doit clôturer son secteur de responsabilité par un rapport final.

Dans le cas du projet 660-0105 - composante routière - il me revient la responsabilité de faire ce rapport avec l'aide de Monsieur Bob BRADEN, Ingénieur en Chef à l'U.S.A.I.D. Kinshasa, se trouvant actuellement à Washington, et de mon épouse pour tous les travaux de dactylographie et de mise en page du présent rapport.

Dans ce rapport, nous tâcherons d'expliquer le passif et l'actif du projet 660-0105/Routes jusqu'à son interruption (le 29 septembre 1991) suite à l'évacuation de force majeure de tous ses responsables.

Ce rapport traitera de :

II. Historique du projet (du moins ce que j'en ai vécu), à savoir :
   2.1. Construction de la base O.R./U.S.A.I.D. à Kabongo
   2.2. Projet 105-1 à Kongolo
   2.3. Pont de Kitanda
   2.4. Travaux de contrôle de l'Entreprise privée à Kabongo.

III. Contrat et travaux de l'Entreprise privée

   3.1. Contrat
   3.2. Travaux exécutés du début du projet (le 15/04/1991) à la date d'évacuation (le 29/09/1991)
   3.3. Travaux à exécuter plus situation budgétaire
   3.4. Travaux supplémentaires absolument nécessaires

IV. Conséquences en cas de rupture définitive de contrat

   4.1. Financière
   4.2. Matériel (liste)

V. Contrôle des facturations M.D.Z.

   5.1. Travaux réalisés par l'Entreprise du 01/09/1991 au 29/09/1991 - situation No 5
   5.2. Situation Nos 1, 2, 3, 4 et 5
   5.3. Litiges

VI. Reprise du Projet

6.1. Travaux restant de l'avenant No 1 - Délais
6.2. Projet prioritaire de réhabilitation de nouvelles routes.
6.3. Estimation budgétaire des nouvelles routes

VII. Recommandations

7.1. Etablissement d'un projet
7.2. Contrat
7.3. Choix de sociétés
7.4. Contrôle des travaux

VIII. Annexes

Schémas

II. HISTORIQUE

2.1. Construction de la base O.R./U.S.A.I.D. à Kabongo

En août 1987, après avoir terminé mes prestations sur le projet hydraulique de Sandoa (660-0116), l'U.S.A.I.D. m'a proposé un P.S.C. pour la construction d'une base devant abriter le staff du projet 660-0105, Shaba Central, projet de développement agricole.

C'est à cette époque que j'ai rencontré, pour la première fois, Monsieur Bruce SPAKE de l'U.S.A.I.D. et Monsieur Francis THOMAS, Conseiller Technique Régional à l'Office des Routes.

A mon grand étonnement, aucune étude n'avait été faite concernant la construction d'une base. On connaissait seulement l'endroit où elle devait se situer : Kabongo, Shaba Central.

L'U.S.A.I.D. était partagée sur les faits :
Fallait-il construire une nouvelle base ou racheter les anciennes installations cotonnières, sises à Kabongo ? Ma première mission, à Kabongo, a été d'estimer le coût des installations cotonnières, sa remise en état et la construction de deux ou trois villas. Après l'étude de la vétusté de ces bâtiments et une comparaison avec une mission de services de l'urbanisme de Lubumbashi, une estimation de 11.000.000,00 zaïres a été proposée pour le rachat de ces installations. A ce moment-là, 1 US $ équivalait à 235 zaïres. La proposition de vente du propriétaire de la cotonnière a été de 6.000.000,00 de francs belges, soit 170.000,00 US $.

L'U.S.A.I.D. m'a demandé de faire une étude de comparaison des coûts entre la remise en état de la cotonnière, y compris la construction de trois villas à Kabongo, et la construction d'une nouvelle base, proche du chemin de fer à Kime - à 12 Km de Kabongo, entre Kabongo et Nyembo.

La nouvelle base devait comprendre les installations suivantes : 5 villas de plus ou moins 200 m2, un hangar de 840 m2 composé de bureau, hangar, garage et un dépôt de carburant de 300 m3. Pour cela, il fallait des plans, un cahier de charge et un devis quantitatif et estimatif des travaux, ainsi que le délai des réalisations (planning).

Je n'ai plus - au chiffre près - le montant exact des travaux mais la différence était de plus ou moins 10.000.000,00 de zaïres, en faveur du projet de remise en état de la cotonnière. Seulement, même après une remise en état, un vieux bâtiment reste un vieux bâtiment. C'est donc pour cette raison que l'U.S.A.I.D. et l'Office des Routes ont décidé la construction d'une nouvelle base. Cette décision a été approuvée après maintes discussions.

Dans le courant du mois de janvier 1988, le coût total de la nouvelle base a été estimé à plus ou moins 550.000,00 US $. Je m'étais engagé à réaliser les travaux en 12 mois.

Après avoir reçu le feu vert pour la construction de la base et avoir passé toutes les commandes aux fournisseurs à Lubumbashi, nous étions opérationnels, à Kabongo, début février 1988.

Je disposais, à l'époque, de 15 pelles, 15 pioches, 15 houes et 15 machettes pour commencer le débroussaillement du site de la base d'une superficie de 2 hectares (100 m. x 200 m.)

J'avais décidé de réaliser ces travaux uniquement avec les citoyens de la région (c'est une de mes façons de faire du développement). Pour me seconder, je n'avais aucune personne spécialisée dans la construction de bâtiment. Seule, mon épouse m'aidait pour toutes les questions administratives.

Suite à la triste expérience vécue par l'U.S.A.I.D. dans la construction de la base de Kasaji du projet 660-0115, il avait été décidé que l'U.S.A.I.D. serait responsable de la gestion des fonds de contrepartie pour le projet 660-0105.

Quant au personnel participant à la construction de la base, il avait également été décidé d'en employer le moins possible en provenance de l'Office des Routes. Sur un effectif de 150 individus, les membres de l'Office des Routes étaient au nombre de 8 personnes : un Ingénieur de Zone, un mécanicien, deux chauffeurs de camion, deux conducteurs d'engins, un chauffeur de véhicule léger et un Ingénieur civil en construction. A part le chauffeur du véhicule léger et le chauffeur de camion, les autres personnes ne m'ont été d'aucune utilité. Ils pensaient plus à faire leur petit commerce personnel pendant les heures de service qu'à participer à la construction de la base. J'ai donc adopté une ligne de conduite avec ce personnel : les ignorer.

Les trois premiers mois de la construction ont servi à :

- l'assainissement du terrain
- la réalisation de la clôture de la base
- la production de briques : 550.000 pièces
- le ravitaillement des matériaux locaux (sable, gravier, moëllons et bois)
- ainsi que l'acheminement d'une grande partie du matériel provenant de Lubumbashi.

Nous avons commencé la fondation du premier bâtiment au début du mois de mai 1988 et le 23 décembre de la même année, les bâtiments étaient terminés. La base de Kabongo était née et devenue opérationnelle, le tout sans dépasser les budgets prévus. A plus de 750 Km de Lubumbashi, nous avons réussi à réaliser cette construction malgré les difficultés de communication et d'approvisionnement, connues au Zaïre.

Sur ce chantier, j'avais instauré une prime journalière, accordée ou supprimée. C'est de cette façon que l'ouvrier était continuellement motivé.

Pendant toute la durée des travaux (11 mois), je ne me suis jamais rendu à Lubumbashi. Mes seules absences ont été un aller-retour à Kamina et une crise de malaria qui a duré deux jours.

2.2. Projet 105-1 à Kongolo

Après la construction de la base de Kabongo, l'U.S.A.I.D., par l'intermédiaire d'une société américaine Morrison Maierle, m'a proposé de reprendre le poste de Chef de Projet à Kongolo, en remplacement de Monsieur Tuoi Van Tran, rapatrié pour raison de santé.

L'objectif de ce projet était la réhabilitation de la première section de la route en terre de l'axe Nord-Sud du projet 660-0105, Shaba Central, Kongolo - Katshi = 180 Km, avec une brigade de l'Office des Routes (BR 612), dont 50 Km avaient été exécutés par mon prédécesseur. Une autre brigade (BR 603) était intégrée à ce même projet pour l'entretien des routes.

Je suis arrivé à Kongolo après la remise-reprise de la base de Kabongo, le 1er février 1989 et le projet s'est terminé le 30 avril 1990. Ces quatorze mois passés comme responsable du projet ont été, pour moi, la plus triste expérience professionnelle que j'ai vécue pour les raisons suivantes.

Sur ce projet, je ne travaillais qu'avec du personnel de l'Office des Routes et, dans cet organisme, les responsables expatriés ont toutes les responsabilités sans aucune autorité : pendant toute la durée du projet, je n'ai jamais réussi à mettre un agent de l'Office des Routes à la porte pour détournement alors que j'ai connu, au moins, un vol par semaine. En 1989, sur un envoi de carburant en provenance de Kalemie, mon homologue Zaïrois, à Kongolo, est parvenu à détourner 3.000 litres de gasoil. Me trouvant dans une situation délicate, j'ai demandé au Directeur Régional de l'Office des Routes du Shaba d'envoyer un enquêteur pour ce détournement. La personne désignée venait du même village que celui de mon homologue, autant dire que l'enquête n'a jamais eu de suite et tout était à l'avenant sans parler également de l'emploi abusif du matériel.

Nous avons été volontairement freinés par le manque de ravitaillement en carburant et lubrifiant pour que l'on ne puisse pas prouver que les brigades de l'Office des Routes sous la responsabilité d'expatriés avaient un meilleur rendement que celles dirigées par des responsables nationaux. Sur les quatorze mois de travaux, je n'ai disposé que de six mois de carburant. Travailler avec la mentalité des agents de l'Office des Routes de l'époque était devenu impossible. Ce personnel n'avait plus aucune motivation étant donné que les salaires arrivaient en retard et que les primes et avantages sociaux n'étaient plus payés depuis plus d'une année pour certains et depuis plus de deux ans pour d'autres.

Cependant, pendant les six mois où nous avons pu travailler, nous avons réalisé :

- <u>avec la Brigade 612</u> : **60 Km de réhabilitation sur la route** Kongolo - Katshi dont 40 Km de rechargement

  48 Km de réouverture de la route Kakuyu - Kitanda.

- <u>avec la Brigade 603</u> : **l'entretien des routes suivantes**

  . Kongolo - Nyunzu 126 Km
  . Kongolo - Sola 35 Km
  . Kabalo - Kakuyu 70 Km
  . Nyunzu - bac Niemba 60 Km

l'ouverture de la route :

. Nyunzu - Kabalo 100 Km

les terrassements des hangars (abris de maïs) aux gares de :

. Niemba
. Nyunzu
. Luizi
. Kongolo
. Kitanda

Pendant toute la durée de ce projet, nous avons aussi été fort ralentis par le manque de pièces d'entretien et de rechange, fournies par l'U.S.A.I.D.

2.3. Pont de Kitanda

Après le contrat avec la société Morrison Maierle, l'U.S.A.I.D. m'a proposé un P.S.C. de deux mois pour la construction d'un pont de 32 mètres à proximité de la gare de Kitanda. Ce pont était absolument nécessaire pour l'évacuation de tous les produits agricoles de la région de Kakuyu, se trouvant à 48 Km de Kitanda. Sans l'existence de ce pont, les opérateurs économiques étaient obligés d'expédier leurs produits par les gares de Kabalo (à 70 Km), de Kongolo (à 200 Km), ou de Kitenge (plus ou moins 120 Km).

Comme la gare de Kitanda ne se trouve pas dans l'aire du projet, l'U.S.A.I.D. a accepté de payer des frais de mission au personnel de l'Office des Routes qui travaillera sur ce pont. Le délai de réalisation était très court : j'ai compté un mois pour l'approvisionnement des matériaux au pont (sable, gravier, ciment, bois, fer à béton, etc...) et un mois pour la construction elle-même.

Nous avons d'abord dû détruire l'ancien pont (en bois) et réhausser les culées et les piles en rivière avec du béton armé. Pour ce faire, il a fallu construire une passerelle de service et lancer le nouveau pont métallique et le peindre.

Là, une fois encore, pour motiver les agents de l'Office des Routes, j'ai transformé la somme de frais de mission accordée par l'U.S.A.I.D. en primes dégressives. Ce qui signifiait que j'ai proposé aux agents une prime globale pour le mois de travail au pont. Ce délai une fois passé, ils étaient pénalisés de 5 % de cette somme par jour de retard. Par exemple, s'ils avaient réalisé la construction en 40 jours au lieu des 30 prévus, ils auraient eu leurs primes coupées de 50 %.

Ce remède a été magique : 30 jours après le début des travaux, le pont était opérationnel.

A) Cette réalisation a été exécutée avec un personnel non spécialisé dans la construction des ponts. Leurs qualifications étaient :
- conducteurs d'engin (3)
- chauffeur de camion (1)
- maçons (2)
- soudeur (1)
- charpentiers (2)
- mécaniciens (2)
- manoeuvres (10)

Cela prouve que la main-d'oeuvre nationale, bien que peu spécialisée dans certains domaines (vu la carence d'écoles techniques), reste une excellent main-d'oeuvre car elle est volontaire et attentive à toute participation dans n'importe quelle réalisation. Bien dirigée et motivée, elle est efficace.

2.4. Travaux de contrôle de l'Entreprise privée à Kabongo.

En avril 1991, la société américaine, Checchi & Company, m'a contacté pour un contrat de Fonctionnaire Dirigeant dans le cadre du Projet 660-0105, composante routière. Il s'agissait de contrôler une société privée (M.D.Z.) à Kabongo pour la réhabilitation de 587 Km de routes en terre.

Les travaux ont débuté officiellement le 15 avril 1991. Après deux semaines de travail, il s'est avéré que l'Entreprise privée réalisait un très mauvais travail à cause du responsable de chantier de cette époque qui n'avait aucune expérience en travaux routiers et qui, de plus, avait une très mauvaise conscience professionnelle.

Suite à plusieurs messages et lettres de ma part à l'U.S.A.I.D., l'Office des Routes et M.D.Z., la direction de l'Entreprise a décidé de renforcer son équipe d'expatriés, composée, à l'époque, d'un conducteur de travaux (non expérimenté) et d'un mécanicien. La nouvelle équipe consistait en un chef de projet, un conducteur en chef et deux mécaniciens. L'équipe entière était au complet le 15 juillet 1991.

Dès les jours suivants l'arrivée de ce renforcement de l'équipe, on a pu constater une nette amélioration dans tous les domaines : nous avions enfin à faire à de vrais spécialistes routiers.

Du 15 avril au 15 juillet 1991, la première équipe avait réalisé un travail bâclé sur le tronçon No 4 (Kamungu - Kitenge - Kebangu = 127 Km). J'ai été obligé de demander au nouveau chef de projet de reprendre les travaux sur les premiers 80 Km de cette route.

Le 12 août 1991, l'Entreprise a entamé les travaux du tronçon No 1 (Kabondo Dianda - bac Kabwe = 214 Km) à la demande expresse du Gouverneur de Région du Shaba. A la fin du mois d'août 1991, l'Entreprise avait déjà réalisé 16 Km d'ouverture de route sur une largeur de 18 mètres, ce qui permettait un ensoleillement et une visibilité convenables de la route.

