

PD - ABD - 332  
10A 10/1/86

**PRIVATE ENTERPRISE PROMOTION  
IN  
CHAD**

**XTRA COPY**

Submitted to:

John Woods  
Mission Director  
U.S. Agency for International Development  
American Embassy  
N'djamena, Chad

Submitted by:

Volunteers in Technical Assistance  
1815 North Lynn Street, Suite 200  
P.O. Box 123438  
Arlington, Virginia 22209-8438

September 1986

**PRIVATE ENTERPRISE PROMOTION  
IN  
CHAD**

Submitted to:

John Woods  
Mission Director  
U.S. Agency for International Development  
American Embassy  
N'djamena, Chad

Submitted by:

Volunteers in Technical Assistance  
1815 North Lynn Street, Suite 200  
P.O. Box 123438  
Arlington, Virginia 22209-8438

September 1986

## TABLE OF CONTENTS

### ACRONYMS AND ABBREVIATIONS

I.	SUMMARY PROJECT DESCRIPTION .....	1
A.	Private Voluntary Organization (PVO) Applicant.....	1
B.	Government of Chad Implementing Agency .....	1
C.	Summary Financial Plan .....	1
D.	Project Goal/Purpose .....	1
E.	Project Background .....	2
F.	Summary Project Description .....	3
G.	Project Issues .....	4
H.	Project Waivers and Approval .....	4
I.	VITA Design Team Members .....	4
II.	PROJECT RATIONALE AND DETAILED DESCRIPTION .....	5
A.	Project Rationale .....	5
B.	Detailed Description .....	7
1.	Project Setting .....	7
2.	Project Goal .....	8
3.	Project Purpose .....	9
4.	Project Outputs .....	9
5.	Project Issues .....	11
C.	Project Components/Functional Elements .....	14
D.	PVO Inputs Financed by AID .....	15
E.	VITA Inputs .....	17
F.	Other Inputs .....	17
III.	COST ESTIMATES AND FINANCIAL PLAN .....	18
A.	Summary Cost Estimates .....	18
B.	Financial Plan .....	18
C.	Cost Estimates of Other Inputs to the Project .....	19
IV.	IMPLEMENTATION PLAN .....	19
A.	Implementation Responsibilities .....	19
1.	Volunteers in Technical Assistance, Inc. ....	19
2.	Government of Chad .....	20
3.	United States Agency for International Development..	20
4.	Other Local Loan Program Management Relationships ..	20
B.	Other Donor/NGO Collaboration .....	21
C.	Procurement Plan .....	21

V.	MONITORING PLAN .....	22
A.	PVO Project Management .....	22
	1. In-Country .....	22
	2. Home Office Support .....	22
B.	AID Liaison .....	24
C.	GOC Project Management .....	24
D.	Reporting .....	24
VI.	SUMMARY ANALYSES .....	24
A.	Summary Technical Analysis .....	24
	1. Technical Approach .....	24
	2. Agricultural Sector Development .....	25
	3. Lending Process .....	27
B.	Summary Financial Analysis .....	28
	1. Small Farmer Loan Program .....	28
	2. Urban Perimeter Enterprise Loans .....	29
C.	Summary Economic Analysis .....	31
	1. Economic Benefits .....	31
	2. Cost Effectiveness of Loan Delivery System .....	33
	3. Internal Rate of Return .....	34
	4. Marketing Issues Concerning Food Production and Food Related Businesses .....	34
D.	Summary Social Soundness Analysis .....	35
	1. Project Beneficiaries .....	35
	2. Acceptance by Institutions/Participants .....	36
	3. Project Impact and Beneficiary Incidence .....	37
E.	Summary Environmental Analysis .....	38
VII.	EVALUATION ARRANGEMENTS .....	39
A.	Implementation Progress Evaluation .....	39
B.	Formative Evaluation .....	40
C.	Final/Summative Evaluation .....	40
VIII.	NEGOTIATING STATUS .....	40

<b>IX. ANNEXES</b> .....	<b>43</b>
<b>ANNEX A. Logframe</b> .....	<b>45</b>
<b>ANNEX B. Letter of Understanding</b> .....	<b>53</b>
<b>ANNEX C. Budget</b> .....	<b>63</b>
<b>ANNEX D. Commodity List</b> .....	<b>73</b>
<b>ANNEX E. Position Descriptions</b> .....	<b>75</b>
<b>ANNEX G. Financial Analysis</b> .....	<b>89</b>
<b>ANNEX H. Economic Analysis</b> .....	<b>93</b>
<b>ANNEX I. Administrative Documentation</b> .....	<b>107</b>
<b>ANNEX J. Project Implementation Schedule</b> .....	<b>135</b>
<b>ANNEX K. VITA Capability Statement</b> .....	<b>137</b>

**I. SUMMARY PROJECT DESCRIPTION**

**A. PRIVATE VOLUNTARY ORGANIZATION (PVO) APPLICANT**

Volunteers in Technical Assistance (VITA)  
Suite 200, 1815 N. Lynn Street  
Arlington, VA 22209

**B. GOVERNMENT OF CHAD (GOC) IMPLEMENTING AGENCY**

- o Ministry of Plan and Reconstruction
- o Ministry of Agriculture

**C. SUMMARY FINANCIAL PLAN**

Agency	Yr.1	Yr.2	Total
AID: PDIP	\$ 600,760	\$ 600,759	\$1,201,519
RISAX	299,030	299,030	598,061
VITA	26,850	26,850	53,700
Other Inputs	533,294	160,000	693,294
Total	\$1,459,935	\$1,086,639	\$2,546,574

**D. PROJECT GOAL/PURPOSE**

This proposal represents a continuation of an on-going USAID financed project (Ref. Cooperative Agreement 677-0502-A-00-4016-00) which, with the approval of a two year extension, plans to continue the distribution of supervised credit to the small business sector -to promote private sector development and economic growth as possible within the framework of this proposal. Further, the project establishes as its project goal and purpose the institutionalization of the VITA/PEP credit program into a Chadian financial system through a general cost minimization effort and eventual administrative turnover at the end of the project's timeframe.

Therefore, the project has two distinct goals:

- o to stimulate private sector growth and economic production;
- o to improve the quality of life for the low income population in the targeted geographic areas.

The Project's purpose is to achieve these goals by the identification and evaluation of possible institutional programs, the continuation of cost-minimization efforts, and the provision of both urban and rural small and medium enterprises (SMEs) with credit, management, and other direct technical assistance, and market information. These will be accomplished by:

- o creating a workplan to institutionalize the on-going credit program into the Chadian financial system;
- o implementing a cost minimization effort over the two year life span of the project; and,
- o continuing the on-going distribution of supervised credit.

#### **E. PROJECT BACKGROUND**

VITA is currently completing a Private Enterprise Project (PEP) which provides supervised credit to Chad's small scale private sector. This project focuses on business in N'Djamena and its environs to help the region recover from a protracted civil war which was both preceded and followed by a devastating drought. After hostilities ceased in the N'Djamena area in 1982, little government or private sector infrastructure remained. By 1984, when VITA's project started, entrepreneurs with few resources had already begun to reestablish enterprises of all types, primarily in retail trade. Farms in the area had begun production again and some commodities were available in the market. Credit, particularly to small farmers and business people, was non-existent. This lack was a major obstacle to economic growth.

Since 1984, VITA/PEP has granted 95 loans totalling slightly over \$451,000 to a wide variety of farm and commercial enterprises. As a result, many small agricultural, fabrication and processing businesses have been established and have expanded.

The GOC currently plans to give top priority to the development of both the agricultural and the SME sectors. Agricultural sector activities will emphasize development of food production and truck farming. SME development will focus on food processing activities. The GOC will also emphasize growth of the construction industry.

Business and investment opportunities, particularly in the food production and processing enterprises, are now opening in the rural prefectures of Chad. In Bongor, the Food and Agriculture Organization (FAO) and ONDR are assisting farmers on a 500 hectare block of land consisting of 2,000 1/4 hectare plots. VITA/PEP is participating through a credit program in Bongor to help these as well as other small farmers and entrepreneurs. VITA has already surveyed the northern towns of Bol, Mao, Massakory and Massaguet to determine the potential for VITA/PEP loan activity.

## F. SUMMARY PROJECT DESCRIPTION

This proposal is based on the in-country experience gained during the implementation of the VITA/PEP project. It also includes institutional development, training components and a cost minimization effort. This program will make possible the distribution of approximately 340 loans during the two year life span of the project. Using the infrastructure built up during VITA/PEP, the new project will maintain the geographic area of operation at a 60 km radius around N'Djamena.