L'Entreprise a également réalisé la construction (en béton armé) et le montage des pylônes du câble porteur du premier bac du tronçon No 2 (Mwadi Katoloka - Kaniama = 246 Km). Début septembre, la société Sometole a envoyé une équipe au premier passage à Mwadi Katoloka pour l'assemblage et la mise à l'eau du premier bac. Actuellement, ce bac est terminé et opérationnel.

L'ensemble des travaux a été stoppé aux environs du 10 septembre, pendant une semaine, à cause d'une rupture de stock en gasoil. L'Entreprise a repris les travaux le 17 septembre et a dû, de nouveau, arrêter le tout le 27 septembre, date à laquelle la direction de l'Entreprise a donné l'ordre à ses agents d'évacuer le Zaïre.

A ce moment-là, deux agents avaient accepté de rester sur place pour préserver le matériel. Il s'agit de Monsieur André Graff, mécanicien à Kabongo, et de Monsieur Philippe Théâtre, mécanicien à Kabondo Dianda. Début novembre, ils ont malheureusement reçu l'ordre de quitter leur poste, laissant tout le matériel A.I.D. sans aucun contrôle.

III. CONTRAT ET TRAVAUX DE L'ENTREPRISE PRIVEE

3.1. Contrat.

Dans le cadre de la section No 3 de réhabilitation de la route en terre de l'axe Nord-Sud du Projet 660-0105, Shaba Central (Kikondja - Malemba Nkulu - Mwanza - Kikose), un appel d'offre a été lancé durant l'année 1989 aux entreprises privées désireuses de réaliser ces travaux.

Après l'étude des offres, les travaux ont été confiés à l'Entreprise Maurice Dellens Zaïre (M.D.Z.) par le contrat des travaux No ODR/DG/000/470/90 du 23 mars 1990.

J'ignore pour quelle raison ces travaux n'ont pas eu lieu. Le fait est que le 1er février 1991, un avenant No 1 a été établi et signé. Vous en trouverez une retranscription ci-après.

AVENANT No 1 AU CONTRAT DES TRAVAUX
No ODR/DG/OOO/470/90 DU 23 MARS 1990.

Entre :

L'Office des Routes, entreprise publique créée et organisée par l'ordonnance-loi No 71/023 du 26 mars 1971 et régie par la loi No 78/002 du 06 janvier 1978 portant dispositions générales applicables aux entreprises publiques ainsi que par l'ordonnance No 78/223 du 05 mai 1978 portant statuts d'une entreprise publique dénommée "Office des Routes", ci-après désigné "l'Administration", représenté par son Président Délégué Général, d'une part ;

et

MAURICE DELLENS ZAIRE, société privée à responsabilité limitée, dont le siège social est établi avenue BOBOZO No 3555, quartier Kingabwa à Kinshasa, ci-après désignée "l'Adjudicataire", "l'Attributaire" ou "l'Entrepreneur" et représentée par son Directeur Général, d'autre part.

IL EST CONVENU ET ARRETE CE QUI SUIT :

I. Du préambule.

1.- A la suite de l'insuffisance des ressources des fonds de contrepartie USAID et de l'amenuisement de la capacité de la S.N.C.Z. à évacuer les produits agricoles stockés dans les gares, il importe pour maintenir les objectifs du projet USAID 660-0105 relatif au développement agricole du Shaba Central, de procéder à une réorientation géographique du projet routier initialement arrêté.

2.- Dans ce contexte, l'USAID propose que la réorientation de ce projet soit envisagée en vue de drainer les flux des produits agricoles de l'aire du projet vers la région du Kasaï, grande région de consommation.

Dans cette optique, les deux parties ont envoyé sur le site du projet une équipe conjointe chargée notamment de déterminer les itinéraires à réhabiliter prioritairement, la nature et le volume des travaux à réaliser ainsi que les stratégies d'entretien adaptées au site et à la nature des travaux à exécuter.

Les données rapportées par la mission conjointe ont permis à l'Entrepreneur de proposer des prix unitaires portant sur les postes du bordereau compatibles avec la nature des travaux.

4.- Après identification du niveau de service requis, des stratégies d'intervention conséquentes, et des ressources financières et matérielles disponibles dans l'aire du projet, l'USAID et l'Office conviennent de réorienter le volet routier du projet sur les routes d'intérêt national et régional ainsi que sur certaines routes de desserte agricole situées dans le périmètre Kabondo-Dianda - Malemba Nkulu - Kabongo - Kaniama.

5.- L'option ainsi levée nécessite l'adaptation du contrat initial au nouveau contexte du projet.

II. Des dispositions contractuelles.

Article 1 : Objet de l'avenant.

Le présent avenant au contrat No ODR/DG/000/470/90 conclu entre les deux parties en vue de la réalisation des travaux de réhabilitation de la route Kikondja - Malemba Nkulu - Muanza - Kikose, a pour objet d'acter les amendements au contrat initial consécutifs aux modifications intervenues dans le projet 660-0105 notamment en ce qui concerne :

- l'identification et la longueur du tronçon à entretenir ;
- la description des travaux à entreprendre ;
- la proposition des prix unitaires ;
- le délai d'exécution des travaux.

Article 2 : Objet du contrat.

L'article 2 du contrat initial est modifié comme suit :
"Le présent contrat a pour objet la réhabilitation ou l'entretien de routes d'intérêt national, d'intérêt régional et de desserte agricole situées dans l'aire du projet USAID 660-0105.

Les tronçons routiers concernés sont :

- tronçon No 1 :	Kabondo Dianda - Malemba Nkulu - bac Kabwe :	214 Km
- tronçon No 2 :	Mwadi Katoloka - Kaniama :	246 Km
- tronçon No 3 :	Kabongo - Mwadi Katoloka :	60 Km
- tronçon No 4 :	Kamungu - Kitenge - Kebangu :	127 Km

Article 3 : Nature et description des travaux.

Le nouvel article 4 du contrat est libellé comme suit :

3.1. Travaux objet de contrat initial

Les travaux objet du contrat initial et qui ont été entrepris avant la date de la signature du présent avenant seront achevés dans les limites définies par l'Administration par ordre de service.

Ces travaux seront payés par l'Administration et consistent essentiellement en :

- la réalisation et l'équipement des installations de chantier à Malemba Nkulu ;

- l'établissement des levés topographiques et des plans sur les tracés objet du marché initial, engagés jusqu'à ce jour par l'Attributaire.

L'Administration s'engage à rembourser à l'entreprise, sur présentation de pièces justificatives :

- les frais de transit et de magasinage dûs aux retards de fourniture des documents d'exonération dont question a l'article 6.2. du contrat initial ;

- les frais de maintien sur le site de travaux des équipes de l'Attributaire, les frais de cautionnement, autres frais financiers et les pertes d'industrie, etc...

- les frais engagés dans le cadre du présent avenant ;

- les frais exposés par l'Entreprise dans le cadre de l'exécution du contrat de location de matériel conclu avec l'Administration.

Ces frais feront l'objet d'une évaluation détaillée et justifiée par l'Entreprise.

3.2. **Travaux nouveaux.**

Les travaux objet du présent avenant portent sur les tronçons repris à l'article 2 du présent contrat et comprennent les opérations suivantes :

- débroussaillage et déforestage ;

- reprofilage léger à la lame de niveleuse avec scarification et compactage si nécessaire ;

- reprofilage lourd à la niveleuse avec scarification au bulldozer suivi de compactage ;

- rechargement ;

- réfection et construction des ouvrages d'art ;

- réfection d'ouvrages d'assainissement ;

- d'entretien des itinéraires pendant la durée des travaux ;

- implantation et exploitation des bacs.

Article 4 : Délai d'exécution.

L'article 5 du contrat initial est modifié comme suit :

Le délai d'exécution des travaux objet de cet avenant est de 18 mois intempéries comprises. Il prend cours le quarante-

cinquième (45ème) jour suivant la signature du présent avenant. Toutefois, si l'Entreprise démarre les travaux avant la date précitée, c'est la date de démarrage effectif qui sera considérée comme date de prise d'effet du délai d'exécution.

Article 5 : Montant du contrat, exonération fiscale, paiement.

5.1. L'article 6.1. du contrat est libellé comme suit :

Après déduction de la rémunération de l'amortissement du matériel mis à la disposition de l'Entreprise (US $ 918.000), le montant total du présent marché établi sur base de ses prix unitaires est estimé à US $ 6.781.823 (dollars américains six million sept cent quatre vingt et un mille huit cent vingt trois) dont :

- 85 %, soit US $ 5.764.550 payables en dollars américains et

- 15 %, soit US $ 1.017.273 payables en zaïres et équivalant à Z. 2.392.836.672 au taux du 29 janvier 1991 (1 US $ = Z. 2.352).

5.2. Il est ajouté un alinéa 6.4. stipulé comme suit :

Les bordereaux de prix et les sous-détails des nouveaux travaux à entreprendre sont joints au présent avenant".

Article 6 : Avances.

L'article 7 du contrat est remplacé par les stipulations ci-après :

6.1. Les avances forfaitaires déjà versées à l'Attributaire sont maintenues et seront remboursées par les retenues effectuées sur les facturations mensuelles et approuvées, à raison de 30 % du montant de chaque facture jusqu'à l'apurement du montant de l'avance octroyée.

6.2. A la demande de l'une des parties et avec l'accord de l'autre, une avance complémentaire pourra être versée à l'Attributaire.

Cette avance complémentaire sera établie sur base des prix unitaires de l'avenant et consentie dans les mêmes conditions que l'avance initiale. Elle sera actualisée à la date d'établissement de la facture y relative, par application de la formule de révision des prix prévue par le contrat.

6.3. Les avances complémentaires éventuellement consenties par l'Administration seront remboursées dans les conditions définies à l'article 7.1.

Article 7 : Cautionnement de bonne fin.

7.1. L'alinéa 8.1. est complété comme suit :

"L'Administration s'engage à restituer à l'Entreprise, dès la signature du présent avenant, le cautionnement constitué par l'Entreprise pour garantir la bonne fin des travaux prévus au contrat de base.

Pour chacun des tronçons définis à l'article 2 du présent avenant, l'Entreprise s'oblige à constituer un cautionnement de bonne fin des travaux dans les 20 jours de la signature de l'avenant".

7.2. L'alinéa 8.2. est remplacé par la stipulation ci-après :

"Pour chacun des tronçons précités, le cautionnement de bonne fin sera libéré en totalité à la fin de l'ensemble des travaux entrepris sur le tronçon concerné.

Article 8 : Obligations diverses.

8.1. L'alinéa 11.1. est amendé comme suit :

La seconde base du chantier sera installée à Kabongo. La base USAID existante, ses installations et équipements

seront mis gratuitement et exclusivement à la disposition de l'Attributaire qui en assurera la gestion, la maintenance et les approvisionnements en carburant nécessaires à un fonctionnement normal.

L'Attributaire mettra à la disposition du Fonctionnaire-Dirigeant le logement et les services directs repris dans le marché de base.

Un état des lieux et une remise-reprise de ces installations seront effectués sans délai par les parties après la signature de l'avenant.

Les aménagements fonctionnels exécutés par l'Entreprise et à son initiative dans la base de Kabongo demeurent à sa charge.

8.2. L'alinéa 11.2. (laboratoire de chantier) est complété par la stipulation suivante :

"Le matériel de laboratoire en possession de l'Entreprise pourra, aux frais de l'Entreprise, être installé à l'endroit désigné par l'Administration."

8.3. L'alinéa 11.5. (logement) est complété par l'alinéa dont la teneur suit :

"Pour les agglomérations situées loin de l'endroit où l'Entreprise a érigé les installations de chantier dans le cadre du présent avenant, le logement du Fonctionnaire Dirigeant pourrait être fourni par voie de bail."

8.4. Il est ajouté un alinéa 11.8. (planning des travaux) libellé comme suit :

"Avant le démarrage des travaux, l'Entreprise soumettra au Fonctionnaire Dirigeant le planning des travaux à entreprendre."

Article 9 : Révision des prix.

L'article 9 du contrat est complété comme suit :

"Les parties conviennent de faire dans les meilleurs délais application de l'article 9.1.1. c) du contrat."

Article 10 : Fonctionnaire Dirigeant.

L'article 10 du contrat est modifié comme suit :

"L'Administration notifiera à l'Entreprise avant le démarrage des travaux le nom du Fonctionnaire Dirigeant."

Article 11 : Réception des travaux.

Les stipulations de l'article 12 du contrat sont amendées par l'alinéa suivant :

"A la demande de l'Entreprise, pour chaque itinéraire et pour chaque tronçon d'au moins 50 Km, il sera organisé une réception partielle des travaux".

"A la fin de l'ensemble des travaux de l'itinéraire concerné, il sera procédé à une réception récapitulative de ces travaux."

"En ce qui concerne les ouvrages d'art en béton armé, le délai de garantie est fixé à un (1) an. Pour les ouvrages d'art en bois, ce délai est fixé à 6 mois."

Article 12 : Dispositions particulières.

12.1. L'alinéa 20.1. est supprimé.

12.2. L'alinéa 20.2. est reformulé comme suit :

"L'Attributaire engagera du personnel dans les régions desservies par les nouveaux axes désignés. Ce personnel sera pris prioritairement parmi le personnel provenant des unités de l'Office."

12.3. Il est ajouté un alinéa 20.3. dont libellé suit :

20.3. Matériel.

Dans le cadre de cet avenant, du matériel sera mis à dis-

position de l'Attributaire par l'Office des Routes dans le cadre de cet avenant.

Ce matériel sera mis à dispisition de l'Attributaire contre rémunération des termes "amortissement" et "réparations", les entretiens normaux restant à la charge directe de l'Attributaire. Le produit de la rémunération de l'amortissement est réintégré dans le financement du projet.

Le montant correspondant à la rémunération de l'amortissement du matériel est repris aux bordereaux des prix en annexe.

Il sera réglé par retenue de 11,92 % sur les factures mensuelles de travaux.

Article 13 : Entretien des tronçons réceptionnés.

13.1. Au fur et à mesure des réceptions des travaux des tronçons 1 et 2 (Kabondo Dianda - Malemba Nkulu - bac Kabwe et Mwadi Katoloka - Kaniama), l'Entreprise mettra en place des équipes de travail en vue de la sauvegarde des travaux réalisés et de l'entretien des tronçons réceptionnés pour y maintenir le niveau de service défini en annexe.

L'entretien qui se rémunère selon le prix au Km proposé par l'Entreprise et sur base du rapport dressé à cet effet par le Fonctionnaire Dirigeant se poursuivra jusqu'à la date d'achèvement de l'ensemble des travaux.

A la fin des travaux, l'Entreprise et le Fonctionnaire Dirigeant feront le point sur les travaux d'entretien réalisés. A cette occasion, l'Administration peut requérir l'Entreprise pour exécuter certains travaux d'entretien préalablement déterminés.

13.2. Les travaux déjà réalisés par l'Entreprise sur une partie du tronçon de route initialement convenu seront réceptionnés dans les conditions prévues au contrat.

L'Entreprise s'engage à arrêter aussitôt après la signature du présent avenant les travaux sur les tronçons non retenus dans le cadre de cet avenant.

Article 14 : Dispositions fiscales.

Les autres clauses du marché initial non concernées par les amendements, compléments ou modifications apportés par le présent avenant restent d'application.

Article 15 : Entrée en vigueur.

En foi de quoi, les parties agissant par l'entremise de leurs représentants dûment autorisés respectifs, ont signé le présent avenant au contrat de base en deux exemplaires faisant également foi en français, à la date de la signature.

Fait à Kinshasa, le 01 fév. 1991

POUR L'ADMINISTRATION	POUR L'OFFICE DES ROUTES
Jean-Louis MARCHAL	MUNGA Mibindo
Directeur Général.	Président Délégué Général.

Approbation USAID

Charles JOHNSON

Directeur

REHABILITATION DE ROUTES EN TERRE
DANS LA REGION DU SHABA
CONTRAT No ODR/DG/000/470/90
A V E N A N T No 1

DEVIS QUANTITATIF ET ESTIMATIF

	Designation	Unite	Quantite	P.U. US $	P.T. US $
	A. ROUTE MWADI KATOLOKA - KANIAMA				
I.	Assainissement comprenant :				
	-Excavation pour bassin de decantation	m3	98,400.00	2.00	196,800.00
	-pose des buses metalliques y/c				
	murs des tetes diametre 80	ml	100.00	201.56	20,156.00
	diametre 150	ml	33.00	307.73	10,155.00
II.	Profilage de la route y compris debroussaillement, abattage d'arbres scarification, deblais, remise en forme et fosses, arrosage et compactage, entretien pendant la duree des travaux	Km	246.00	13,955.68	3,433,098.00
III.	Rechargement digue Mwadi Katoloka	m3	10,000.00	9.11	91,100.00
IV.	Implantation bacs :				
	- Acheminement des bacs aux sites	U	2.00	49,000.00	98,000.00
	- Execution rampes d'acces bacs	U	5.00	59,680.00	298,400.00
	- Fonctionnement et entretien bacs pendant duree des travaux	3x12	18.00	1,820.00	32,760.00
			Total travaux A		4,180,469.00
	B. ROUTE KAMUNGU - KITENGE - KEBANGU				
V.	Profilage de la route y compris debroussaillement, abattage d'arbres, scarification, deblais, remise en forme et fosses, arrosage eventuel et compactage	Km	127.00	5,629.33	714,925.00
			Total travaux B		714,925.00

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	Designation	Unite	Quantite	P.U. US $	P.T. US $
	C. ROUTE KABONGO - MWADI KATOLOKA				
IV.	Entretien de routine	Km/an	60.00	1,500.00	90,000.00
			Total travaux C		90,000.00
	D. ROUTE KABONGO DIANDA - BAC KABWE				
I.	Assainissement comprenant :				
	-Excavation pour bassin de decantation	m3	85,600.00	2.00	171,200.00
	-pose des buses metalliques y/c				
	murs des tetes diametre 80	ml	112.00	201.56	22,575.00
	diametre 100	ml	14.00	271.24	3,797.00
	diametre 150	ml	14.00	307.73	4,308.00
	-fosses maconnes	ml	115.00	99.55	11,448.00
II.	Profilage et rechargement partiel de la route y compris debroussaillement, abattage d'arbres, scarification, deblais, remise en forme et fosses, arrosage et compactage. entretien pendant la duree des travaux.	Km	214.00	11,687.39	2,501,101.00
			Total travaux D		2,714,429.00

TOTAL DES TRAVAUX EN USD	=	7,699,823.00
AMORTISSEMENT	=	918,000.00
COUT RESIDUEL	=	6,781,823.00
PART EN DEVISES : 6.781.823 x 0,85	=	5,764,550.00
PART EN ZAIRES : 6.781.823 x 0,15	=	1,017,273.00

Fait a Kinshasa le 01 fev. 1991

Pour l'Attributaire

Jean-Louis MARCHAL

Directeur General

Pour l'Office des Routes

Munga Nibindo

President Delegue General

Approbation USAID

Charles Johnson

Directeur

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REHABILITATION DE ROUTES EN TERRE
DANS LA REGION DU SHABA
CONTRAT No ODR/DG/000/470/90
A V E N A N T No 1

DEVIS QUANTITATIF ET ESTIMATIF
SOUS-DETAIL DES PRIX

A. ROUTE MWADI KATOLOKA - KANIAMA (246 KM)

	Designation	Unite	Quantite	P.U. US $	P.T. US $
I.	Assainissement comprenant :				
1.1.	Debroussaillement Y/C le chargement et evacuation des debris	m2	1,230,000.00	0.47	578,100.00
1.2.	Abattage d'arbre dont la circonference est > 0,50 m Y/C le chargement et evacuation des debris	U	235.00	26.74	6,284.00
1.3.	Excavation pour bassin de decantation comme exutoires des fosses tous les 150m long.15m, larg.2m, haut.1m	m3	98,400.00	2.00	196,800.00
1.4.	Pose buses metalliques Y/C murs de tete				
	- diametre 80	ml	100.00	201.56	20,156.00
	- diametre 150	ml	33.00	307.73	10,155.00
	Les buses metalliques sont a charge du maitre de l'oeuvre				
II.	Reprofilage				
2.1.	Remise en forme de la plateforme et des fosses avec desherbage, arrosage eventuel et compactage	Km	171.00	714.00	122,094.00
2.2.	Remise en forme de la plateforme et fosses avec desherbage, scarification sur une epaisseur de 25 cm, arrosage eventuel et compactage	Km	75.00	1,918.00	143,850.00
III.	Deblai meubles : extraction, chargement, transport, jusqu'a 500 m et mise en depot	m3	417,000.00	5.81	2,422,770.00
IV.	Entretien de routine	FF			160,000.00
V.	Implantation et exploitation des bacs				
5.1.	Chargement digue Mwadi Katoloka (preparation des emprunts,extraction, chargement, transport jusqu'a 500 m., mise en remblais, reglage, arrosage et compactage)	m3	10,000.00	9.11	91,100.00

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	Designation	Unite	Quantite	P.U. US $	P.T. US $
5.2.	Execution des acces aux bacs -terrassement -fourniture et pose du beton arme sur une longueur de 15 m. -fourniture et pose de pierres maconnees sur une longueur de 15 m. -pose des gabions N.B. les fers a beton et les gabions sont a charge du maitre de l'oeuvre	FF	5.00	39,680.00	198,400.00
5.3.	Acheminement des bacs a partir de L'shi	Pce	2.00	49,000.00	98,000.00
5.4.	Fonctionnement des bacs (bac x mois)		18.00	1,820.00	32,760.00
	Total				4,080,469.00

B. ROUTE DESSERTE AGRICOLE KAMUNGU - LENGE - KITENGE - KEBANGU (127 Km)

	Designation	Unite	Quantite	P.U. US $	P.T. US $
I.	Assainissement comprenant :				
1.1.	Debroussaillement Y/C le chargement et evacuation des debris	m2	100,000.00	0.47	47,000.00
1.2.	Excavation pour bassin de decantation comme exutoires des fosses tous les 150m long.15m, larg.2m, haut.1m	m3	75,000.00	2.00	150,000.00
II.	Deblai meubles : extraction, chargement transport, jusqu'a 500 m et mise en depot	m3	38,100.00	5.81	221,361.00
III.	Reprofilage Remise en forme de la plateforme et des fosses avec desherbage, arrosage eventuel et compactage	Km	127.00	714.00	90,678.00
IV.	Rechargement : preparation des emprunts et extraction des materiaux d'emprunts conformes aux specifications, chargement, transport jusqu'a 5 Km, melange eventuel des materiaux de sources differentes, mise en place, reglage selon les epaisseurs specifiees, arrosage et compactage.	m3	22,600.00	9.11	205,886.00
	Total				714,925.00

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C. ROUTE KABONGO - MWADI KATOLOKA (60 Km)

	Designation	Unite	Quantite	P.U. US $	P.T. US $
	Entretien de routine : - cantonnage manuel - curage des fosses - desherbage - une passe de niveleuse/an	Km	60.00	1,500.00	90,000.00
	Total				90,000.00

D. REHABILITATION DE LA ROUTE KABONDO DIANDA - KINKONDJA - BAC KABWE (214 Km)

	Designation	Unite	Quantite	P.U. US $	P.T. US $
I.	Assainissement comprenant :				
1.1.	Debroussaillement Y/C le chargement et evacuation des debris	m2	1,070,000.00	0.47	502,900.00
1.2.	Excavation pour bassin de decantation comme exutoires des fosses tous les 150m long.15m, larg.2m, haut.1m	m3	85,600.00	2.00	171,200.00
1.3.	Pose buses metalliques Y/C murs de tete				
	- diametre 80 (16)	ml	112.00	201.56	22,575.00
	- diametre 100 (2)	ml	14.00	271.24	3,797.00
	- diametre 150 (2)	ml	14.00	307.73	4,308.00
	Les buses metalliques sont a charge du maitre de l'oeuvre				
1.4.	Fosses maconnes	ml	115.00	99.55	11,448.00
II.	Deblai meubles : extraction, chargement transport, jusqu'a 500 m et mise en depot	m3	210,000.00	5.81	1,220,100.00
III.	Reprofilage				
3.1.	Remise en forme de la plateforme et des fosses Y/C compactage et eventuellement arrosage	Km	151.00	714.00	107,814.00
3.2.	Reprofilage avec scarification -remise en forme de la plateforme et fosses Y/C compactage et arrosage -scarification sur une epaisseur de 25 cm	Km	63.00	1,918.00	120,834.00
IV.	Rechargement : preparation des emprunts et extraction des materiaux d'emprunts	m3	42,750.00	9.11	389,453.00
V.	Entretien de routine	FF			160,000.00
	Total				2,714,429.00

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3.2. Travaux exécutés du début du projet (le 15 avril 1991) à la date d'évacuation (le 29 septembre 1991)

3.2.1. Tronçon No 1 : Kabondo Dianda - Bac Kabwe = 214 Km

I. Assainissement

1.1. Débroussaillement :
PK 0 + 000 au PK 30 + 000 =
$\frac{1.070.000 \text{ m2} \times 30}{214}$ = 150.000,00 m2

1.2. Excavation pour bassin de décantation :
PK 0 + 000 au PK 16 + 000 =
213 x 30 m3 = 6.390,00 m3

1.3. Pose de buses métalliques :
3 x 7 ml = 21,00 ml

II. Déblai meubles

PK 0 + 000 au PK 30 + 000 =
$\frac{210.000 \text{ m3} \times 30}{214}$ = 29.439,25 m3

III. Reprofilage (lourd)

PK 0 + 000 au PK 18 + 000 =
$\frac{63 \times 18 \text{ Km}}{214}$ = 5,30 Km

IV. Rechargement

PK 0 + 000 au PK 2 + 000 =
2.000 m x 6 x 0,10 = 1.200,00 m3

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3.2.2. Tronçon No 2 : Mwadi Katoloka - Kaniama = 246 Km

I. Assainissement

1.4. Pose de buses métalliques =
2 x 11 ml = 22,00 ml

V. Implantation et exploitation des bacs :

5.2. Fourniture et pose des bétons =
Travaux exécutés à 50 % de deux passages = 1,00 pc
(bac opérationnel)

3.2.3. Tronçon No 4 : Kamungu - Kitenge - Kebangu = 127 Km

I. Assainissement

1.1. Débroussaillement :

$$\frac{100.000 \text{ m2} \times 127 \text{ Km}}{127} = 100.000,00 \text{ m2}$$

1.2. Excavation pour bassin de décantation :
(120 x 13,3 x 30) = 47.880,00 m3

II. Déblai meubles

$$\frac{38.100 \text{ m3} \times 127 \text{ Km}}{127} = 38.100,00 \text{ m3}$$

III. Reprofilage

$$\frac{127 \times 105}{127} = 105,00 \text{ Km}$$

IV. Rechargement

du PK 0 + 000 au PK 84 + 300 = 14.235,47 m3

3.2.1.Situation budgetaire des travaux executes

Troncon No 1 : Kabondo Dianda - Bac Kabwe = 214 Km

Designation	Quant.	P.U.USD	Part dev. USD	Part Z en USD	Total
I. Assainissement					
1.1. Debrouss. (m2)	150000.00	0.47	59925.00	10575.00	70500.00
1.2. Exc.saignees (m3)	6390.00	2.00	10863.00	1917.00	12780.00
1.3. Pose buses metal. diam.80 (ml)	21.00	201.56	3597.85	634.91	4232.76
II. Deblai meubles (m3)	29439.25	5.81	145385.74	25656.31	171042.04
III.1.3. Reprofilage (Km)	5.30	1918.00	8640.59	1524.81	10165.40
IV. Rechargement (m3)	1200.00	9.11	9292.20	1639.80	10932.00
TOTAL			237704.37	41947.83	279652.20

Troncon No 2 : Mwadi Katoloka - Kaniama = 246 Km

Designation	Quant.	P.U.USD	Part dev. USD	Part Z en USD	Total
I. Assainissement					
1.1. Debrouss. (m2)	0.00	0.47	0.00	0.00	0.00
1.2. Exc.saignees (m3)	0.00	2.00	0.00	0.00	0.00
1.3. Pose buses metal. diam. 150 (ml)	22.00	307.73	5754.55	1015.51	6770.06
V. 2. Fourniture et pose de beton (FF)	1.00	59680.00	50728.00	8952.00	59680.00
TOTAL			56482.55	9967.51	66450.06

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Troncon No 4 : Kamungu - Kitenge - Kebangu = 127 Km

Designation	Quant.	P.U.USD	Part dev. USD	Part Z en USD	Total
I. Assainissement					
1.1. Debrouss. (m2)	100000.00	0.47	39950.00	7050.00	47000.00
1.2. Exc.saignees (m3)	47880.00	2.00	81396.00	14364.00	95760.00
II. Deblai meubles (m3)	38100.00	5.81	188156.85	33204.15	221361.00
III. Reprofilage (Km)	105.00	714.00	63724.50	11245.50	74970.00
IV. Rechargement	14235.47	9.11	110232.36	19452.77	129685.13
TOTAL			483459.71	85316.42	568776.13

Total de la situation budgetaire des travaux executes

Designation	Quant.	P.U.USD	Part dev. USD	Part Z en USD	Total
Troncon No 1			237704.37	41947.83	279652.20
Troncon No 2			56482.55	9967.51	66450.06
Troncon No 4			483459.71	85316.42	568776.13
TOTAL			777646.63	137231.76	914878.39

Entre la situation des travaux executes et la situation totale des facturations (voir point 5.2.), il y a une difference de 10,42 US $.

Cette difference est due au fait que pour la situation des travaux executes, je ne disposais pas de tous les elements (restes a Kabongo).

La situation des facturations est reelle car a chaque rapport mensuel, elle etait actualisee.