Concerning the continuation of the on-going credit distribution, the project's approach will be to work through the existing PEP structure to recruit, receive, review, and process loan applications, to provide business management and technical training and to establish marketing services.

Concerning the objective of institutionalization, the project's approach will be to research the various options over the first six months of the project timeframe and subsequently present a detailed workplan conceptualizing the turnover plan chosen. It is estimated that it will take a minimum of six months to fully research all of the options available, including establishing or further developing the necessary public and private contacts. *was*

VITA looks upon the institutionalization of the project as an important aspect of not only the immediate objectives of the VITA project in Chad, but also the future development of other supervised credit programs in Africa. If the VITA/PEP project can demonstrate that supervised credit programs in Africa are able to be incorporated into existing financial systems within the host countries, this will serve as a model for other supervised credit programs in Africa. *Model*

VITA/PEP will conduct a dual approach towards the goal of cost minimization. It will intensify existing management practices which have resulted in more efficient operations over the past two years. At the same time, it will explore techniques such as variable interest rate and user fees to further minimize the need for external donor support while maintaining the efficiency and success of current management practices. *24/10*

VITA Volunteers will provide short-term on-site technical training to the local-hire agronomists in specific production areas. VITA will also provide technical information to assist a wide range of manufacturing and processing enterprises. New computer resources will enhance the staff's ability to keep records and analyze project data. Establishing a solid infrastructure in this way will ensure the project's long-term sustainability. *4P*

VITA also plans to assist other PVO donor agencies and Chadian institutions which have requested assistance in establishing their own programs. These include the Banque Tchadienne de Credit



et des Depots (BTCDD), VITA/PEP's disbursing and repayment facility, which has indicated its desire to establish a joint loan program under PEP supervision.

Achievement of these goals will require 11 months of short-term technical assistance (TA). This technical assistance will be provided by an agronomist/agroforester (4 months) a marketing/commercialization specialist (4 months), and a computer expert (2 months). An additional one month of unspecified TA is budgeted to cover unforeseen technical problems. By the end of the project, use of the loan funds should result not only in measurable increases in employment and food production but also in the establishment of a nationwide program providing loans to small scale food producers, food processors, and related enterprises.

#### **G. PROJECT ISSUES**

The two issues continually requiring attention are:

- o balancing the project's financial profitability with the effective generation of economic benefits through small, medium, and especially, agricultural enterprise development; and
- o the development of an appropriate process to institutionalize the project within the Chadian financial system.

Section II.B contains a detailed discussion of both these issues.

#### **H. PROJECT WAIVERS AND APPROVAL**

Justification and approval for blanket source and origin waiver and waivers of FAA section 636(i) for procurement of vehicles, motorcycles and spare parts from code 935 sources, is contained in the Project Paper for the umbrella project "Chad: PVO Development Initiatives" (677-0051), under which this subproject is being funded.

#### **I. VITA DESIGN TEAM MEMBERS**

Team leader and agricultural development specialist Keith Byergo, assisted by development economist C. Anne Pence, designed and drafted the project proposal. VITA home office staff members Donna Read (Chad Program Officer), Rosalyn Lezberg (Assistant Program Officer), and Mari Pappas (Administrative Assistant) wrote, edited, and prepared the final proposal. VITA Executive Director Henry Norman, Deputy Director Larry Williams, PEP Project Director Richard Slacum, and Assistant Project Director Robert Reitemeier reviewed the proposal.

## II. PROJECT RATIONALE AND DETAILED DESCRIPTION

### A. PROJECT RATIONALE

The three main goals of the GOC's Interim Development Plan (1986-88) are:

- o to guarantee the population's basic needs, even if drought returns or persists;
- o to rapidly correct the persistent consequences of the drought; and
- o to increase production on a lasting basis.

The commitment of the United States Agency for International Development (USAID) to revitalize the Chadian small-scale private sector economy supports the GOC's objectives.

The initial two year period (1984-86) was intended to initiate and develop a supervised credit program in Chad. The current proposal is intended to institutionalize the supervised credit program into the Chadian financial system. Within this framework, the VITA/PEP project will attempt to minimize both administrative costs and the need for external donor participation at the end of the projected timeframe.

VITA has cited these objectives as a result of USAID emphasis on institutionalization, cost minimization, and performance standards. As a result, the credit program is scheduled to be incorporated into the Chadian financial system after four and a half years of project activity. This implies that staff time and project resources will be divided between monitoring the existing credit program, attempting to minimize administrative costs which will lead to the identification and implementation of the eventual turnover of the project.

As a result of this division of staff time and project resources, certain limitations will be imposed on anticipated project results. The normal start-up phase for a credit institution is five years, and it is only at that point in time that the institution is able to predict the possibility of long-term financial viability. The VITA/PEP project will enter its fifth year of project activity during the last year of the proposed two year project timeframe. Ideally, the project would request an additional two year period to more efficiently incorporate the credit program into the Chadian financial system. Since there is no assurance that an additional two year extension is possible, VITA will concentrate on the turnover process during the two year time period 1987-88. VITA/PEP will submit a detailed workplan explaining the turnover procedures at the end of the first six months of this proposal's timeframe.

VITA's current project has demonstrated that providing small to mid-size loans to private sector agricultural production, processing and fabrication entities can stimulate economic activity, generate employment, and increase goods and services available to consumers.

Since project inception, 95 loans have been made. VITA estimates that these loans have generated nearly 400 full-time, part-time, and seasonal jobs. Although indirect employment has been generated by the project, this cannot be quantified.

Chad does not currently have an operational development bank. Opportunities for the expansion of PEP activity will increase as private bank branches reopen outside of N'Djamena. Branches will be opening soon in southern Chad. At the request of both the GOC and USAID/Chad, VITA has surveyed the major trading towns between N'Djamena and Lake Chad (Mao, Bol, Massaguet, and Massakory) as possible centers for loan activity. The survey determined that in the four communities the risks to both the farmers, in the form of entering into a debtor position with little means of reimbursing the credit on time, and the credit program, in the form of large start-up costs with little guarantee of successful repayment, indicate that it is as yet too early to expand the VITA/PEP credit program north of N'Djamena.

The current project has demonstrated the demand for loans, their usefulness, and the value of technical assistance to the clients. The project has received widespread attention in Chad and attracted regional and international notice. The GOC and other private sector loan entities have clearly expressed their interest in a continuing and expanding PEP activity.

VITA/PEP has established solid working relationships in the Chadian financial sector. To involve a local banking firm, VITA worked out a relationship with the Banque Tchadienne de Credit et des Depots (BTCDD) for loan disbursement and collection. This French affiliate is one of two private commercial banks in Chad. The BTCDD has now approached VITA/PEP with the possibility of using funds from the European Development Fund to establish a jointly-run loan program. The FAO asked for and received PEP's assistance in the administration of the farm credit support portion of its Casier B rice program in Bongor. Three other PVOs have asked PEP for management assistance to set up similar loan programs in Chad.

Past agricultural loan clients have had technical problems resulting in poor production levels and difficulties in making loan repayments. Increased technical assistance will alleviate these problems. Although the farms are potentially profitable, farmers cannot realize this potential unless they have adequate financial and material resources and technical assistance. A local hire agronomist, assisted by a short-term expatriate specialist, will help improve agricultural management procedures. These technicians will work directly with the clients to provide

training in problem areas. VITA/PEP will train all clients who demonstrate a need for business management and accounting during the application interviews and loan implementation visits.

Although Chad's economy has deteriorated badly and will require years to rebuild, small businesses are remarkably flexible in risky, dynamic markets. They generally require no major capital investments. Thus, they are well suited to meeting the short and long-term development objectives in Chad.

## B. DETAILED DESCRIPTION

### 1. Setting

Chad has suffered from 20 years of political instability. It has not had a development budget since 1975. Since the late 1970's it has been subject to massive military escalation, endured a drought threatening 15% of its population with starvation and dislocation, and witnessed the collapse of its cotton export market which provided 80% of its foreign exchange.

Between 1982 and 1985, the government sought to rebuild the economy by making difficult expenditure cuts, reconstructing buildings and infrastructure, and gradually restoring public services. The manufacturing sector began its recovery. Money supply and credit increased to meet liquidity needs. The government reduced its deficit ratio by raising revenues substantially. Public and private sector cooperation resulted in real economic growth. To a large extent this was due to the resilience and diligence of the Chadians, who are known for their business and marketing skills.