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3.3. Travaux a executer plus situation budgetaire

3.3.1. Troncon No 1 : Kabondo Dianda - Bac Kabwe = 214 Km

Designation	Quantite devis	Quantites executees	Quantites a executer	Prix unit.	Prix Total
I. Assainissement					
1.1. Debrouss. (m2)	1,070,000.00	150,000.00	920,000.00	0.47	432,400.00
1.2. Exc.saignees (m3)	85,600.00	6,390.00	79,210.00	2.00	158,420.00
1.3. Pose buses (ml)					
- diam. 80	112.00	21.00	91.00	201.56	18,341.96
- diam. 100	14.00	0.00	14.00	271.24	3,797.36
- diam. 150	14.00	0.00	14.00	307.73	4,308.22
1.4. Fosses maconnes (ml)	115.00	0.00	115.00	99.55	11,448.25
II. Deblai meubles (m3)	210,000.00	29,439.25	180,560.75	5.81	1,049,057.96
III. Reprofilage (Km)					
3.1. leger	151.00	0.00	151.00	714.00	107,814.00
3.2. lourd	63.00	5.30	57.70	1,918.00	110,668.60
IV. Rechargement (m3)	42,750.00	1,200.00	41,550.00	9.11	378,520.50
V. Entretien (FF)	0.00	0.00	0.00	0.00	160,000.00
TOTAL					2,434,776.85

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3.3.2.Troncon No 2 : Mwadi Katoloka - Kaniama = 246 Km

Designation	Quantite devis	Quantites executees	Quantites a executer	Prix unit.	Prix Total
I. Assainissement					
1.1. Debrouss. (m2)	1,230,000.00	0.00	1,230,000.00	0.47	578,100.00
1.2. Abatt.arbres (U)	235.00	0.00	235.00	26.74	6,283.90
1.3. Exc.saignees (m3)	98,400.00	0.00	98,400.00	2.00	196,800.00
1.4. Pose buses (ml)					
- diam. 80	100.00	0.00	100.00	201.56	20,156.00
- diam. 150	33.00	22.00	11.00	307.73	3,385.03
II. Deblai meubles (m3)	417,000.00	0.00	417,000.00	5.81	2,422,770.00
III. Reprofilage (Km)					
3.1. leger	171.00	0.00	171.00	714.00	122,094.00
3.2. lourd	75.00	0.00	75.00	1,918.00	143,850.00
IV. Entretien de routine (FF)	0.00	0.00	0.00	0.00	160,000.00
V. Implantation des bacs					
5.1. Rechargement (m3)	10,000.00	0.00	10,000.00	9.11	91,100.00
5.2. Fourniture et pose betons (FF)	5.00	1.00	4.00	59,680.00	238,720.00
5.3. Transport des bacs (pce)	2.00	0.00	2.00	49,000.00	98,000.00
5.4. Fonctionnement des bacs (x mois)	18.00	0.00	18.00	1,820.00	32,760.00
TOTAL					4,114,018.93

3.3.3.Troncon No 3 : Kabondo - Mwadi Katoloka = 60 Km

Designation	Quantite devis	Quantites executees	Quantites a executer	Prix unit.	Prix Total
I. Entretien de routine + cantonnage manuel (Km)	60.00	0.00	60.00	1,500.00	90,000.00
TOTAL					90,000.00

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3.3.4.Troncon No 4 : Kamungu - Kitenge - Kebangu = 127 Km

Designation	Quantite devis	Quantites executees	Quantites a executer	Prix unit.	Prix Total
I. Assainissement					
1.1. Debrouss. (m2)	100,000.00	100,000.00	0.00	0.47	0.00
1.3. Exc.saignees (m3)	75,000.00	47,880.00	27,120.00	2.00	54,240.00
II. Deblai meubles (m3)	38,100.00	38,100.00	0.00	5.81	0.00
III. Reprofilage (Km)	127.00	105.00	22.00	714.00	15,708.00
IV. Rechargement (m3)	22,600.00	14,235.47	8,364.53	9.11	76,200.87
TOTAL					146,148.87

3.3.5.Total des travaux restant a executer

Designation	Quantite devis	Quantites executees	Quantites a executer	Prix unit.	Prix Total
2.1. Troncon No 1					2,434,776.85
2.2. Troncon No 2					4,114,018.93
2.3. Troncon No 3					90,000.00
2.4. Troncon No 4					146,148.87
TOTAL					6,784,944.65

3.3.6.Situation des travaux a executer :

- Total des travaux = 6,784,944.65
- Amortissement = 808,765.40
- Cout residuel = 5,976,179.25
- Participation U.S.A.I.D. = 5,079,752.36
- *Participation du Zaire = 896,426.89

* paye a 100 % lors de la signature de l'avenant.

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3.4. Travaux supplementaires absolument necessaires
~~(correction de la synthese)~~

3.4.1. Troncon No 1 : Kabondo Dianda - Malemba Nkulu - bac Kabwe = 214 Km

Lors de l'etude de l'avenant No 1, le trace des 214 Km passe par le village de Mwanza, a 15 Km au nord de la ville de Malemba Nkulu, sans la raccorder. Une bretelle de 15 Km s'avere necessaire pour desservir Malemba Nkulu.

Le cout de ces travaux supplementaires seraient estimes a :

Description des travaux	Unite	Quant.	P.U. en US $	P.U. en US $
I. Assainissement				
1.1. Debroussaillement	m2	75,000.00	0.47	35,250.00
1.2. Exc.pour bassin de decantation	m3	6,000.00	2.00	12,000.00
1.3. Pose buse metall.				
- diam. 80 (3)	ml	21.00	201.56	4,232.76
- diam. 150 (1)	ml	7.00	307.73	2,154.11
II. Deblai meubles	m3	14,719.00	5.81	85,517.39
III. Reprofilage				
3.1. Leger	Km	10.00	714.00	7,140.00
3.2. Lourd	Km	5.00	1,918.00	9,590.00
IV. Rechargement	m3	3,000.00	9.11	27,330.00
V. Entretien	FF	0.00	0.00	11,215.00
TOTAL				194,429.26

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3.4.2.Troncon No 2 : Mwadi Katoloka - Kaniama = 246 Km

Le cout de ces travaux supplementaires seraient estimes a :

Description des travaux	Unite	Quant.	P.U. en US $	P.U. en US $
A. Realisat. des pylones	Pce	4.00	1,500.00	6,000.00
B. Realisat.des ponts				
b.1. un pont de 10 m.	Pce	1.00	3,000.00	3,000.00
b.2. un pont de 13 m.	Pce	1.00	4,000.00	4,000.00
C. Montage des pylones et cable porteur	pass.	2.00	1,500.00	3,000.00
D. Montage des ponts + fourniture des betons	Pce	2.00	3,000.00	6,000.00
E. Transport d'un bac de Kabongo a Mwadi Katoloka	FF	0.00	0.00	1,000.00
I. 4. Pose buses metall. diam. 150	ml	33.00	307.73	10,155.09
V. 2. Execution des acces aux bacs	FF	1.00	59,680.00	59,680.00
TOTAL				92,835.09

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3.4.3.Troncon No 3 : Kabongo - Mwadi Katoloka = 60 Km

La zone de Kabongo (ville) - etant dans un etat deplorable - doit etre rehabilitee sur 5 Km.
Le troncon : sortie Kabongo jusqu'a Kebangu (37 Km) doit aussi etre rehabilite.
Le cout de ces travaux supplementaires seraient estimes a :

a) zone de Kabongo

Description des travaux	Unite	Quant.	P.U. en US $	P.U. en US $
I. Assainissement				
1.1. Exc. pour bassin de decantation	m3	2,000.00	2.00	4,000.00
1.2. Pose buse metall. - diam. 80	ml	35.00	201.56	7,054.60
III. Rechargement				
3.1. moins de 5 Km mater. in situ	m3	10,500.00	9.11	95,655.00
3.2. carriere a 21,5 Km	m3	5,250.00	9.11	47,827.50
Plus-value	m3	5,250.00	7.82	41,055.00
TOTAL				195,592.10

b) sortie Kabongo jusqu'a Kebangu

Description des travaux	Unite	Quant.	P.U. en US $	P.U. en US $
I. Assainissement				
1.1. Debroussaillement	m2	29,600.00	0.47	13,912.00
1.2. Exc.pour bassin de decantation	m3	14,800.00	2.00	29,600.00
1.3. Pose buse metall. - diam. 80 (3)	ml	35.00	201.56	7,054.60
II. Deblai meubles	m3	11,100.00	5.81	64,491.00
III. Reprofilage		37.00	714.00	26,418.00
IV. Rechargement	m3	6,584.00	9.11	59,980.24
TOTAL				201,455.84

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Total des travaux du troncon No 3 :

- zone de Kabongo =	195.592,10
- sortie Kabongo jusqu'a Kebangu =	201.455,84
Total =	397.047,94
- decompte entretien de routine (avenant No 1) : 42 x 1.500 =	63.000,00
Total troncon No 3 =	334.047,94

3.4.4.Troncon No 4 : Kamungu - Kitenge - Kebangu = 127 Km

Description des travaux	Unite	Quant.	P.U. en US $	P.U. en US $
I. 3. Pose buses metall.				
diam. 80	ml	42.00	201.56	8,465.52
diam. 100	ml	6.00	271.24	1,627.44
IV. Rechargement	m3	4,204.94	9.11	38,307.00
TOTAL				48,399.96

Decompte du poste 1.2. du devis :

- estime :	75.000 m3	
- execute :	50.800 m3	
- reste :	24.200 m3 x 2 US $	
		48,400.00
TOTAL =		(0.04)(*)

(*) voir le point 5.2. (paragraphe 2) du present rapport

3.4.5.Total des travaux supplementaires :

1) Troncon No 1 =	194.829,26	
2) Troncon No 2 =	92.835,09	
3) Troncon No 3 =	334.047,94	
4) Troncon No 4 =	0,04	
Total en U.S. $	=	621,712.33
11.92 % d'amortissement	=	74,108.11
Cout residuel	=	547,604.22
85 % participation USAID	=	465,463.59
15 % participation Zaire	=	82,140.63

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IV. CONSEQUENCES EN CAS DE RUPTURE DE CONTRAT

4.1. Financière

En cas de rupture définitive du financement, l'U.S.A.I.D. doit être consciente que, par cette résolution, elle devra supporter toutes les conséquences qui surgiront de sa décision.

Un fait évident est que l'Office des Routes ne se serait jamais engagé vis-à-vis de la société privée s'il n'avait pas eu le financement et l'insistance de l'U.S.A.I.D. Dès lors, il ne peut être impliqué dans la décision de l'A.I.D. de rompre le financement et ne peut en être responsable.

La société privée (M.D.Z.) va obligatoirement demander des indemnités de rupture de contrat qui risquent d'être très élevées car elle espérait tirer un grand bénéfice de ce contrat.

Par un décompte, on peut estimer ce que la société privée pouvait escompter comme bénéfice net, à la fin du projet, en déduisant des frais de fonctionnement tels que :
(en pourcentage du montant total de l'avenant)

I.	main d'oeuvre expatriée =	5 %
II.	main d'oeuvre nationale =	3 %
III.	carburant =	23 %
IV.	lubrifiant =	2 %
V.	pièces de rechange et d'entretien =	4 %
VI.	amortissement du matériel =	12 %
VII.	frais administratifs =	1 %

	Total des frais de fonctionnement =	50 %
	Bénéfice =	50 %

Imposition. Les experts comptables de la société feront en sorte d'éviter une taxation trop élevée du bénéfice. Ce dernier pourrait être imposé de 40 %.

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La société privée aurait pu avoir un bénéfice net de :

Montant total de l'avenant :	7.699.823 $	
Frais de fonctionnement 50 % :	- 3.849.912 $	
Bénéfice :	3.849.911 $	
Imposition :	1.539.964 $	
Bénéfice net		2.309.947 $

Ce qui donne, à la société, une marge bénéficiaire nette de 30 % du montant global des travaux.

Il ne faut pas omettre non plus les travaux supplémentaires absolument nécessaires à la réussite du projet (voir paragraphe 3.4. du présent rapport) pour un montant de :

621.712 x 30 % =	186.514 $
Total bénéfice net :	2.496.461 $

Pour estimer la valeur des indemnités qui pourraient être demandées par la société privée, une proposition serait de répartir le bénéfice net sur le nombre de mois de délai des travaux (qui était de 18 mois) et de tenir compte des mois pendant lesquels la société a travaillé (soit 5 mois et demi). Ce qui donnerait la formule suivante :

(2.496.461 : 18) x 5,5 = 762.807 $

Aux indemnités de la société privée, il faudrait encore ajouter les frais de rapatriement du personnel et du matériel qui pourraient s'élever à : 100.000 $

Par contre, il faudrait déduire le bénéfice des travaux déjà réalisés (voir paragraphe 5.2. du présent rapport - situation Nos 1, 2, 3, 4 et 5), à savoir un montant de :

914.867 $ x 30 % = 274.460 $

Total de l'indemnité de la société :

Bénéfice net pour les mois pendant lesquels elle a travaillé :	762.807 $	
Frais de rapatriement :	100.000 $	
Soit :	862.807 $	
Bénéfice sur les travaux réalisés :	274.460 $	
Total de l'indemnité :		588.347 $

Cette estimation ne peut être retenue comme base des négociations entre l'U.S.A.I.D. et M.D.Z. si cette dernière revendique des droits de rupture de contrat.

Pour établir une situation exacte des indemnités à octroyer à l'Entreprise, une remise-reprise de session de contrat devrait avoir lieu. Pour la rendre la plus plausible possible, il faudrait que celle-ci s'effectue sur le site pour pouvoir déterminer :

1. l'état du matériel ;
2. le stock des pièces de rechange dans le magasin de Kabongo ;
3. le stock de matériel de construction (tel que fer à béton, etc...).

Pour les trois points ci-dessus, une remise-reprise a été faite à l'époque de la signature de l'avenant.

Le crédit de l'Entreprise serait augmenté de :

1. la remise en état d'une partie du matériel ;
2. les travaux supplémentaires nécessaires à la réussite du projet qu'elle a exécuté ;
3. l'envoi de nouvelles pièces de rechange.

Son débit, par contre, se verrait augmenté de :

1. le décompte des travaux qu'elle a mal réalisés et qui ne sont pas réceptionnables ;
2. la détérioration du matériel du projet ;
3. l'emploi des pièces de rechange appartenant au projet.

4.2. Matériel

Le protocole d'accord entre l'U.S.A.I.D. et le Gouvernement zaïrois, concernant le matériel et les pièces de rechange envoyées pour la réalisation du projet 660-0105, stipule que tout le matériel ne peut être employé que sur le projet. Ce n'est qu'à la fin du projet que le matériel reviendra entièrement au Gouvernement zaïrois (à l'Office des Routes).

Ce qui veut dire que, dans le cas d'une rupture de contrat, l'Office des Routes pourra disposer de ce matériel comme il l'entend et l'U.S.A.I.D. ne pourra plus intervenir.

Dans la situation anarchique où se trouve le Zaïre actuellement, il est inutile de se faire des illusions sur l'avenir du matériel et des pièces de rechange. Tous les efforts que l'U.S.A.I.D. a fait pour réaliser des routes, toutes les dépenses effectuées, seront réduites à néant : quatre années pour aucun résultat, alors que les dernières orientations de l'A.I.D. de promouvoir les sociétés privées portaient enfin leurs fruits.

On a pu constater, sur le projet, des tronçons de route de plusieurs kilomètres réhabilités par l'Entreprise privée. Cette dernière, par suite de la rupture du financement, a retiré ses derniers agents expatriés du projet, laissant le matériel et les pièces de rechange à la portée de n'importe quelle tentation.

Conclusion :

En cas de rupture de financement, même temporaire, l'U.S.A.I.D. ne peut espérer, à l'avenir, pouvoir réaliser un kilomètre de route aux mêmes taux de prix proposés que ceux du contrat de l'Entreprise privée M.D.Z.

Dans le cas d'une suspension de financement, l'U.S.A.I.D. devrait trouver un compromis avec l'Entreprise privée pour mettre le projet 660-0105 - composante routière - en "veilleuse" et permettre à M.D.Z. de renvoyer un minimum de personnel expatrié, ainsi que du personnel national, pour préserver les biens du projet. Pour cela, l'U.S.A.I.D. devrait prévoir un budget en dehors de l'avenant No 1.

Ci-dessous, vous trouverez la liste du gros matériel se trouvant encore sur le projet :

MARQUE	TYPE	No O.R.
Caterpillar : Bull Dozer	D 7 H	301.174
	D 7 H	301.175
	D 7 H	301.176
	D 7 H	301.177
	D 7 H	301.178
Caterpillar : Niveleuse	14 G	311.948
	14 G	311.949
	14 G	311.950
	14 G	311.951
	14 G	311.952
	14 G	311.953
	14 G	311.954
	14 G	311.955
	14 G	311.956
	14 G	311.957
Caterpillar : Chargeur	950 E	322.499
	950 E	322.500
	950 E	322.501
	950 E	322.502
	950 E	322.503
Dynapac : Compacteur vibrant	CA 25	345.056
	CA 25	345.057
	CA 25	345.059
	CA 25	345.061
Tera Tema : Compacteur à pneus appartenant à l'Office des Routes	SP 5500	341.145
Mack : Camions benne basculante	RD 685 S	122.394
	RD 685 S	122.395

	RD 685 S	122.396
	RD 685 S	122.397
	RD 685 S	122.398
	RD 685 S	122.399
	RD 685 S	122.400
	RD 685 S	122.401
	RD 685 S	122.402
	RD 685 S	122.403
	RD 685 S	122.404
	RD 685 S	122.405
	RD 685 S	122.406
	RD 685 S	122.407
	RD 685 S	122.408
Mack : Camions benne fixe	RD 685 S	131.246
	RD 685 S	131.247
	RD 685 S	131.248
	RD 685 S	131.249
Mack : Camions grue	RD 685 S	190.017
	RD 685 S	190.018
	RD 685 S	190.019
Mack : Camions citerne à gasoil	RD 685 S	178.278
	RD 685 S	178.279
	RD 685 S	178.280
Mack : Tracteur semi-remorque	RM 6866	141.032
Ford : Tracteurs	7610	223.501
	7610	223.502
	7610	223.504
	7610	223.500
	7610	223.503
Toyota : Land Cruiser	HJ 75	111.544
	HJ 75	111.552
	HJ 75	111.543

	HJ 75	111.553
Toyota : Pick-Up Land Cruiser	BJ 75	115.650
	BJ 75	115.651
	BJ 75	115.653
	BJ 75	115.655
	BJ 75	115.659
Bétonnières :	400 L	701.046
	400 L	701.048
	40 L	-
	40 L	-
	60 L	-
	60 L	-
	60 L	-
	60 L	-
Aiguilles vibrantes	D 4000	-
	D 4000	-
	D 4000	-
	D 4000	-
	D 4000	-
Lister : Groupes électrogènes	HL 6	-
	HL 6	-
Hatz : Groupe électrogène 10 Kva		-
Perkins : Groupe électrog. 40 Kva		-
Honan : Groupe électrog. 10 Kva		-
Makasi : Groupe électrog. 2 Kva		-
Hobaert : Groupes de soudure	400 D	-
	400 D	-
	400 D	-
	400 D	-
Motopompe à membrane	F 13 H	-
Motopompes	317	-
	317	-

	317	-
	317	-
	317	-
	317	-
	317	-
	317	-
	317	-
Hatz : Motopompe à eau		-
Hatz : Motopompe à boue		-
Bimex : Motopompe à carburant		501.108
Poulan : Tronçonneuse		-
Miller : Remorques		-
		-
Remorques	105/13	-
	105/13	-
	105/13	-
	105/13	-
Champion : Compresseurs		-
		-
		-
		-
		-
		-
		-
		-
		-
Le Roi : Compresseur		-
Remorque de 40 tonnes		-
Remorque de 25 tonnes		-
Remorque de 25 tonnes		-
Doly de 25 tonnes		-
Doly de 25 tonnes		-

Caravanes		891.084
		891.085
		891.086
		891.087
+ 13 remorques	W 1600	-

5.1. Travaux executes par l'Entreprise du 01/09/91 au 29/09/91

5.1.1. Troncon No 1 : Kabondo Dianda - Bac Kabwe = 214 Km

5.1.1.1. ASSAINISSEMENT

1. Debroussaillement :

PK 0 + 000 au PK 30 + 000 = 1.070.000 m2 x 30 / 214	=	150,000.00 m2	
Situation No 4	=	82,000.00 m2	
Total	=		68,000.00 m2

2. Excavation pour bassin de decantation :

PK 0 + 000 au PK 16 + 000 = 213 x 30 m3	=	6,390.00 m3	
Situation No 4	=	1,860.00 m3	
Total	=		4,530.00 m3

3. Pose de buses metalliques :

3 x 7 ml	=	21.00 ml

5.1.1.2. DEBLAI MEUBLES

PK 0 + 000 au PK 30 + 000 = 210.000 m3 x 30 / 214	=	29,439.25 m3	
Situation No 4	=	16,093.00 m3	
Total	=		13,346.25 m3

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5.1.1.3. REPROFILAGE
(Reprofilage lourd)

PK 0 + 000 au PK 18 + 000 =
63 x 18 Km
———————— = 5.30 Km
214

5.1.1.4. RECHARGEMENT

PK 0 + 000 au PK 2 + 000 =
2.000 m x 6 x 0.10 = 1,200.00 m3

5.1.2. Troncon No 4 : Kamungu - Kitenge - Kebangu = 127 Km

5.1.2.4. RECHARGEMENT

du PK 0 + 000 au PK 1 + 840 =	1,694.22 m3	
du PK 2 + 400 au PK 2 + 932 =	505.72 m3	
du PK 3 + 700 au PK 4 + 584 =	1,648.50 m3	
du PK 14 + 200 au PK 14 + 278 =	70.20 m3	
du PK 17 + 600 au PK 17 + 697 =	81.48 m3	
du PK 18 + 500 au PK 20 + 400 =	1,720.96 m3	
du PK 20 + 900 au PK 21 + 598 =	583.53 m3	
du PK 24 + 200 au PK 24 + 340 =	119.17 m3	
du PK 24 + 700 au PK 25 + 288 =	484.42 m3	
du PK 27 + 000 au PK 27 + 592 =	464.86 m3	
du PK 28 + 700 au PK 29 + 576 =	701.26 m3	
du PK 31 + 200 au PK 31 + 866 =	554.11 m3	
du PK 33 + 800 au PK 33 + 892 =	78.66 m3	
du PK 36 a la bifurcation =	168.15 m3	
du PK 37 + 900 au PK 38 + 491 =	513.49 m3	
du PK 39 + 000 au PK 40 + 300 =	1,088.39 m3	
du PK 44 + 100 au PK 45 + 471 =	1,141.84 m3	
du PK 45 + 800 au PK 46 + 071 =	201.51 m3	
du PK 82 + 000 au PK 84 + 300 =	2,415.00 m3	
Total	14,235.47 m3	
Situation No 2 =	3,858.00 m3	
Situation No 3 =	4,459.00 m3	
Situation No 4 =	3,503.47 m3	
		2,415.00 m3

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5.1.3.Facturation du 01/09/1991 au 29/09/1991

5.1.3.1. Troncon No 1 : Kabondo Dianda - bac Kabwe = 214 Km

Designation	Quant.	P.U.USD	Part dev. USD	Part Z en USD	Total
I. Assainissement					
1.1. Debrouss. (m2)	68000.00	0.47	27166.00	4794.00	31960.00
1.2. Exc.saignees (m3)	4530.00	2.00	7701.00	1359.00	9060.00
1.3. Pose buses metal. diam.80 (ml)	21.00	201.56	3597.85	634.91	4232.76
II. Deblai meubles (m3)	13346.25	5.81	65910.46	11631.26	77541.71
III. Reprofilage (Km)					
3.1. leger					
3.2. lourd	5.30	1918.00	8640.59	1524.81	10165.40
IV. Rechargement (m3)	1200.00	9.11	9292.20	1639.80	10932.00
TOTAL			122308.09	21583.78	143891.87

5.1.3.2. Troncon No 4 : Kamungu - Kitenge - Kebangu = 127 Km

Designation	Quant.	P.U.USD	Part dev. USD	Part Z en USD	Total
IV. Rechargement (m3)	2415.00	9.11	18700.55	3300.10	22000.65
TOTAL			18700.55	3300.10	22000.65

5.1.3.3. Total des facturations

Designation	Quant.	P.U.USD	Part dev. USD	Part Z en USD	Total
Troncon No 1			122308.09	21583.78	143891.87
Troncon No 4			18700.55	3300.10	22000.65
TOTAL			141008.64	24883.88	165892.52

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5.1.3.4. Retenue sur facturation

- 100 % de la portion en zaire	=	24,883.88
- 11,92 % d'amortissement	=	19,774.39
- 30 % d'avance	=	49,767.76
Total	=	94,426.02
A payer : montant des travaux execut	=	165,892.52
- retenue sur facture	=	94,426.02
Total	=	71,466.50

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5.2. Situations Nos 1, 2, 3, 4 et 5

Etant donné que le devis quantitatif de l'avenant No 1 n'était pas conforme avec les clauses du contrat initial, prévoyant un bordereau des prix et non des prix forfaitaires au kilomètre, le Fonctionnaire Dirigeant a refusé que l'Entreprise facture sur base du devis quantitatif de l'avenant.

Il a accepté que l'Entreprise établisse ses facturations sur base du sous-détail des prix du devis quantitatif de l'avenant, plus proche d'un bordereau de prix, comme prévu dans le contrat initial.

Depuis le début des travaux, jusqu'au moment de l'évacuation, cinq factures ont été établies suivant une situation mensuelle des travaux exécutés.

Les périodes de facturation sont les suivantes :

- No 1 : du 15 avril 1991 au 15 mai 1991
- No 2 : du 16 mai 1991 au 15 juin 1991
- No 3 : du 16 juin 1991 au 15 juillet 1991
- No 4 : du 16 juillet 1991 au 31 aout 1991
- No 5 : du 1er septembre 1991 au 30 septembre 1991.

Les quatre premières facturations ont été approuvées par le Fonctionnaire Dirigeant sauf pour les <u>révisions de prix</u>.

5.2.1. Situation des facturations (sans revision de prix)

Fact.	Somme	Retenue 100% port Z	Retenue 11,92% amort.	Retenue 30% avance	Sommes dues a M.D.Z.
No 1	128,890.15	19,333.52	15,363.71	38,667.04	55,525.88
No 2	149,852.00	22,477.80	17,862.36	44,955.60	64,556.24
No 3	210,581.19	31,587.18	25,101.28	63,174.36	90,718.38
No 4	259,652.11	38,947.82	30,950.53	77,895.63	111,858.13
No 5	165,892.52	24,883.88	19,774.39	49,767.76	71,466.50
	914,867.97	137,230.20	109,052.26	274,460.39	394,125.12

Toutes les facturations ont ete faites sans revision des prix car l'Entreprise n'a jamais fourni au Fonctionnaire Dirigeant les elements et les details necessaires pour la controler.

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5.3. Litiges

Cela concerne, en grande partie, le tronçon No 4 (Kamungu - Kitenge - Kebangu), réalisé de façon scandaleuse par la première équipe de l'Entreprise privée. La nouvelle équipe, arrivée le 15 juillet sur le projet, s'est engagée à rectifier tous les défauts constatés sur l'ensemble du tronçon.

Normalement, une réception des travaux devrait être effectuée après chaque section de 50 Km réalisés. Pour le tronçon No 4, aucune réception n'a été accordée.

D'un commun accord, une réception globale de l'ensemble du tronçon serait proposée à la fin des travaux du présent tronçon.

A ce jour, l'Entreprise a réalisé 96 Km sur les 127 Km prévus. L'Entreprise devrait intervenir sur certaines zones où des défauts ont été constatés, suite aux premières pluies de la saison. Du PK 74 au PK 76 - sur 2 Km - aucun exutoire n'a été réalisé.

Concernant les réceptions des 50 Km réalisés, l'Entreprise a fourni à l'Administration des cautionnements de bonne fin des travaux. Pour chaque tronçon, le cautionnement sera libéré en totalité à la fin de l'ensemble des travaux entrepris sur le tronçon concerné.

Pour le tronçon No 4 (Kamungu - Kitenge - Kebangu), aucun cautionnement ne peut être libéré car l'Entreprise n'a pas terminé le tronçon et rectifié les malfaçons de son exécution.

Sur le tronçon No 2 (Mwadi Katoloka - Kaniama), l'Entreprise a exécuté :

- le transport des éléments du bac de Kabongo à Mwadi Katoloka (60 Km) ;
- le montage des pylônes métalliques et du câble porteur.

Les points ci-dessus ne sont pas repris à l'avenant No 1. Ces travaux pourraient être considérés comme travaux supplémentaires et payés dans ce sens.

D'après le sous-détail des prix du devis du tronçon No 4, le poste 1.2. (Excavation pour bassin de décantation) prévoit 75.000 m3 de terrassement. Les exutoires ont été réalisés tous les 150 m. comme prévu sur le présent devis. Les quantités réelles de terrassement sont : [(127 : 0,15) x 2] x 30 = 50.799,99 = 50.800 m3 au lieu de 75.000 m3. Soit un surplus de 24.200 m3 à 2 US $ le m3. Ce qui donne une somme de 48.400 US $ qui pourrait être employée pour des travaux supplémentaires absolument nécessaires sur ce tronçon. (Voir le point 3.4. du présent rapport).

Début septembre, un Bull D7H est tombé en panne (bielle ou coussinet de pallier abîmé) suite à une trop grande sollicitation de l'engin ou par manque de contrôle au point de vue entretien. Il a été demandé à l'Entreprise de procéder a un échange standard du moteur avec la firme Caterpillar afin d'avoir une garantie car ce moteur n'avait que 900 heures.

Dans le cas d'une rupture de contrat avec l'Entreprise privée (M.D.Z.) et l'Administration (l'Office des Routes) par manque de financement, une remise-reprise doit être effectuée en ce qui concerne l'état du matériel (U.S.A.I.D./O.R.) et l'utilisation des pièces de rechange et d'entretien, en stock au magasin de Kabongo.

VI. REPRISE DU PROJET

6.1. Travaux restant de l'avenant No 1 - Délais.

Dans l'alternative d'une reprise du projet routier à Kabongo et concernant les travaux de l'avenant No 1, il faudrait notifier, par écrit, à l'Entreprise, l'intention de l'U.S.A.I.D. de reprendre les activités.