In late 1985, world cotton prices fell drastically. These prices are not expected to reach previous world price levels for several years. CotonTchad, Chad's cotton production and marketing parastatal, will generate a deficit of approximately \$38 million by mid-1986. This enormous deficit, which equals total annual government expenditures, is diverting valuable resources from other sectors of Chad's fragile, reviving economy.

Despite this unfavorable macroeconomic environment, the recovery capacity of small enterprises and subsistence farms has been noticeable. Small operations have been flexible, able to adapt to market conditions and to thrive in small isolated markets using mostly local resources. They have slowly developed means of providing rudimentary goods and services and generating local employment.

Such diversified free market-oriented activities play a major role in rebuilding the economy. Effective economic development depends on the expansion of small private enterprises, especially in disrupted environments. Small enterprises require relatively

little capital investment or business sophistication and allow for wide distribution of economic benefits to low income and rural populations.

Furthermore, employment and other benefits derived from investment activity in other areas such as roads, water management systems, petroleum resources and education will generate additional income and result in an increased demand for goods and services provided by small businesses. VITA plans to encourage these businesses in both urban and rural environments. The expanded VITA/PEP loan activities will thus promote economic integration and will complement other planned development activities.

In these circumstances, small enterprise encouragement is a logical and appropriate development strategy for Chad. The original VITA/PEP project, which began in 1984, was designed to assist entrepreneurs with few resources to establish new enterprises of all types, primarily retail. The project has accomplished this task successfully. Since its inception, VITA/PEP has been able to provide the systematic disbursement of loans to small farmers and business people in those sectors where investment was most needed. While all repayments have not been received on time and some rescheduling has been necessary for numerous reasons, only six out of ninety-five loans are at the point of requiring legal action. Only one of these has required court action, which resulted in a favorable judgment for the project.

Clearly, small private enterprise encouragement has the potential for succeeding where other approaches would not, especially in the short to medium term period covered by the current project.

## 2. Project Goal

The goals of this project are:

- o to stimulate economic production and private sector growth, especially food production, through the small and medium private business sector in Chad
- o to improve the quality of life for the low income population in the targeted geographic areas.

VITA/PEP will accomplish these goals by providing supervised credit and directed technical assistance to small and medium private enterprises in N'Djamena and selected rural areas whose activities result in an increase in food supply and availability.

Over time, the markets established, the skills gained, and the productivity improvements realized will contribute to the infrastructure needed for Chadians to cope effectively with their environment. Development of a cost-effective Chadian development

credit institution, increased food and other production, greater income generation, and higher levels of employment are among the most significant benefits of this project.

### **3. Project Purpose**

The purpose of this project is to enhance private sector productivity by;

- o providing both urban and rural small and medium enterprises (SMEs) with credit, management and other direct technical assistance, and market information; and
- o incorporating the established supervised credit program into the Chadian financial system through the selection and implementation of an appropriate turnover mechanism.

The project's credit dissemination activity will focus on providing entrepreneurial support such as business planning, market development, brokering, and problem solving technical assistance to encourage future self-sufficiency of participating enterprises.

The project will also research, identify, and implement a turnover plan which will result in the creation of a continued credit program at the end of the two year time period which will function on a minimal amount of external funding assistance while adhering to project goals.

The development of this detailed turnover workplan will take place during first six months of the project and will identify the logframe in which to follow the remaining 18 months of the project. As mentioned in section IIA., the anticipated results of such a turnover will be affected by the limitations of staff time and project resources.

Section IX, Annex A restates the objectives. Verifiable indicators and monitoring data are also presented to assess the degree to which the project has met these objectives.

### **4. Project Outputs**

By 1988, an anticipated \$693,000 will have been disbursed from the loan fund. This includes capital inflows financed under the project as well as repayments received during the project. An estimated 340 new loans are planned using PVO Development Initiatives Project (PDIP) funding. These will be issued in three basic categories (number of loans in parentheses):

- o N'Djamena market environs small business loans (100)
- o Small non-traditional industrial loans (14)
- o Loans for traditional rural activities (226).

The majority of these loans will target food production, food processing, and marketing activities in the agricultural sector.

Based on Phase I's experience, approximately four jobs will be created for each of the 114 loans extended in the small business sector. Approximately one seasonal job will be created for each of the 226 loans extended the traditional rural sector.

A training and supervisory program will complement VITA/PEP loan disbursement activity. PEP staff will familiarize each of the borrowers in the rudiments, usefulness and potential benefits of business planning and basic bookkeeping. VITA/PEP will also train small farmers in simple accounting and investment principles to improve land productivity.

As a result of this project training, the borrowers will become not only more skilled and more efficient managers, but will most likely transfer some newly acquired entrepreneurial skills to family members and co-workers.

By project completion, a cadre of Chadians will have been trained in small business credit management and credit extending procedures, and a new money lending institution will be operational with little or no expatriate managerial assistance and a proven capability for processing loans at a minimal cost while continuing to operate as a development project and addressing the credit distribution towards the same target population. This will provide clear motivation for long-term program continuation.

The project will also develop a database concerning potential investment areas and the benefits of small enterprise development. The data will be used to evaluate VITA's program and to compare specific VITA/PEP methods to other projects' procedures. This model will be available to other countries and agencies who want to apply it to their own programs. The data collected will be of continued use to the GOC and donor agencies for program planning purposes in Chad.

The following short, medium and long-term outputs will indicate that the project is generating financial as well as economic benefits:

- o Creation and turnover of a viable development credit program which will be incorporated into the Chadian financial system (long-term);
- o Trained cadre of Chadian credit specialists (short, medium and long-term);
- o Administrative procedures in place which permit smooth daily operation of credit mechanism (short, medium and long-term);

- o Proven economies in administrative management (medium and long-term);
- o Maximization of sustainability of revolving loan fund (long term);
- o Financial viability of participating firms (short, medium, and long-term);
- o Increased production and/or profitability in participating enterprises (short-term);
- o Business diversification by participating firms (short, medium and long-term);
- o Adoption of improved business practices by participants (short, medium, and long-term);
- o Increased full-time, part-time, and/or seasonal employment (short, medium, and long-term);
- o Increased income of employees in participating enterprises (short, medium, and long-term);
- o Stabilized consumer prices for goods and services (long-term);
- o Continued demand for enterprise credit by small production and service/processing enterprises (short, medium and long-term);
- o An increase in the number of participants in the loan program over time and in the total amount of funds loaned (long-term);

## 5. Project Issues

Several issues arise regarding VITA/PEP operations that undoubtedly affect small to medium business credit programs in most very low income countries. These are:

- o Conflict between development and profitability objectives: the requirement that all project costs be covered by borrowers considerably undermines development objectives expressed in the PDIP, particularly in a deteriorated economic environment such as Chad's; and
- o Project turnover mechanism: There is no local institution which currently can absorb all PEP loan activities after the VITA/ PEP program ends. Only two commercial banks are presently functioning and cannot profitably offer the same project services to SMEs. Chad has no development bank.



The GOC is not currently able to support an indigenous development bank that would permit it to offer services at the current project level.

**Conflict Between Development and Profitability Objectives.** A fee structure that takes into account inflation and default risk would maintain the real capital level of the fund and allow it to maintain current levels of assistance to other enterprises. A fee structure which also takes into account operating costs would prevent recurrent cost problems. However, such a model can be

applied effectively only in reasonably integrated economies where diversified financing and investment possibilities and a fairly competitive market structure exist.

Many factors impede full recovery of the capital costs of these projects in very low-income countries, particularly for projects which involve smallholder agricultural loans.

These factors are:

- o Small and often medium sized enterprise loans require close supervision to assist them with technical and business management problems. This is labor intensive and therefore costly;
- o Chad's fragmented markets and unreliable supply and marketing channels create a very risky business climate. Few enterprises have the means to reduce this market risk.
- o Agriculturalists face tremendous seasonal risks and are subject to natural disasters which particularly affect small farmers with little available capital.

Overemphasis on project profitability creates perverse incentives for credit fund managers to lend only to the wealthy and to producers of high value consumer goods. This counteracts development goals of creating employment through SMEs, encouraging agriculture, developing urban/ rural market links, increasing available capital and raising the standard of living.

A well planned credit program such as VITA/PEP trains its clients to anticipate business risks, to assess costs and revenues, to improve operating efficiency, to identify suppliers and sellers, and to gain a rudimentary understanding of the demand for goods and services. Often clients will require specific, technical support. When the project can supply this need through training and technical assistance, it creates a skill base on which society can draw. Expecting the borrowers to cover the entire cost of the loan program assumes that they should be paying for program components which have a much larger socio-economic impact.