Dès réception de cette notification, l'Entreprise aurait besoin de six semaines pour réunir une équipe aussi efficace que la dernière, à Kabongo. Dès cette équipe opérationnelle sur le site, et en tenant compte des travaux à réaliser ainsi que des travaux supplémentaires, l'Entreprise pourrait terminer ce projet en un minimum de 16 mois. Ce qui donnerait un délai total de 17 mois et demi.

6.2. Projet prioritaire de réhabilitation des nouvelles routes.

Dans le cadre du projet agricole, Shaba Central, les travaux de réhabilitation des routes de l'avenant No 1 laissent l'aire du projet enclavée par rapport au sud. Seul le tronçon No 2 (Mwadi Katoloka - Kaniama) permettra l'évacuation des produits agricoles vers le Kasaï, au nord.

Etant donné que les nouvelles tendances politiques du pays semblent prêcher le fédéralisme des régions, la réhabilitation des routes vers le sud devient de première priorité pour le ravitaillement des grands centres tels que Kolwezi et Lubumbashi. En urgence, il serait souhaitable de réaliser les travaux de réhabilitation de la route Kabongo - Kamina pour rejoindre le chemin de fer électrifié et la route principale dont les travaux sont en cours (Nguba - Kamina - Mwene Ditu) ainsi que de la route Kabongo - Mwanza pour la jonction du tronçon No 1 de l'avenant : Kabondo Dianda - bac Kabwe.

Ce tronçon de 146 Km traverse des secteurs de grande production agricole.

6.3.Estimation budgetaire des nouvelles routes

1. Kamina - Kabongo = 193.00 Km
2. Niembo - Mwanza = 147.00 Km

Total = 340.00 Km

Pour une estimation budgetaire de ces nouvelles routes, les prix unitaires ont ete pris sur le devis quantitatif de l'avenant No 1 du 1er fevrier 1991.

1. Troncon Kamina - Kabongo = 193 Km

Designation	Unite	Quantite	P.U. en USD	P.Total en USD
I. Assainissement				
1.1. Debroussaillement	m2	1,930,000.00	0.47	907,100.00
1.2. Excav. pr bassin de decantation	m3	77,200.00	2.00	154,400.00
1.3. Pose buse metall. y/c mur de tete + puisard				
- diam. 60 (10)	ml	70.00	320.50	22,435.00
- diam. 80 (6)	ml	42.00	403.00	16,926.00
- diam. 100 (4)	ml	28.00	572.00	16,016.00
- diam. 150 (2)	ml	14.00	614.00	8,596.00
(La fourniture des buses est a charge de l'Entreprise)				
1.4. Abattage d'arbres d'1 diam. de plus de 0,5 m.	Pce	200.00	26.74	5,348.00
II. Deblai meubles	m3	154,400.00	5.81	897,064.00
III. Reprofilage Lourd I	Km	193.00	1,068.00	206,124.00
IV. Rechargement				
- moins de 5 Km	m3	41,000.00	9.11	373,510.00
- plus de 5 Km (30)	m3	36,000.00	9.11	327,960.00
- plus-value	m3	36,000.00	14.58	524,736.00
V. Entretien pendant la duree du contrat (+/- 18 mois)	FF	0.00	0.00	160,000.00
Total				3,620,215.00

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2. Troncon Niembo - Mwanza = 147 Km

Designation	Unite	Quantite	P.U. en USD	P.Total en USD
I. Assainissement				
1.1. Debroussaillement	m2	1,470,000.00	0.47	690,900.00
1.2. Excav. pr bassin de decantation	m3	88,200.00	2.00	176,400.00
1.3. Pose buse metall. y/c mur de tete + puisard				
- diam. 60 (10)	ml	280.00	320.50	89,740.00
- diam. 80 (6)	ml	140.00	403.00	56,420.00
- diam. 100 (4)	ml	8.00	572.00	4,576.00
- diam. 150 (2)	ml	8.00	614.00	4,912.00
(La fonrniture des buses est a charge de l'Entreprise)				
1.4. Abattage d'arbres d'l diam. de plus de 0,5 m.	Pce	220.00	26.74	5,882.80
II. Deblai meubles	m3	93,345.00	5.81	542,334.45
III. Reprofilage Lourd I	Km	147.00	1,068.00	156,996.00
IV. Rechargement	m3	47,061.00	9.11	428,725.71
V. Maconnerie de moellons pr ouvrages existant	m3	90.00	1,000.00	90,000.00
VI. Construction d'l pont metallique - portee 4,50 m.	Pce	1.00	9,800.00	9,800.00
VII. Entretien pendant la duree des travaux (+/- 18 mois)	FF	0.00	0.00	120,000.00
Total				2,376,686.96

1. Troncon Kamina - Kabongo	3,620,215.00
2. Troncon Niembo - Mwanza	2,376,686.96

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VII. RECOMMANDATIONS

Après l'expérience vécue ces dernières années sur le projet routier 660-0105, des recommandations sont à proposer afin d'éviter de commettre les mêmes erreurs que par le passé.

L'U.S.A.I.D. devrait être plus engagée dans les projets qu'elle réalise et non pas, comme par le passé, n'être qu'un observateur car, en temps que bailleur de fonds, elle reste l'élément principal dans les projets de développement et doit avoir plus de pouvoir de décision que l'Administration. Cette dernière, par sa contribution au projet, pourrait être un observateur surtout pour éviter certaines "tentations" connues dans le passé.

7.1. Etablissement d'un projet

Tout projet demande une étude préalable pour estimer le coût réel de réalisation. En ce qui concerne la réhabilitation des routes en terre, l'étude peut être moins élaborée que pour des routes en revêtement. Ce qui ne veut pas dire que l'Entrepreneur peut réaliser ces travaux comme il l'entend. Les prix forfaitaires au kilomètre sont à éviter dans les devis car on ne peut procéder à aucun contrôle des quantités réalisées.

L'étude doit comporter un cahier spécial des charges avec les clauses administrative et technique ainsi qu'un bordereau d'estimation des quantités à réaliser. Pour que ces quantités se rapprochent des réalités, il faudra procéder à une reconnaissance du tronçon à réhabiliter, effectuer des coupes en travers tous les 500 mètres, observer le profil en long pour déterminer les passages sous route, répertorier, par des sondages à la tarière, les zones d'emprunt ainsi que les zones à recharger avec des matériaux provenant des emprunts ou des matériaux in situ.

Le secret, pour les routes de terre, n'est pas une inconnue. Il suffit d'un bon assainissement et ... d'un bon entretien. Ce dernier point est très important car réhabiliter les routes sans assurer l'entretien est utopique. Le financement et l'étude d'un projet de réhabilitation devrait prévoir l'entretien manuel au moins pendant la durée du projet ainsi que deux années après la fin du projet afin de permettre à l'Administration de s'organiser et de prévoir un budget d'entretien des routes réhabilitées.

7.2. Contrat

Après la publication de l'étude, l'U.S.A.I.D. devrait lancer un appel d'offre aux sociétés privées désireuses de participer à la réhabilitation du projet.

Toutes les offres des sociétés privées devraient être envoyées à l'U.S.A.I.D. avant une date précise. L'ouverture des offres se fera en présence des représentants des entreprises et de l'Administration (invitée par l'U.S.A.I.D. en temps qu'observateur).

L'U.S.A.I.D. devrait signer les contrats directement avec l'entreprise sans passer par l'Administration. Elle devrait aussi garantir à l'entreprise d'éviter les "tracasseries" de l'Administration.

Ce n'est que de cette façon que les entreprises pourront répondre aux appels d'offre en diminuant leur proposition de prix de 25 % minimum.

Lors de l'élaboration du cocntrat, il faut tenir compte des clauses administratives et des lois en vigueur dans le pays. Pour cela, les avocats de l'U.S.A.I.D. devront être mis à contribution afin d'éviter des erreurs qui pourraient porter préjudice à l'une ou l'autre des parties.

7.3. Choix des sociétés

Chaque offre remise à l'U.S.A.I.D. fera l'objet d'une étude approfondie sur la crédibilité et le sérieux de la société. L'offre la plus avantageuse, du point de vue rapport qualité/prix, sera retenue tout en tenant compte de promouvoir des sociétés privées nationales.

7.4. Contrôle des travaux

Dans l'élaboration de l'étude d'un projet, l'U.S.A.I.D. devrait prévoir un budget pour la mission de contrôle car cette dernière doit être indépendante de l'Entreprise à tous points de vue. La mission de contrôle devrait être composée de :

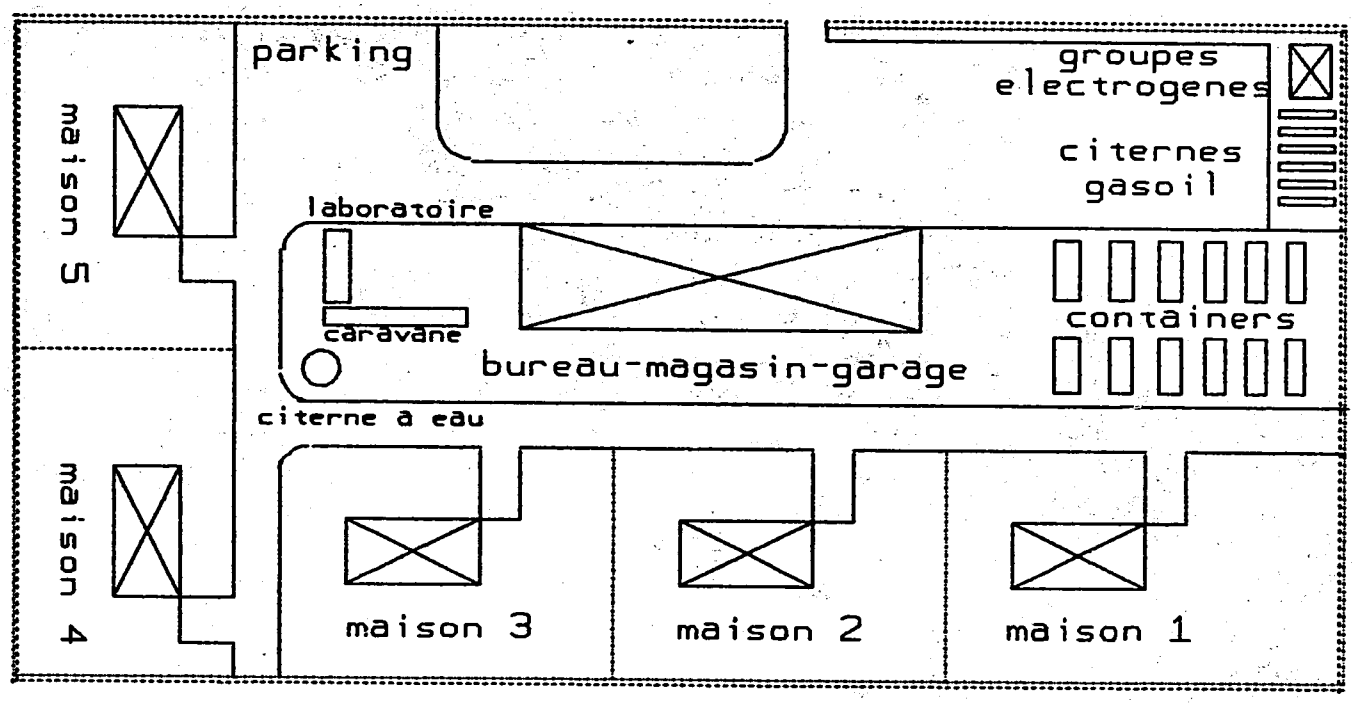
- un chef de mission
- un adjoint au chef de mission
- un spécialiste de la mécanique des sols
- un topographe
- trois ouvriers qualifiés en mécanique des sols
- quatre ouvriers qualifiés en topographie
- six ouvriers non qualifiés ou manoeuvres
- trois véhicules tout terrain
- le matériel nécessaire en topographie
- le matériel de bureau
- le logement de tout le personnel spécialisé

Note : Le matériel de topographie, de laboratoire, de bureau ainsi que tous les frais de réparation et d'entretien des véhicules peuvent être fournis par l'Entreprise, moyennant paiement.

PLAN SCHEMATIQUE

Base US.AID/OR

Kabongo/Shaba Central



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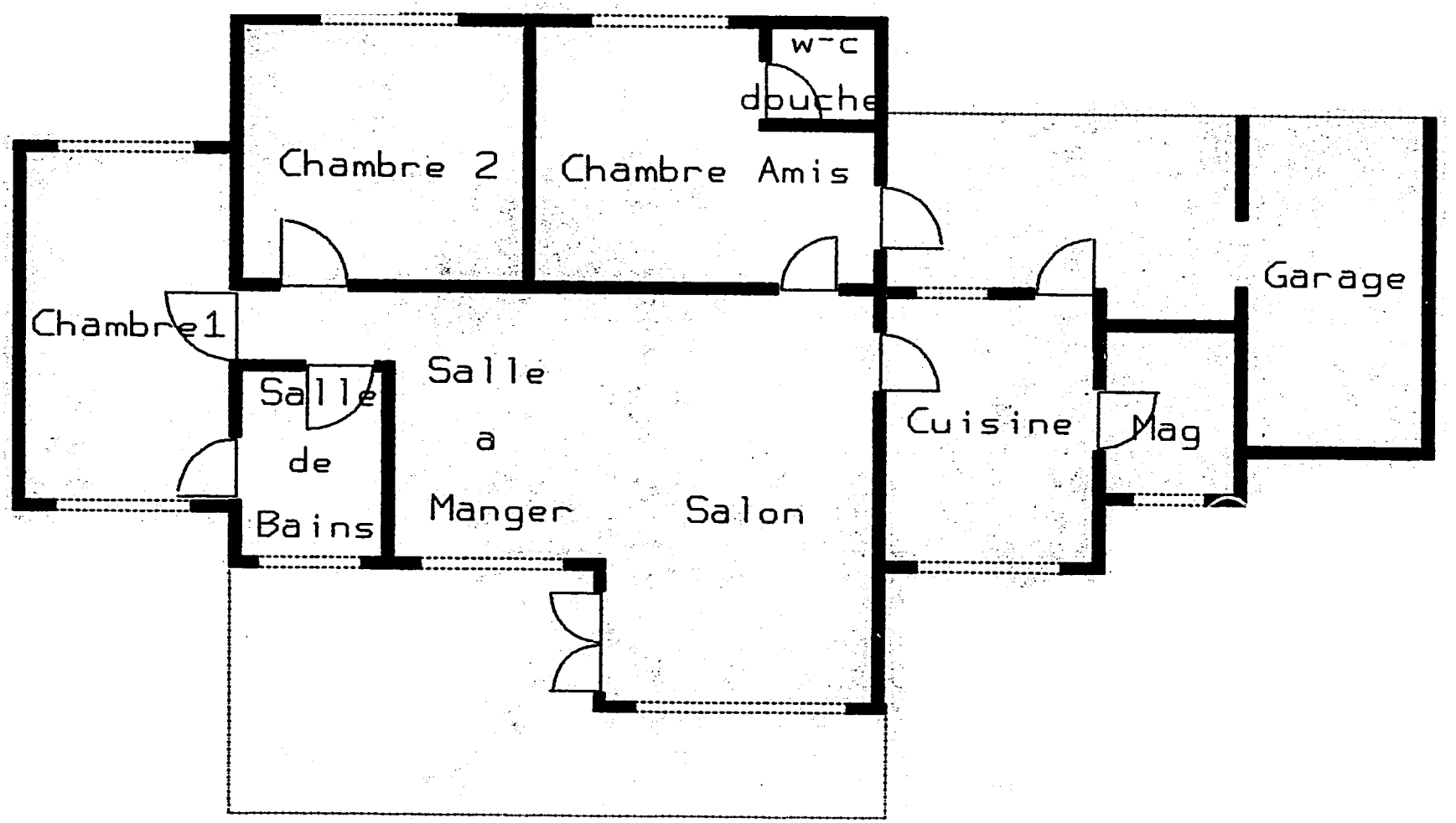
106

Schema type des maisons de
a Base USAID/OR
Kabongo



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Annex 4

NONEXPENDABLE PROPERTY INVENTORY

ANNUAL REPORT OF NON-EXPENDABLE AID-FINANCED PROPERTY IN CUSTODY OF AID-FINANCED CONTRACTOR
REPORT DATE: 20 NOVEMBER 1991 (IN THOUSANDS OF U.S. DOLLARS)

CONTRACTOR/HC AGENCY: CHECCHI & CO. PROJECT NO.: 660-105A6

LINE 1	FACTORS TO REPORT 2	MOTOR VEHICLES (SEE ANNEX A) 3	ROAD EQUIPMENT (SEE ANNEX B) 4	OFFICE EQPT. (SEE ANNEX C) 5	HOUSE FURN. (SEE ANNEX D) 6	OTHER (SEE ANNEX E) 7	TOTALS (ADD ACROSS) 8
A.	VALUE OF PROPERTY AS OF LAST REPORT	$444.75	$0.00	$62.17	$37.20	$135.50	$679.62
B.	NET TRANSACTIONS DURING REPORTING PERIOD (Line B1-B2 = + or -)	$75.00	$0.00	$0.00	$20.92	$0.00	$95.92
B.1.	ACQUISITIONS (=A+B+C+D+E+F BELOW)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
	A. Purchased by contractor for own use	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
	B. Transfers from AID for contractor's own use	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
	C. Receipts from procurement for project use	$75.00	$0.00	$0.00	$0.00	$0.00	$75.00
	D. Receipts from others for project at no cost	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
	E. Receipts of project property on loan	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
	F. Not previously reported	$0.00	$0.00	$0.00		$0.00	
B.2	DISPOSALS (=A+B+C+D+E BELOW)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
	A. Return of AID property purchased by contractor for own use	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
	B. Return to AID of property loaned to contractor	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
	C. transfer AID-financed property to HC	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
	D. Transfer project property to others at no cost	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
	E. Other disposals	$0.00	$0.00	$0.00	$20.92	$0.00	$20.92
C.	Value of Property as of report date	$519.75	$0.00	$62.17	$16.28	$135.50	$733.70
D.	Estimated Average Age of Contractor-held AID-financed property	3 YEARS	N/A	2.5 YEARS	3.8 YEARS	3 YEARS	3 YEARS

REMARKS: Note that value of U.S. consulate supplied furniture was dropped because it was not acquired under the contract. However, it is retained on the inventory due to its sensitive" nature.

SIGNATURE
NAME PRINTED: John B. Hannum
TITLE: Project Administrative Officer

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109

ANNUAL REPORT OF NON-EXPENDABLE AID-FINANCED PROPERTY IN CUSTODY
OF
AID-FINANCED CONTRACTOR OR COOPERATING HOST COUNTRY (HC) AGENCY
(in Thousands of U.S. Dollars)
(Ref: USAID/Zaire Mission Order 301, Amendment No. 1)

ANNEX A: MOTOR VEHICLES — REPORT DATE: 20/11/91
CONTRACTOR/HC AGENCY: CHECCHI & CO. — PROJECT NO.: 650-105AG

LINE 1	FACTORS TO REPORT 2	LANDED COST 3	REMARKS 4
A.	VALUE OF PROPERTY AS OF LAST REPORT	$444.75	
B.	NET TRANSACTIONS DURING REPORTING PERIOD (Line B1-B2 = + or -)	$75.00	
B.1.	ACQUISITIONS (=A+B+C+D+E+F BELOW)		
	A. Purchased by contractor for own use	$0.00	
	B. Transfers from AID for contractor's own use	$0.00	
	C. Receipts from procurement for project use	$75.00	rcvd 3 HJ-80s from CMS order
	D. Receipts from others for project at no cost	$0.00	
	E. Receipts of project property on loan	$0.00	
	F. Not previously reported	$0.00	
B.2	DISPOSALS (=A+B+C+D+E BELOW)		
	A. Return of AID property purchased by contractor for own use	$0.00	
	B. Return to AID of property loaned to contractor	$0.00	
	C. transfer AID-financed property to HC	$0.00	
	D. Transfer project property to others at no cost	$0.00	
	E. Other disposals	$0.00	
C.	Value of Property as of report date	$519.75	
D.	Estimated Average Age of Contractor-held AID-financed property	3 years	

BEST AVAILABLE DOCUMENT

110

ITEMIZED LIST OF ALL MOTOR VEHICLES

VEHICLE TYPE	VEHICLE MAKE	VEHICLE MODEL	VEHICLE ID#	STATUS	LANDED UNIT COST	AGE
9 TON TRUCK	MACK	RD685P	KN664M	IN USE/LHSI	$60,000.00	5 YEARS
9 TON TRUCK	TOYOTA	DA 115	SH 6059D	IN USE/NBO	$42,000.00	4 YEARS
4WD STATION	TOYOTA	HJ80	NONE#	IN USE/NBO	$25,000.00	.25 YEARS
4WD STATION	TOYOTA	HJ80	NONE#	IN USE/NBO	$25,000.00	.25 YEARS
4WD STATION	TOYOTA	HJ80	NONE#	IN USE/LHSI	$25,000.00	.25 YEARS
4WD STATION	NISSAN	PATROL	IT5223	IN USE/LHSI	$25,000.00	3 YEARS
4WD STATION	NISSAN	PATROL	IT5832	IN USE/LHSI	$25,000.00	3 YEARS
PICK-UP	NISSAN	DBL CABIN	IT 3066	IN USE/LHSI	$15,000.00	5 YEARS
4 WD PICK-UP	TOYOTA	HI-LUX	IT 7890	DECLASSE/NBO	$11,487.00	3 YEARS
4 WD PICK-UP	TOYOTA	HI-LUX	IT 7912	IN USE/LHSI	$11,487.00	3 YEARS
4 WD PICK-UP	TOYOTA	HI-LUX	IT 7892	IN USE/NBO	$11,487.00	3 YEARS
4 WD PICK-UP	TOYOTA	HJ-75	013 IT 33	IN USE/NBO	$20,000.00	4 YEARS
4 WD PICK-UP	TOYOTA	HJ-75	IT 4648	DECLASSE/NBO	$20,000.00	3 YEARS
4WD STATION	TOYOTA	HJ-60	IT 7891	IN USE/LHSI	$25,000.00	3 YEARS
4WD STATION	TOYOTA	HJ-60	IT 7893	IN USE/KIT	$25,000.00	3 YEARS
4WD STATION	TOYOTA	HJ-60	013 IT 36	IN USE/NBO	$25,000.00	2 YEARS
4WD STATION	TOYOTA	HJ-60	013 IT 01	IN USE/NBO	$25,000.00	2 YEARS
4WD STATION	TOYOTA	HJ-60	013 IT 32	IN USE/NBO	$25,000.00	2 YEARS
SEDAN	TOYOTA	COROLLA	013 IT 182	KINSHASA	$20,000.00	2 YEARS
MOTORCYCLE	YAMAHA	125CC	YA 120	DECLASSE/LHSI	$1,500.00	4 YEARS
MOTORCYCLE	HONDA	125XL	YA 164	IN USE/NBO	$1,832.00	5 YEARS
MOTORCYCLE	HONDA	125XL	YA 165	IN USE/NBO	$1,832.00	5 YEARS
MOTORCYCLE	HONDA	125XL	YA 166	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YA 502	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YA 501	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YA 503	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YA 504	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YA 505	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YA 506	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YA 507	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YA 508	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YA 509	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YA 510	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YA 511	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YA 512	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YA 513	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YA 514	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YA 515	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YA 520	IN USE/NBO	$1,832.00	3 YEARS
MOTORCYCLE	HONDA	125XL	YQ 601	IN USE/NBO	$1,832.00	1 YEAR
MOTORCYCLE	HONDA	125XL	YQ 602	IN USE/NBO	$1,832.00	1 YEAR
MOTORCYCLE	HONDA	125XL	YQ 603	IN USE/NBO	$1,832.00	1 YEAR
MOTORCYCLE	HONDA	125XL	YQ 604	IN USE/NBO	$1,832.00	1 YEAR
MOTORCYCLE	HONDA	125XL	YQ 605	IN USE/NBO	$1,832.00	1 YEAR
MOTORCYCLE	HONDA	125XL	YQ 606	IN USE/NBO	$1,832.00	1 YEAR
MOTORCYCLE	HONDA	125XL	YQ 607	IN USE/NBO	$1,832.00	1 YEAR
MOTORCYCLE	HONDA	125XL	YQ 608	IN USE/NBO	$1,832.00	1 YEAR
MOTORCYCLE	HONDA	125XL	YQ 609	IN USE/NBO	$1,832.00	1 YEAR
MOTORCYCLE	HONDA	125XL	YQ 610	IN USE/NBO	$1,832.00	1 YEAR
MOTORCYCLE	HONDA	125XL	YQ 611	IN USE/NBO	$1,832.00	1 YEAR
MOTORCYCLE	HONDA	125XL	YQ 612	IN USE/NBO	$1,832.00	1 YEAR

BEST AVAILABLE DOCUMENT

ANNUAL REPORT OF NON-EXPENDABLE AID-FINANCED PROPERTY IN CUSTODY
OF
AID-FINANCED CONTRACTOR OR COOPERATING-HOST COUNTRY (HC) AGENCY
(in Thousands of U.S. Dollars)
(Ref: USAID/Zaire Mission Order 301, Amendment No. 1)

ANNEX B: ROAD EQUIPMENT — REPORT DATE: 20/11/91
CONTRACTOR/HC AGENCY: CHECCHI & CO. — PROJECT NO.: 650-105A6

LINE 1	FACTORS TO REPORT 2	LANDED COST 3	REMARKS 4
A.	VALUE OF PROPERTY AS OF LAST REPORT	0	
B.	NET TRANSACTIONS DURING REPORTING PERIOD (Line B1-B2 = + or -)	0	
B.1.	ACQUISITIONS (=A+B+C+D+E+F BELOW)	0	
	A. Purchased by contractor for own use	0	
	B. Transfers from AID for contractor's own use	0	
	C. Receipts from procurement for project use	0	
	D. Receipts from others for project at no cost	0	
	E. Receipts of project property on loan	0	
	F. Not previously reported	0	
B.2	DISPOSALS (=A+B+C+D+E BELOW)	0	
	A. Return of AID property purchased by contractor for own use	0	
	B. Return to AID of property loaned to contractor	0	
	C. transfer AID-financed property to HC	0	
	D. Transfer project property to others at no cost	0	
	E. Other disposals	0	
C.	Value of Property as of report date	0	
D.	Estimated Average Age of Contractor-held AID-financed property	N/A 0	

REMARKS: Project has no road equipment

BEST AVAILABLE DOCUMENT

ANNUAL REPORT OF NON-EXPENDABLE AID-FINANCED PROPERTY IN CUSTODY
OF
AID-FINANCED CONTRACTOR OR COOPERATING HOST COUNTRY (HC) AGENCY
(in Thousands of U.S. Dollars)
(Ref: USAID/Zaire Mission Order 301, Amendment No. 1)

ANNEX C: OFFICE EQUIPMENT — REPORT DATE: 20/11/91
CONTRACTOR/HC AGENCY: CHECCHI & CO. — PROJECT NO.: 650-105A6

LINE 1	FACTORS TO REPORT 2	LANDED COST 3	REMARKS 4
A.	VALUE OF PROPERTY AS OF LAST REPORT	$62.17	
B.	NET TRANSACTIONS DURING REPORTING PERIOD (Line B1-B2 = + or -)	$0.00	
B.1.	ACQUISITIONS (=A+B+C+D+E+F BELOW)	$0.00	
	A. Purchased by contractor for own use	$0.00	
	B. Transfers from AID for contractor's own use	$0.00	
	C. Receipts from procurement for project use	$0.00	
	D. Receipts from others for project at no cost	$0.00	
	E. Receipts of project property on loan	$0.00	
	F. Not previously reported	$0.00	
B.2	DISPOSALS (=A+B+C+D+E BELOW)	$0.00	
	A. Return of AID property purchased by contractor for own use	$0.00	
	B. Return to AID of property loaned to contractor	$0.00	
	C. transfer AID-financed property to HC	$0.00	
	D. Transfer project property to others at no cost	$0.00	
	E. Other disposals	$0.00	
C.	Value of Property as of report date	$62.17	
D.	Estimated Average Age of Contractor-held AID-financed property	2.5 years	