VITA has developed loan criteria and operating procedures to achieve cost-effective management of the new loan fund while meeting the developmental objectives of the USAID/PDIP. This program may still require capital inflow to maintain its operating level after the project's completion. This inflow will not subsidize the direct cost of capital to the borrower, but will serve only to cover the additional costs of providing highly supervised credit and technical assistance for SMEs. These are costs which are over and above normal management operations and should not be considered when determining the ratio of operating costs to dollar loaned.

**Project Turnover Mechanism.** The final turnover of VITA/PEP activities to a Chadian institution will require careful planning. PEP to date has successfully built a trained, experienced Chadian staff, and developed organizational procedures and an organizational identity.

Several turnover options exist. These include, but are not limited to:

- o Institutionalizing the project, with its Chadian staff, loan portfolio and other assets as a Chadian development organization with a Chadian director with minimal funding from USAID and/or other donors.
- o Having a commercial bank continue the project at currently planned or greater operating levels with USAID and/or other donors maintaining and separately funding the existing supervised loan program from the bank's commercial portfolio. If the bank can determine a cost-effective way of including some productive enterprise loans in its commercial portfolio, it could assume a development bank role;
- o Transforming the current project and assets into a more formalized national development bank with some sort of donor funding; or
- o Curtailing current project activities and having a commercial bank manage the existing project assets and loan portfolio for the GOC until complete phase-out is financially warranted or closing down the project at PACD.

The first six months of the project will include a formal review of these and other turnover options which will result in a detailed workplan indicating how VITA intends to institutionalize the project. The workplan will be presented to the USAID Mission in N'Djamena at the end of month six.

### C. PROJECT COMPONENTS/FUNCTIONAL ELEMENTS

The project has four components:

- o The lending organization and structure;
- o The loan and operations fund;
- o Technical assistance activities; and
- o Institutionalization of the credit program.

Section VI.A and Section IX, Annex E and Section II.B. discuss the first, third and fourth components in detail. This section will focus on the loan operation.

The total budget for this project is \$2.5 million. Total funding requested from USAID is \$1.2 million plus \$600,000 from the Chadian PL480 local currency fund. The loan fund will total \$693,294. These funds will be released over the next two years.

The organization of the new project is based on lessons learned from VITA/PEP. The budget for that project was \$1,432,000. The loan fund portion of the budget totaled \$400,000.

During the start-up phase no data was available regarding the impact of potential risk factors, economy-wide inflation rates and repayment rates over time. Repayment rates have varied widely not only annually but also monthly. No formal lending market existed at project startup; no comparable rates were available as benchmarks to lending competition.

Over the first two years of the project, the borrowers had achieved a repayment rate of 89%. Of the 252 payments due by December 31, 223 had been received. By December 1985, value equivalent to the original loan fund had been disbursed, plus a portion of the interest and principal repayments which exceeded \$100,000.

The project's 12% interest rate was determined through discussions with Chadian banks, the GOC, and other experts on Chadian economic conditions and development needs. The 12% figure was agreed to as an initial rate to encourage program acceptance by borrowers and in recognition of the loan program's developmental aspects. Commercial banks charge 12% on financing through the Central Bank. Loans made from their own limited funds carry a rate of 15-18%.

During the next two years, VITA/PEP will experiment with a variety of cost reduction measures to provide for the sustainability of the credit system beyond project completion. These may include, but are not limited to, variable interest rates, scheduling of loan repayments, redefinition of late payments, user fees, and group lending and collection methods.

**D. PVO INPUTS FINANCED BY AID**

Following are the inputs financed by USAID:

1. **Long Term Technical Assistance (TA):** 48 person months  
Project Director 24 person months  
Assistant Project Director 24 person months

Responsibilities: direct the development, organization, administration and implementation of the project. The current project director and assistant director will remain with the project.

2. **Short Term Expatriate TA:** 11 person months  
Agronomist/Agroforester: 4 person months

Responsibilities: work with Chadian counterpart agronomist to impart practical knowledge and skills. Determine Chad's agroforestry needs and recommend inputs and practices for fuel, lumber, and forage production in the Soudanian, Sahelian, and Saharan zones of Chad. Train local staff in agroforestry practices.

Experience: US agronomist with broad field experience in sub-Saharan environments.

- Marketing/Commercialization  
Specialist: 3 person months

Responsibilities: determine Chad's major areas of comparative advantage in the world export markets. Research all major productive sectors. Survey European and other neighboring African countries for potential markets.

Help identify new opportunities for PEP clients, make market information available to participants, commercialize the technologies developed with VITA for use in Chadian enterprises.

Experience: Marketing expert with experience analyzing African markets.

- Computer Expert: 2 person months

Responsibilities: design and establish a computerized management information system and train project personnel in efficient entry, retrieval, and analysis of project data.

**Experience:** Knowledge of personal and microcomputers, as well as of spreadsheet and project appraisal software and applications. Experience in training developing country nationals.

**Miscellaneous TA:**

1 person month

This consultancy may be filled by a credit management specialist if it is determined that the project needs additional expertise to identify and implement cost minimizing loan management procedures and to train Chadian personnel in long term program management.

### 3. Local Staff

The local staff will consist of twenty employees, thirteen professionals and seven support staff plus temporary help as needed, as shown below:

4 loan officers	1 collection officer
3 loan monitors	1 accountant
1 agriculturalist	1 bookkeeper
1 economic analyst	3 secretaries
1 office manager	3 drivers
	1 messenger

These personnel will service the N'Djamena area and Bongor. They will also handle increased activity generated by collaboration with other donor credit programs.

The office manager will coordinate loan office or staff activity. This position may include overall program direction although this will be determined by the precise nature of the turnover mechanism selected.

### 4. In-Country Staff Training

- o Computer training
- o Loan program management training
- o Specialized technical training, e.g. small-scale irrigation.

### 5. Commodity Acquisition

The project will procure the following items:

Commodity	Geographic Origin
1 Toyota Land Cruiser	Cameroon code 935
3 motorcycles	local - off the shelf
4 air conditioners	local - off the shelf
2 sets office equipment	local - off the shelf
2 sets bedroom furniture	local

## 6. Other Costs

The following operating costs have been budgeted: office space, building/vehicle maintenance, travel, per diem, office supplies, communications, home office salaries and project evaluations.

## 7. Contingency/Inflation

- o Contingency: 10% of total direct costs has been budgeted.
- o Inflation: 5% has been budgeted.

## E. VITA INPUTS

Since the project is expanding into new enterprise sectors VITA Volunteers' technical skills will be needed in a variety of fields to supplement on-site technical expertise. Increased requests for by-mail technical information will be handled through VITA's volunteer data base and VITA's technical information service. One hundred and forty (140) skills applicable to the project's loan activities have been identified. The VITA budget includes an anticipated minimum of 150 technical by-mail inquiries (See Section IX, Annex C).

Budget transportation and per diem provisions have also been made for 8 field visits by VITA Volunteers to provide short term technical assistance in areas ranging from computerized information management to animal husbandry.

VITA publications and documents from VITA's appropriate technology library will be available at the project office to provide information and guidance on many recurring questions.

## F. OTHER INPUTS

A portion of the funding for this project will be received from sources other than direct US Government (USG) support. These funds are:

Year One:	Risax Local Currency Grant No. 1	\$235,294
	Risax Local Currency Grant No. 2	299,031
	Turnover USAID loan fund repayments (principal & interest):	160,000
<b>Subtotal:</b>		<b>\$694,325</b>
Year Two:	Repayments USAID loan fund:	160,000
	Risax Local Currency Grant No. 2	299,030

**Subtotal:** 459,030

**Total estimated non-USG contribution:** \$1,153,355

VITA will work with the Chadian Ministry of Agriculture and the ONDR to provide loans for ox-plows to the rice farming population participating in the Ministry of Agriculture's Casier B project. The Ministry of Agriculture guarantees these loans.

VITA will also work with CARE, Africare, IHAP, and ORT to assist these organizations with the set up and management of the loan components of their projects.

### **III. COST ESTIMATES AND FINANCIAL PLAN**

#### **A. SUMMARY COST ESTIMATES**

The total estimated budget for the new two year project is \$2,546,574. Total USAID funding requested for this project is \$1,799,580. The project will maintain its geographic area of operation in a radius of 60km around N'Djamena. The loan fund will increase from \$400,000 to \$693,294

Major budget categories are estimated as follows:

o Personnel (expat, home office, local, short term TA. Includes allowances, travel, per diem)	\$1,027,188
o Project Equipment	104,669
o Other Direct Costs (maintenance, supplies, communications, evaluations)	122,684
o Contingency	114,987
o Overhead	430,052
o Loan Fund	693,294
o VITA Volunteer services	53,700
o <b>TOTAL</b>	<b>\$2,546,574</b>

Detailed cost estimates are found in Section IX, Annex C.

#### **B. FINANCIAL PLAN**

VITA/Arlington will communicate on a regular basis with VITA/N'Djamena. All financial reports will be submitted promptly to USAID/N'Djamena at the end of each reporting period by the VITA/PEP Chief of Party and VITA/Arlington. VITA/Arlington's

accounting office will retain all original receipts for field expenditures. The Project Director in Chad will keep copies of all receipts for expenses incurred in the field. VITA's controller will be responsible for all matters relating to the payroll, with the exception of locally hired staff members. The controller will be directly accountable to the VITA/Arlington Program Officer. The controller will also be responsible for certifying all financial reports submitted to USAID.

VITA's accounts are reviewed annually by an outside independent auditor. This can be verified through AID's Office of Private Voluntary Cooperation.

VITA requests that the AID portion of the project financed with PVO Initiatives funds be added through an amendment to VITA's Federal Reserve Letter of Credit in the amount of US dollars available for obligation under this contract and against which the contractor may present payment vouchers.

Non-USG contributions will include remaining loan funds (approximately \$235,294) carried over from PL480 funds received in the latter part of the original VITA/PEP contract, \$600,000 in PL-480 funds as well as the value of loan principal and interest repayments (approximately \$320,000). The value of the equipment already purchased with PL480 funds will remain an integral part of VITA/PEP assets to be used from the RISAX II project during the implementation of the new project.

#### **C. COST ESTIMATES OF OTHER INPUTS TO THE PROJECT**

Cost estimates of other inputs to the project are detailed in Sections II.E and F.

### **IV. IMPLEMENTATION PLAN**

#### **A. IMPLEMENTATION RESPONSIBILITIES**

##### **1. Volunteers in Technical Assistance, Inc. (VITA)**

VITA will be responsible for:

##### **Loan program management.**

- o client identification and selection
- o loan disbursement
- o management assistance
- o repayment monitoring
- o loan collection.

**Technical Assistance/Training.** VITA will program 11 months of short term technical assistance.



**Computerized Information Management.** VITA will design and implement a computerized information management system to facilitate internal management decisions, project evaluations, loan fund monitoring, coordination of technical assistance, and acquisition procedures.

**Other Donor Coordination.** VITA will establish a close working relationship with the BTCDD to operate a joint loan program for the disbursement of monies from the European Development Fund. VITA will also increase coordination with the FAO and other donors.

**Project Turnover.** The selected Chadian counterpart organization will be trained and equipped to take over the management of the PEP program at project completion.

## **2. Government of Chad (GOC)**

**Ministry of Plan and Reconstruction.** The Ministry of Plan will continue to perform a liaison and oversight function for VITA/PEP. The Ministry will also direct donor proposals to the appropriate GOC organizations.

**Ministry of Agriculture.** The Ministry of Agriculture will be closely associated with loan implementation activities in the casier programs. The ministry will act through the ONDR to provide necessary inputs and technical assistance to the farmers. In the case of the Bongor Casier B program, the local prefect actively supported the loan program and was willing to enforce legal action on defaults. The same level of support will be required from the ONDR and other local prefectures if the project is to assist the agricultural casiers which have indicated they would like to participate. Surveys of the new areas should determine that this support is available.

## **3. United States Agency for International Development (USAID)**

USAID/Chad will:

- o provide general in-country support and monitoring
- o report project activity and progress to AID/Washington
- o provide funding
- o coordinate project evaluation procedures.

## **4. Other Local Loan Program Management Relationships**

**Banque Tchadienne de Credit et des Depots.** The BTCDD acts as the VITA/PEP loan disbursement and collection agent and will continue to do so under the new project. The BTCDD has also coordinated contacts between VITA and the local business community. In addi-

tion, VITA and the BTCDC are organizing a joint loan program, for which the BTCDC would provide the major portion of the funding. VITA would contribute its loan management expertise and a smaller portion of the funding. This will expand the VITA/BTCD relationship and provide an opportunity to develop a revised set of lending procedures designed especially for the bank's needs.

#### B. Other Donor/NGO Collaboration

CARE, IHAP, Africare, and FAO have already expressed interest in VITA/PEP assistance in planning or managing small agricultural and commercial loan programs. These organizations are emphasizing agricultural loans in remote areas of Chad. VITA has tentatively agreed to help, provided that VITA can maintain its

primary commitments and that these organizations contribute to VITA/PEP's overhead as well as the direct costs incurred in the management of their loan funds.

#### C. PROCUREMENT PLAN

VITA adheres to the following acquisition procedures:

1. Local and Code 435 procurement is provided for through a waiver in the basic PVO Development Initiatives Project.
2. Section II.D contains an illustrative list of the commodity categories. These include:
  - o Long/short term technical assistance
  - o Vehicles
  - o Local furniture/supplies
  - o Air conditioners
  - o Computers
  - o Other office equipment.
3. VITA/PEP will handle local and code 435 acquisition. US acquisition services will be supplied by VITA home office.
4. VITA's acquisition policy requires for purchases:

Greater than or equal to \$500	Written competitive quotations
More than \$100 but less than \$500	Written competitive quotations preferred, but oral quotations accepted with proper backup for the file

Under \$100

No documentation  
required

A supplier is selected on the basis of responsiveness and responsibility. The project director will initiate all project purchases. Except for shelf item goods, VITA/US will handle all project purchase requirements, such as quotations, purchases, shipments and insurance. A US agent will handle shipping. Sea shipments will arrive in Chad via Cameroon or Nigeria. Air shipments will arrive via Paris.

## V. MONITORING PLAN

### A. PVO PROJECT MANAGEMENT

#### 1. In-Country

The professional staff, which includes the Project Director, Assistant Project Director, loan officers, and agricultural technicians, will implement and monitor the loan program. They will perform the following monitoring activities:

- o data collection
- o selection of loan applications
- o ongoing review and analysis of program data
- o evaluation and monitoring of loan status
- o identification of client needs to target technical assistance
- o monitoring of loan impact on financial status of client enterprises
- o monitoring of benefits generated by loan program
- o revision of monitoring procedures based on feedback from program participants and analysis of data previously collected.

#### 2. Home Office Support

VITA's home office project support will be directed by a program officer experienced in all aspects of contract management. VITA's unique database of volunteer skills and its broad technical information service will support project activities.

**Project Management.** The VITA home office program officer will provide coordination and management oversight in the following areas:

- o negotiating and subcontracting
- o recruiting (long and short-term technical assistance, volunteers)
- o acquisition
- o arranging and monitoring all travel and shipments of equipment

- o reviewing all narrative and financial project reports
- o fielding inquiries for technical information and selection of VITA Volunteers to respond; obtaining and transmitting training materials
- o preparing project budgets and monitoring fund transfers
- o monitoring project progress in relation to the project schedule
- o briefing AID/Washington and evaluation team members
- o coordinating liaison with other donor/NGO agencies active in Chad
- o organizing and coordinating an advisory council of selected volunteers who will monitor project technical activity during the project's life span.

**Publication and Editing.** VITA's publications department will edit major reports for style and clarity. The department will also prepare training and dissemination materials.

**Technical Inquiry Coordination.** All requests for technical information will be directed through VITA's technical inquiry coordinators for response. These coordinators have access to VITA's technical information center containing one of the world's foremost collections of documentation on appropriate technology. VITA responds to an average of 2500 requests per year for technical information. VITA expects to receive a minimum of 300 inquiries from Chad as a result of project activities over the next three years.

**Volunteer Participation.** VITA Volunteers will contribute the following services:

**Short term technical assistance:** The budget includes trips for 8 volunteers to the project site. These volunteers will be selected from among VITA's computer roster of over 4,400 skilled technicians. VITA home office has already identified the technologies likely to be of interest to VITA/PEP. Volunteers will be sent out to assist the larger groups of entrepreneurs who share similar technical problems.

**Volunteer advisory council:** VITA home office will select appropriate VITA volunteers to form an advisory council to monitor and assist with the technical aspects of the project. These panel members will be kept informed on field activities and will provide comments and suggestions as they feel necessary or as they are requested. They will communicate with the program officer and with each other to discuss project related matters.