BEST AVAILABLE DOCUMENT

INVENTORY OF NON-EXPENDABLE OFFICE EQUIPMENT

ITEM DESCRIPTION	MANUFACTURER	SERIAL NUMBER	LANDED COST	DISPOSITION	AGE
DESK TOP COMPUTER/386	AST	HKP3004773	$4,377.00	SCAD/LHSI	1 YEAR
DESK TOP COMPUTER/386	AST	HKP3004781	$4,377.00	SCAD/NBO	1 YEAR
DESK TOP COMPUTER/286	AST	TWP2028817	$2,662.00	SLAA/LHSI	2 YEARS
DESK TOP COMPUTER/286	AST	TWP2029041	$2,662.00	SCAD/LHSI	2 YEARS
DESK TOP COMPUTER/286	AST	TWP2029089	$2,662.00	SHADO	2 YEARS
LAP-TOP COMPUTER	ZENITH	022DE0	$1,882.00	RDS/NBO	1 YEAR
LAP-TOP COMPUTER	ZENITH	022DD051699	$1,882.00	SCAD/NBO	1 YEAR
LAP-TOP COMPUTER	ZENITH	8821839003	$1,882.00	DVA/NBO	2 YEARS
LAP-TOP COMPUTER	ZENITH	9311014803	$1,882.00	LHSI/CPTE	3 YEARS
LAP-TOP COMPUTER	ZENITH	9821839003	$1,882.00	SCAD/NBO	3 YEARS
LAP-TOP COMPUTER	ZENITH	9002790201	$1,882.00	EN PANNE/LHS	3 YEARS
LAP-TOP COMPUTER	ZENITH	9861031802	$1,882.00	EN PANNE/LHS	3 YEARS
LAP-TOP COMPUTER	ZENITH	9311043303	$1,882.00	EN PANNE/LHS	3 YEARS
PRINTER LQ1050	EPSOM	0F61000566	$804.00	SCAD/NBO	2 YEARS
PRINTER LQ1050	EPSOM	0F61000565	$804.00	CPTE/LHSI	2 YEARS
PRINTER LQ1050	EPSOM	0F61000564	$804.00	SCAD/LHSI	2 YEARS
PRINTER LQ950	EPSOM	0HN0002938	$615.00	SCAD/NBO	2 YEARS
PRINTER LQ950	EPSOM	0HN0002933	$615.00	SCAD/LHSI	2 YEARS
PRINTER MICROLINE 320	OKIDATA	812B0076089	$912.00	SLAA/LHSI	2 YEARS
PRINTER MICROLINE 320	OKIDATA	711B1138598	$912.00	DVA/NBO	2 YEARS
PRINTER MICROLINE 320	OKIDATA	711B1138665	$912.00	SCAD/LHSI	2 YEARS
VOLTAGE STABILIZER	OMNIPOWER	64869UP	$3,000.00	LHSI	2 YEARS
VOLTAGE STABILIZER	OMNIPOWER	64866UP	$3,000.00	NBO	1 YEAR
SOFTWARE	SPSS PC+	101.12.156	$729.00	LHSI	1 YEAR
SOFTWARE	PARADOX	101.12.155	$508.00	NBU	1 YEAR
VDT	AST/VGA	4U029139	$525.00	SLAA/LHSI	2 YEARS
VDT	AST/VGA	4U029154	$525.00	SCAD/LHSI	2 YEARS
VDT	AST/VGA	4U029170	$525.00	SHADO	2 YEARS
VDT	PACKARD-BELL	0096DC0699	$525.00	SCAD/LHSI	1 YEAR
PHOTOCOPIER	SHARP	75602049	$4,762.00	EN PANNE/NBO	4 YEARS
PHOTOCOPIER	SHARP	75410065	$4,762.00	LHSI	4 YEARS
STENCIL MACHINE	REX-ROTARY	1015-20883	$1,934.00	NBO	4 YEARS
TYPEWRITER	HERMES AMB.	720965678	$638.00	LHSI	4 YEARS
TYPEWRITER	HERMES AMB.	720965655	$638.00	NBO	4 YEARS
TYPEWRITER	HERMES AMB.	720255874	$638.00	NBO	3 YEARS
ELECTRIC TYPEWRITER	HERMES	69316908	$650.00	LHSI	4 YEARS
ELECTRIC TYPEWRITER	ERICA 170	793208	$645.00	NBO	3 YEARS
			$62,178.00		

BEST AVAILABLE DOCUMENT

ANNUAL REPORT OF NON-EXPENDABLE AID-FINANCED PROPERTY IN CUSTODY
OF
AID-FINANCED CONTRACTOR OR COOPERATING HOST COUNTRY (HC) AGENCY
(in Thousands of U.S. Dollars)
(Ref: USAID/Zaire Mission Order 301, Amendment No. 1)

ANNEX D: HOUSE FURNISHINGS — REPORT DATE: 20/11/91
CONTRACTOR/HC AGENCY: CHECCHI & CO. — PROJECT NO.: 650-105AG

LINE 1	FACTORS TO REPORT 2	LANDED COST 3	REMARKS 4
A.	VALUE OF PROPERTY AS OF LAST REPORT	$37.20	
B.	NET TRANSACTIONS DURING REPORTING PERIOD (Line B1-B2 = + or -)	$20.92	
B.1.	ACQUISITIONS (=A+B+C+D+E+F BELOW)	$0.00	
	A. Purchased by contractor for own use	$0.00	
	B. Transfers from AID for contractor's own use	$0.00	
	C. Receipts from procurement for project use	$0.00	
	D. Receipts from others for project at no cost	$0.00	
	E. Receipts of project property on loan	$0.00	
	F. Not previously reported	$0.00	
B.2	DISPOSALS (=A+B+C+D+E BELOW)	$0.00	This property was a gift to the project from U.S. Consulate Therefore, it was acquired at no cost and should be taken off cost line, but not inventory, as it is "sensitive"
	A. Return of AID property purchased by contractor for own use	$0.00	
	B. Return to AID of property loaned to contractor	$0.00	
	C. transfer AID-financed property to HC	$0.00	
	D. Transfer project property to others at no cost	$0.00	
	E. Other disposals	$20.92	
C.	Value of Property as of report date	$16.28	
D.	Estimated Average Age of Contractor-held AID-financed property	3.8 years	

BEST AVAILABLE DOCUMENT

LIST OF NON-EXPENDABLE HOUSE FURNISHINGS

ITEM DESCRIPTION	MANUFACTURER	SERIAL NUMBER	COST	LOCATION	AGE
REFRIGERATOR*	GENERAL ELECTRIC	510726	$0.00	SHADO	4 YEARS
REFRIGERATOR*	GENERAL ELECTRIC	11525904	$0.00	NEO	4 YEARS
REFRIGERATOR*	GENERAL ELECTRIC	ZM164573	$0.00	NEO	4 YEARS
REFRIGERATOR*	GENERAL ELECTRIC	MA1638161	$0.00	NEO	4 YEARS
REFRIGERATOR*	DEFY "SUPER DEAL"	103.14103	$0.00	SHADO	4 YEARS
REFRIGERATOR*	DEFY "SUPER DEAL"	116.14108	$0.00	NIEMBO	4 YEARS
REFRIGERATOR*	DEFY "SUPER DEAL"	101.14115	$0.00	SHADO	4 YEARS
REFRIGERATOR*	FRIGIDAIRE 800	86TQ	$0.00	NEO	4 YEARS
REFRIGERATOR*	INDESIT MINI	104.14104	$0.00	SHADO	4 YEARS
REFRIGERATOR	VALIANT 150	010240	$1,363.00	NEO	4 YEARS
REFRIGERATOR	CONSUL BIFLEX	8016929	$1,500.00	KITENGE	4 YEARS
REFRIGERATOR	CONSUL BIFLEX	8016932	$1,500.00	KITENGE	4 YEARS
REFRIGERATOR	IMPERIAL BIFLEX	600-3528	$1,500.00	NEO	4 YEARS
REFRIGERATOR	IMPERIAL BIFLEX	600-3486	$1,500.00	NEO	4 YEARS
FREEZER*	UNKNOWN	102.14151	$0.00	SHADO	4 YEARS
FREEZER*	CANDY TYPE F51E	343-659321	$0.00	SHADO	4 YEARS
FREEZER	FRIGIDAIRE	117.14154	$1,300.00	KITENGE	3 YEARS
FREEZER	GORENGE	116.14153	$1,300.00	NEO	3 YEARS
FREEZER	GORENGE	132.14156	$1,300.00	NEO	3 YEARS
FREEZER	IBERNA	802679769	$1,300.00	NEO	2 YEARS
STOVE*	RELANGER	MW13304	$0.00	KIT	4 YEARS
STOVE*	FUCHISWARE	6918	$0.00	NEO	4 YEARS
STOVE*	GENERAL ELECTRIC	HL1704150	$0.00	NEO	4 YEARS
STOVE	GORENGE	350097	$930.00	NEO	2 YEARS
STOVE	ARISTON	609028066	$930.00	NEO	2 YEARS
STOVE	ARISTON	609028064	$930.00	SHADO	3 YEARS
STOVE	AKAZ	1756287	$930.00	NEO	4 YEARS
WASHING MACHINE*	GENERAL ELECTRIC	105.14301	$0.00	SHADO	4 YEARS
WASHING MACHINE*	GENERAL ELECTRIC	101.14302	$0.00	SHADO	4 YEARS
CLOTHES DRYER*	GENERAL ELECTRIC	DS2-02525	$0.00	SHADO	4 YEARS
CLOTHES DRYER*	GENERAL ELECTRIC	TL2-04510	$0.00	SHADO	4 YEARS
			$16,283.00		

BEST AVAILABLE DOCUMENT

ANNUAL REPORT OF NON-EXPENDABLE AID-FINANCED PROPERTY IN CUSTODY
OF
AID-FINANCED CONTRACTOR OR COOPERATING HOST COUNTRY (HC) AGENCY
(in Thousands of U.S. Dollars)
(Ref: USAID/Zaire Mission Order 301, Amendment No. 1)

ANNEX E: OTHER PROPERTY
CONTRACTOR/HC AGENCY: CHECCHI & CO.

REPORT DATE: 20/11/91
PROJECT NO.: 650-105AG

LINE 1	FACTORS TO REPORT 2	LANDED COST 3	REMARKS 4
A.	VALUE OF PROPERTY AS OF LAST REPORT	$135.50	
B.	NET TRANSACTIONS DURING REPORTING PERIOD (Line B1-B2 = + or -)	$0.00	
B.1.	ACQUISITIONS (=A+B+C+D+E+F BELOW)	$0.00	
	A. Purchased by contractor for own use	$0.00	
	B. Transfers from AID for contractor's own use	$0.00	
	C. Receipts from procurement for project use	$0.00	
	D. Receipts from others for project at no cost	$0.00	
	E. Receipts of project property on loan	$0.00	
	F. Not previously reported	$0.00	
B.2	DISPOSALS (=A+B+C+D+E BELOW)	$0.00	
	A. Return of AID property purchased by contractor for own use	$0.00	
	B. Return to AID of property loaned to contractor	$0.00	
	C. transfer AID-financed property to HC	$0.00	
	D. Transfer project property to others at no cost	$0.00	
	E. Other disposals	$0.00	
C.	Value of Property as of report date	$135.50	
D.	Estimated Average Age of Contractor-held AID-financed property	3 years	

BEST AVAILABLE DOCUMENT

PHYSICAL INVENTORY OF "OTHER" PROPERTY

PHYSICAL DESCRIPTION	MAKE	SERIAL #	LANDED UNIT COST	LOCATION	AGE
Tractor	Ford 7610	B12221	$40,000.00	NBO	3 years
Weather Station	Forestry Suppl.	842	$3,955.00	NBO	2 years
Seed Cleaner Model M2BC	Seedburo	A2526	$2,197.00	NBO	2 years
Husker/Sheller	Haban & Co.	2BB213E	$1,846.00	NBO	2 years
Disk Plow	unknown	99/86	$500.00	NBO	5 years
Generator 5.6KVA	Onan	850756061	$6,132.00	NBO	4 years
Generator 2.5KVA	Onan	830668918	$5,180.00	NBO	4 years
Generator 15KVA	Lister	3803629	$9,863.00	NBO	4 years
Generator 4 KVA	Lister	3810659	$4,500.00	KIT	4 years
Generator 4KVA	Lister	161791004	$8,125.00	EN PANNE/LHS	3 years
Generator 11KVA	Onan	850756302	$9,062.00	EN PANNE/LHS	3 years
Generator 2.5 KVA	Onan	830652983	$5,180.00	NBO	3 years
Generator 5.6KVA	Onan	850765059	$6,132.00	NBO	3 years
Video Camera	JVC	134H0409	$957.00	NBO	2 years
Video Cassette Player	Panasonic	L9MA04512	$990.00	NBO	2 years
Video Cassette Player	Panasonic	L9MA01382	$990.00	NBO	2 years
Video Cassette Player	Panasonic	L9MA04718	$990.00	NBO	2 years
Video Monitor	Phillips	109616	$550.00	NBO	2 years
Video Monitor	Phillips	109465	$550.00	NBO	2 years
Video Monitor	Phillips	109620	$550.00	NBO	2 years
35mm Camera	Minolta	9093043	$797.00	NBO	2 years
SW Radio	Kenwood TS440	8010726	$4,101.00	NBO	4 years
SW Radio	Kenwood TS440	8020765	$4,101.00	KIT	4 years
SW Radio	Kenwood TS440	8010761	$4,101.00	NBO	4 years
SW Radio	Kenwood TS440	902096	$4,101.00	NBO	4 years
SW Radio	Kenwood TS440	9078032	$4,101.00	KIN	4 years
SW Radio	YAESU FT-757	4E-080106	$3,000.00	LHSI	3 years
SW Radio	YAESU FT-750	1L-150605	$3,000.00	LHSI	3 years
			$135,551.00		

BEST AVAILABLE DOCUMENT

ANNUAL REPORT OF NON-EXPENDALBE AID-FINANCED PROPERTY IN CUSTODY

OF

AID-FINANCED CONTRACTOR

(In Thousands (000) of U.S. Dollars)

(REF: USAID/ZAIRE Mission Order 301, Amendment No. I)

Contractor: Checchi & Co. Project No.: 660-105AG

Project Name: Central Shaba Agricultural Development Project

Date of Inventory Report (Form CMS-MO301-9001): 20 November, 1991

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NOTE: The following certificate, required by referenced mission order, is to be executed by the responsible official signing the annual report of non-expendable property, form CMA-MO301-9007, February 1990. This is certificate is to be signed and attached to the report when submitted, using this form as Annex F thereto. The name and title of the individual signing must be printed or typed below the sighature.

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CERTIFICATE OF PROPERTY INVENTORY VERIFICATION

I attest that (1) physical inventories of AID-financed property are taken not less frequently than annually; (2) the accountability records maintained of AID-financed property in our possession are in agreement with such inventories; and (3) the total of the detailed accountability records maintained agrees with the property value shown opposite line C of USAID/Zaire report form CMS-MO301-9001, which I have signed and (4) the estimated average age of each category of property is as cited opposite line D of the above-mentioned report.

Signed at Washington, D.C., this 25th day of November, 1991

by:

John B. Hannum
Project Administrative Officer

Annex 5

LIST OF CONTRACT REPORTS

Annex 5

WRITTEN MATERIALS PRODUCED UNDER THE CHECCHI CONTRACT[1]

A. AGRICULTURAL EXTENSION SERVICE (SVA)

Work Plans

Work Plan for Agricultural Year 1988/89
Work Plan for Agricultural Year 1989/90 (French)
Work Plan for Agricultural Year 1990/91 (French)
Work Plan for Agricultural Year 1991/92 (French)

Progress Reports

Report on Extension Activities: July-August 1988
Report on Extension Activities: September-December 1988
Report on Extension Activities: January-March 1989
Report on Extension Activities: April-June 1989
Annual Report on Agricultural Year 88/89 (French)
Report on Extension Activities: September-December 1989
Report on Extension Activities: January-April 1990
Annual Report on Agricultural Year 89/90 including results of dry season activities
End of Planting Season Report covering the period October 1990-March 1991
Annual Report on Agricultural Year 90/91 including results of dry season activities

Training Materials

Document prepared for the December 1988 training session for project extension agents and Peace Corps volunteers (French)
Document prepared for the May-June 1989 training session for project extension agents and Peace Corps volunteers (French)
Document prepared for the April 1991 training session for project extension agents and Peace Corps volunteers (French)
Technical information sheets (fiches techniques) describing recommended production techniques for corn, manioc, peanuts, bean, soybeans and rice (French, Kiswahili, and Kiluba)

[1]All documents are in English unless otherwise noted.

Consultant Reports

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Notes on Extension Training prepared for the May 29-June 8, 1989 Training Session, by Arpi Hamalian, Extension Training Specialist (French)
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B. DATA COLLECTION AND ANALYSIS SERVICE (SCAD)

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C. ROADS CONTRACT SUPERVISION

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Road Rehabilitation Contract Situation Report as of September 29, 1991 (French)

D. FINANCIAL ACCOUNTING REPORTS

Checchi and Company Consulting, Inc. Annual Financial Accounting Report for FY 1988 and 1989, November 1989
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Checchi and Company Consulting, Inc. Annual Financial Accounting Report for FY 1991, October 1991