**By-mail technical inquiries:** as stated earlier, VITA Volunteers will be asked to respond to field requests for technical information.

## **B. AID LIAISON**

**Field contact.** Contact is maintained between VITA/PEP and the AID mission. A direct hire AID General Development Officer manages the PDIP and the subprojects funded under it.

**Home office contact.** The VITA home office program officer will continue to maintain regular contact with the AID/Washington Chad desk and project officers.

## **C. GOC PROJECT MANAGEMENT**

**Ministry of the Plan and Reconstruction** The Ministry of the Plan handles liaison and ministerial coordination for the VITA/PEP project. VITA gives the ministry quarterly updates on project activity. The ministry will continue to function in this role.

**Ministry of Agriculture.** The Ministry of Agriculture coordinates activities specifically related to Casier B activities. It has no direct oversight responsibility for VITA/PEP.

## **D. REPORTING**

**Progress.** Quarterly reports are provided to USAID/Chad. VITA/PEP also provides data for the Mission's semi-annual project implementation reports to AID/Washington.

**Financial.** VITA home office provides quarterly financial reports showing both field and home office expenses.

## **VI. SUMMARY ANALYSES**

### **A. SUMMARY TECHNICAL ANALYSIS**

#### **1. Technical Approach**

As the PEP project expands, it will involve more entrepreneurs in more diversified fields. The staff will receive ongoing technical training to increase their ability to make reasonable judgments on technical loan proposals, access detailed technical data, and supply borrowers with basic information and assistance with technical problems.

The project has now reached the stage where training is particularly important. Not only will staff continue to receive technical training, but they must also continue to provide borrowers with business and organizational management assistance. The VITA/PEP Chadian professional staff has been performing these services to meet borrowers' needs and will continue to do so under the new project. However, the services they provide will increase in scope and content as the project expands. The project will therefore increase its capability to provide training in the following:

**Accounting and Financial Planning.** Borrowers will continue to be trained in basic, single entry record-keeping of expenses and income. They will also learn to examine alternative supply sources for quality service and cost, changing customer demand, marketing strategies, and business costs and income.

**Capital and Inventory Management.** Loan clients will continue to receive monthly visits from project loan officers. These visits verify whether or not a client is using the loan funds in accordance with the enterprise plan, if the inventory or technical inputs needed to run the business are present, and if income is matching or exceeding costs.

**Marketing Analysis/Investment Planning.** Borrowers will be trained in basic marketing strategies. The areas of primary focus are:

- o identifying wholesale and retail operations
- o identifying the most profitable point of sale (e.g. farmgate or marketplace)
- o determining which product qualities increase profitability (e.g. type of grain, upgraded packaging, increased processing)
- o calculating a fair profit range
- o determining what percentage of enterprise-generated income should be reinvested in the business
- o identifying capital available for business expansion.

A marketing specialist will provide short-term technical assistance in these areas. He/she will also assist with new loan sector identification and identifying methods of obtaining access to Chadian market information.

## **2. Agricultural Sector Development**

VITA/PEP will provide local and short-term technical assistance to fill the farmers' basic needs for technical services and information. These needs become more apparent as the project moves into more remote production areas. Donors have now begun to focus on developing needed food production and processing technologies.

Neither the GOC nor the local donor community have sufficient resources available to support the farming community. PEP already has the infrastructure to begin a limited outreach program and must start by providing the technical services and financing it has available. A realistic evaluation must be made of the extent and cost of this support. In addition, farmers' abilities to repay loans will be based on projected agricultural yields and net incomes.

The project plans to consider many types of agricultural sector assistance, investment, and development to increase borrowers' profits. The possibilities include assistance and investment in production techniques, farming equipment and maintenance, irrigation, livestock, fishing, and agroforestry.

Crop production can be enhanced with modest investment, simply by adopting different agronomic practices and improving resource management.

Farmers also need simple land leveling and farming equipment, and the resources to maintain this equipment. Plans are available for local manufacture of equipment such as ox-drawn plows and oxcarts. The Casier B rice project currently operates only one of its many peddle threshers as the rest require repairs.

Water availability limits the usefulness of all other agricultural inputs. Therefore, efficient water use must be planned and prepared for in order for irrigated farming to be financially successful. The Technical Section of the PDIP paper fully discusses Chadian irrigation projects. PEP will provide one local and one expatriate agronomist to specifically address irrigation problems.

The livestock industry has good business potential. Poultry, cattle, sheep, and goats and associated animal products are in great demand. Profit margins for efficient enterprises are high. Numerous poultry establishments in N'Djamena have achieved efficient and high quality production. The cattle industry requires investment in animal health and nutrition as well as in improved breeding programs.

Many small and medium scale livestock producers could increase their profits by pooling their resources to improve production and/or marketing efficiency. PEP plans to investigate the possibility of providing credit to entrepreneurs who wish to increase the value of their product by taking responsibility for intermediary operations such as transportation and processing.

Many types of technical interventions will increase agricultural productivity and farmer incomes. The PEP staff must understand the basic technologies applicable to each loan proposal and be able to consult appropriate technical resources to help clients invest in new enterprises and technologies.

### 3. Lending Process

**Loan Selection.** The loan selection process is based on a set of operating procedures developed, tested and revised during the two years of the PEP project. The criteria used in the selection of a borrower are:

- o client's reputation in financial matters
- o client's record with VITA/PEP if not first-time borrower
- o financial viability of the suggested venture
- o availability of a responsible guarantor (primarily for non-agricultural projects)
- o personal factors, such as client motivation, innovation, and enthusiasm
- o impact of the proposed venture on the overall development objectives of the PEP project.

The anticipated increase in the number of borrowers who have previously worked with VITA/PEP will result in lower supervisory and training costs.

If the client clears the initial screening process, the client is then taken through a planning exercise adapted to the enterprise's scale and sophistication. If the results of this exercise show that the client is able to develop and manage such a business, his loan application will be approved. The PEP system ensures that the borrower receives ample funds to cover the costs of establishing or expanding the business.

**Loan Fund Management.** Once the loan has been approved, VITA/PEP and the borrower enter into a contract. It is signed by all parties including the guarantor. The client establishes an account at the BTCD from which the initial loan payment is made and into which loan repayments are deposited. If extenuating circumstances do not permit payment on schedule, rescheduling will be considered. VITA/PEP staff clearly explain repayment procedures to the client during the loan interview. The VITA/PEP program conveys the message in its interaction with clients that accommodations can be made if late payments become necessary, but that payments must be made or the borrower and the guarantor will be taken to court without exception.

Payments are due monthly and are expected to be made on time. VITA/PEP insists on detailed prior notification of delays. Careful records are kept of each loan project.



The project's Chadian loan officers and/or controllers visit each client once monthly to evaluate progress and to give whatever encouragement and assistance seems needed. If necessary, technical and/or marketing assistance is provided.

The key elements of the current project's success are:

- o a well-trained local staff
- o careful selection of participants
- o availability of sufficient initial capital for each loan
- o professional handling of the loan process including the repayment procedures
- o business planning and problem solving services
- o monitoring, motivation and support of the borrower
- o solid relationship with an established financial institution
- o incentive to be eligible for subsequent loans once the borrower's credibility has been established
- o threat of legal action for failure to fulfill contractual obligations.

For the proposed project, VITA/PEP plans to continue encouraging applications from small scale farmers. Some emphasis will continue to be placed on small food processing enterprises.

## **B. SUMMARY FINANCIAL ANALYSIS**

### **1. Small Farmer Loan Program**

VITA agrees with USAID's assessment that many small farmers use resources very efficiently and merit credit assistance. Such assistance can enhance income and increase food security not only for the participants but also for the surrounding community. However, loans to small farmers are generally risky because of farmers' dependence on weather conditions and fluctuating market prices, and administratively costly because of the small size of the average loan.

VITA/PEP's first venture with small farm enterprises began with an agreement with the Ministry of Agriculture to extend loans to small farmers participating in the Casier B rice project. This project involves 2000 quarter-hectare plots on 500 hectares of irrigated land. The project also includes plots on 300 hectares of rainfed land. The FAO coordinates irrigation, technical assistance, and agricultural support.

The small farmers have no major collateral and no financial guarantors. To provide small farmers access to credit, the Ministry of Agriculture guarantees each loan. Local officials witness the loans and assist in following up delinquency cases and loan defaults. Farmers use the loan funds mainly to buy ox plows to till their fields. They also offer this service to their neighbors on a fee basis. The income thus earned is used for loan repayment.

The demand for these loans is clear. Well-plowed land has significantly higher yields. However, plows and plowing services are scarce in Casier B. Although tractors or mechanized roto-tillers have been used to do some plowing, farmers have been unable to afford basic maintenance and repairs. Animal traction plows have proved much more efficient and economical.

There is a ready market for Casier B rice in the surrounding areas. Yields on the Casier B farms are good, averaging about four metric tons per hectare, yet no surplus remains on site. In N'Djamena, just 250 km away, prices per 50 kg bag are double the prices in Bongor. The rice market should therefore continue to be profitable for small farmers.

By participating with the ONDR, VITA/PEP has reduced the risks of business failure and loan defaults for small farmers. Cooperating with the FAO and the Ministry of Agriculture ensures that critical resources will be available as they are needed. This also keeps VITA/PEP staff costs to a minimum.

The traditionally high administrative costs of small farmer loans are held in check not only by the above factors, but also because:

- o borrowers are located in the same region
- o technical assistance is concentrated
- o the borrowers work within a competitive, supportive framework
- o the local government strongly supports the program.

Economic and social benefits are also increased because of:

- o financial benefits concentrated over small areas
- o new business skills gained
- o new income earned
- o new direct/indirect employment generated
- o the growth in market demand.

## 2. Urban Perimeter Enterprise Loans

Only two commercial banks continue to finance commercial production ventures. Because of the years of capital flight and Coton-Tchad's financial crisis, these banks have become illiquid and risk-averse. Commercial credit is scarce even for quick payback

ventures such as trade and retail enterprises. It is almost non-existent for the manufacturing, service, repair, and processing industries.

Despite these conditions, however, entrepreneurs are slowly returning to Chad. To improve the business climate and to encourage investment, the European Development Fund has made available \$2 million to the BTCD for light and heavy industrial lending. The BTCD has informed VITA/PEP that its own staff is not large enough to provide this type of credit. It has asked that VITA/PEP set up a co-financing arrangement. Under this arrangement, the BTCD would provide the major portion of the initial financing and VITA would supply the remainder. VITA would provide close loan supervision as well as technical assistance. Lending procedures would remain essentially the same as those currently used by VITA/PEP. Control mechanisms similar to those used for PEP's N'Djamena loans would also be set up (although these new loans would not be limited to N'Djamena). BTCD's considerable financial experience would direct the more sophisticated business planning aspect of the project. At the same time, the bank would acquire exposure to the VITA/PEP loan management system.

Among the activities that may be included in this loan portfolio are:

- o meat processing and packing
- o fish processing and packing
- o plow manufacturing
- o juice processing and manufacturing
- o packaging manufacture and design
- o tomato paste production
- o nail and barbed wire manufacturing
- o livestock/poultry feed production.

Average loan size is estimated at between FCFA 15 and 50 million. VITA's participation would be between FCFA 5 and 15 Million per loan. Assisting these types of industries would give Chad an important economic boost and help rebuild its financial services sector.

Benefits derived from this joint participation include:

- o generation of concentrated employment benefits and increased income for Chadian families, and
- o increased production and/or value added to agricultural commodities.

A joint program such as this would also decrease VITA's administrative costs per dollar loaned.

VITA's normal loan program will continue to grow. Loans will continue to be issued to urban horticultural producers, small-scale millers, poultry farmers and others in and outside of N'Djamena. New business activities will include fishpond harvesting, agricultural transport, cold storage for agricultural products and irrigation pump and farm implement repair shops. Other small business activities will be considered if they meet the project's financial requirements and its development objectives.

## **C. SUMMARY ECONOMIC ANALYSIS**

### **1. Economic Benefits**

Research has shown that not only do small enterprise loan programs generate net economic returns, but the majority also generate at least a 100% internal rate of return. One project has even shown a rate of return of over 800%.

It is not possible to quantify precisely the new VITA/PEP benefits prior to its operation. However, based on experiences detailed in the recent USAID comparative study "Searching For Benefits," a high rate of return can be anticipated.

This study highlights a number of lessons which can be applied to the new VITA/PEP project:

- o Early generation of benefits in a loan project is achieved by tapping into the structure of an already existing lending agency and getting loan funds into the economy as quickly as possible. This has been the VITA/PEP policy since its beginning. This policy should result in a substantial positive rate of return for the project.
- o Projects that avoid lending to retailers have a much higher positive economic impact. Lending to retailers creates very few backward linkages to other firms. These are critical in benefit generation. No exclusively retail loans will be made under the VITA/PEP project. Borrowers will all be involved in the production of tangible goods and services, which creates links with other businesses.
- o Small business loans generate opportunities for the productive use of excess production and labor capacity. A country showing overall macroeconomic growth has a higher level of demand for goods and services. However, the efficient use of physical and human resources can generate an equally high rate of return even in countries like Chad which lack a positive macroeconomic environment. Thus, since Chad has substantial under and unemployment, as well as underused capital, the opportunity exists for high returns.

- o Benefit generation depends on the financial performance of the participating firms. Good loan programs require:
  - timely loan disbursements
  - repayment schedules tied to realistic cashflow expectations
  - strong individualized business management and planning advice
  - flexible loan rescheduling in proven cases of unforeseeable business difficulties.

VITA's loan program and procedures satisfy all of the above criteria to create positive economic returns.

Participant enterprises operating in local markets generate highest consumer benefits where they can:

- stimulate competition
- increase supply
- force other enterprises in the same market to become more efficient
- maintain performance pressure on the other firms.

If the participating firm can substantially increase a supply of particular goods, consumer prices may actually fall.

VITA/PEP participant enterprises are chosen for their ability to:

- produce scarce goods and services
- generate high profit activity
- operate more efficiently than existing competition.

If their profitability is maintained, these firms should be able to generate significant consumer benefits by increasing competition among suppliers and in turn producing lower prices for consumers.

VITA/PEP's principal objective is to maximize the social, financial, and economic benefits possible in Chad's current economic environment through assistance to the private sector. These include increased income, increased employment and production, backward linkages, and consumer gains. These benefits and the cost-effectiveness of loan delivery will determine the project's overall rate of return.

Section IX.H contains a diagram of how benefits are calculated as well as supporting technical information and comparative project statistics. An illustrative cash flow as anticipated from loans to small farmers on the Casier B rice project is included to demonstrate the loan's direct financial and economic benefits.

## 2. Cost Effectiveness of Loan Delivery System

A major concern of this project is the cost effectiveness of its loan delivery system. This must be balanced against the constant concern that project income cover all administrative costs and capital fund erosion. All comparative evaluations in recent years have shown that small enterprise loan projects are seldom viable on a purely financial basis. However, all but a very minute fraction of projects have generated internal rates of economic return exceeding 100%. The reason for the wide divergence between financial and economic returns is often the presence of imperfectly competitive markets in developing countries. Market constraints such as policy distortions, poor market information, immobility of production factors related to fragmented markets, and regulated borders help account for this difference.

The expansion of the total loan fund will help spread fixed and operating costs over more loaned FCFAs. Investments are by necessity made in lump sums, and quarterly amounts loaned are not yet stabilized enough for total costs to be covered by interest income in the near future. For the same reasons, financial performance ratios will not immediately show a clear trend of improved cost-effectiveness.

On an annual basis, however, a discernible trend of an increasing ratio of interest income to project costs will be apparent, as will the declining average program costs per FCFA loaned.

To increase financial and economic benefits as well as to improve the cost effectiveness of the loan delivery system, VITA/PEP will continue to focus on reducing decapitalization, increasing the average interest income on the loans, and reducing administrative costs per FCFA loaned. The following approaches will be explored to minimize costs:

- o Reduced capitilization through increased repayment rates and variable interest fees (e.g. 15%)
- o Incentive structures such as linking repayment performance to access to new loans
- o Shortened time between application and loan disbursement
- o Continued emphasis on streamlining loan procedures
- o Quicker turnover of principal
- o Expansion of loan fund relative to fixed costs
- o Minimization of loan defaults and delinquencies through close supervision and recourse to the legal system when necessary.

The successful generation of economic benefits depends on the establishment of successful business activities which could not have existed without the program. To achieve this, certain elements such as expert expatriate technical assistance, directed local technical assistance, up front investments, close loan supervision, careful monitoring, market analysis, and thorough program evaluations are necessary. Although these program costs are initially unavoidable to generate maximum economic returns, many of these will be eliminated or reduced to achieve maximum financial cost effectiveness once the project has demonstrated its financial viability.

### **3. Internal Rate of Return (IRR)**

Similar projects have achieved a range of internal rates of return from 136% to infinity. Given VITA/PEP's strong adherence to previously outlined principles for generating economic benefits (See Section IV.C.1) and Chad's macroeconomic condition, VITA conservatively predicts an IRR of approximately 115% for the project.

Considering Chad's economic situation, such a rate of return is sufficient to justify investment in a small loan program. Careful baseline data will be maintained to permit accurate monitoring of the project.

This rate of return will increase even more if the assumptions made in the project logframe prove correct and if project activities can be successfully continued by a national counterpart agency after the completion of the PDIP.

### **4. Marketing Issues Concerning Food Production and Food Related Businesses**

Project-financed food producers generally have ready access to local markets. However, producers in the N'Djamena area complain about transportation bottlenecks and low farmgate prices. Retail food prices reflect high transportation costs, and are often 100% greater than farmgate prices. Farmgate prices are generally lower the more distant the production areas are from strong demand centers.

High profit margins and production increases in the project areas are encouraging investment in the food transportation sector. Transporters will have the additional incentive of carrying greater loads, thereby lowering unit costs for consumers.

Since rice is a fairly high value grain, the Casier B has had no problem selling it to traders who transport it to nearby towns, villages and eventually to N'Djamena. More efficient transportation would help increase farmgate prices. However, farmers have profited because of the localized nature of the markets and the recent high demand relative to the supply. VITA/PEP plans to

offer these farmers loans to purchase ox carts. They will be able to pool their goods and arrange their own transport to market. If this system proves effective, the number of loans will be increased.

To ensure consideration of marketing issues in enterprise development, VITA/PEP encourages several types of market development strategies. Market surveys are conducted. Marketing-related technical assistance and business planning advice are given to the participants. The need for investment to improve marketing efficiency is considered. If necessary, loans are given for the purchase of trucks, localized animal transport, cold storage facilities, or for setting up vehicle maintenance shops.

There is a proven market for small-scale processing investments. Investments in simple food processing units such as small grain mills add considerable value to grains and are very appealing. Other areas of increased interest are cold storage units, baking equipment, butchery supplies, livestock/poultry feed operations, and juicing/canning facilities. Given the high value-added component of these investments, VITA/PEP will make a number of such loans in each project area. The project's market development analyst and the agronomist will investigate the economic benefits of other types of investments such as seed multiplication.

The project is seeking practical means of generating real income, increased productivity, and real investment despite the marketing constraints and food supply issues. Each of these benefits will in turn generate new investment opportunities. Although the establishment of a strong human and economic infrastructure necessary for further growth requires time, the project will generate significant economic benefits and help stimulate this growth. The agricultural sector will provide the basis for this new growth.

#### **D. SUMMARY SOCIAL SOUNDNESS ANALYSIS**

##### **1. Project Beneficiaries**

**Direct Beneficiaries.** The VITA/PEP loan recipients will be the direct beneficiaries of the program.

These include:

- o small rice farmers
- o small horticulturalists
- o poultry farmers
- o workshop owners
- o N'Djamena area manufacturers
- o other small entrepreneurs
- o target area farmers.



Those who will benefit the most from the loan program are (1) farmers, whose production and savings seriously declined during the recent drought years; (2) small horticulturalists and business people in N'Djamena, who lost their markets, inventories, and fixed assets as a result of military attacks on the city.

The activities which will be financed are primarily ones in which the borrowers already have experience. These either involve the use of simple techniques with which they are already familiar or require slight improvements using local materials and easily acquired skills.

Most beneficiaries are satisfied to date with the overall loan process. The discipline of the repayment schedules is new and disconcerting to some. However, the VITA/PEP staff is trained to understand and to help solve problems as they arise. In addition, the incentive of further loans helps create acceptance of the overall program.

**Indirect Beneficiaries.** Many levels of indirect beneficiaries are also associated with these loans. Family members and co-workers are among the first to benefit through the small businesses' added productivity. Carefully supervised capital inflows will increase the total amount of available employment and income. Consumers also benefit from increased supply effects, sometimes accompanied by price reductions and/or quality improvements. The project may have many other spin-off effects which are more difficult to quantify.

## **2. Acceptance By Institutions/Participants**

Chadian institutions have welcomed the VITA/PEP initiative. The Chadian Government ministries involved with the first project have entirely supported its activities. These are the Ministry of Foreign Affairs, the Ministry of Plan and Reconstruction, and the Ministry of Agriculture. The Ministry of Agriculture, through the ONDR, the FAO, and the local government, has also actively supported VITA/PEP's Bongor project.

The BTCDC has also been extremely helpful with the project's accounts and has suggested a cooperative co-financing arrangement with VITA (See Section IV.A.4). The bank has also agreed to monitor any outstanding loans after the project's completion date.

Prominent business and university figures have publicly supported the program. University of Chad faculty members have offered seminars on identification of local credit sources and training in effective credit management. A local business association sponsored a lecture by the Project Director on VITA/PEP and credit in Chad.

Other FVOs, impressed with VITA/PEP's development credit management capabilities, have asked for VITA's advice and/or active assistance in establishing their own credit programs.

The Chadian legal system has supported the project. In the one instance of a loan default, judgment was rendered in VITA/PEP's favor. This decision confirmed the program's recognized legitimacy.

The project has received extensive media coverage. The VOA carried an interview on VITA/PEP. The project was written up in the New York Times. The local press has given it ample and continuous coverage.

Participant acceptance of the project has been clearly demonstrated by local residents' and businesspersons' general awareness of VITA/PEP operations. The program has never had to actively recruit qualified applicants. 523 applications have been received in N'Djamena in the two years since VITA/PEP began operations. Bongor has had a similar experience.

Another sign of program acceptance is the high annual percentage of total loan repayments made relative to those due. Many of the borrowers, having established good credit with VITA/PEP, have received small supplements to existing loans or have been granted new loans. This shows additional acceptance on their part of the terms and procedures of the lending system. VITA will continue to monitor its lending process in a careful, informed manner to protect its social acceptability and appropriateness in Chad.

### **3. Project Impact And Beneficiary Incidence**

VITA/PEP concentrated initial project activities in N'Djamena. Designing and organizing a loan process which was culturally acceptable and balanced the project's development objectives with its financial resources was a lengthy process. This limited the total number of loans as well as the speed with which they could be made.

Ninety five (95) loans have been made to date. Of these, 77 concerned business ventures in the N'Djamena area. The average loan for the N'Djamena area is \$6,000. The geographic area covered in the capital alone amounts to 3,600 square kilometers. Conservatively, assuming an average family size of five for each separate loan customer, VITA/PEP has directly assisted 385 individuals for the N'Djamena area alone.

Loan assistance to small businesses is a relatively inexpensive way to generate employment. Rough estimates based on VITA/PEP reports show an average of three to four new jobs directly created through each loan. This breaks down to between 230 and 300 new full-time jobs and up to 100 seasonal and part-time positions. These figures were obtained by surveying loan

clients. Increased family employment and the net employment effects of backwards linkages are not included in these figures. A conservative estimate indicates that VITA/PEP has assisted over 800 people in two years.

Project loans will be increased by about 114 in the N'Djamena area over the next two years. An estimated 340 people will be affected in terms of jobs directly generated. Consumers and recipients of indirectly generated employment will also benefit. At least 500 more people, members of borrowing families, will also be affected.

The proposed project would also expand the project's rural activity. Twenty trial loans have already been given in Bongor. The new project would increase this number to 226. Benefits from these loans could affect 1000 people or more.

The above numbers are conservative estimates based on project experience, planned activities, and reasonable assumptions. The calculation of the total number of beneficiaries is extremely complex. However, over 600 families, or 3000 family members, should benefit from the new loans. In addition, an estimated 400 new jobs will be created in N'Djamena. The impact of the benefits on the families and employees directly involved should be noted. First, they will benefit from a very noticeable increase in their standard of living and secondly, many will acquire skills which they can market for the foreseeable future.

The beneficiary outlook will improve if the Chadian economy stabilizes and grows. This depends to a large extent on the political environment, which will clearly affect productivity and levels of investment in the country.

#### **E. SUMMARY ENVIRONMENTAL ANALYSIS**

No issues related to a negative environmental impact have arisen since the initial start-up phase of the VITA/PEP small enterprise program. A number of factors exist in the program's structure which minimize the potential for negative environmental impact. These are:

- o Loans are not extended for any projects involving the procurement of suspect chemical agents; the client may, however, decide to obtain these with his own personal resources;
- o A VITA/PEP staff member visits loan project sites once a month to make sure the clients are using the funds for the stated purpose of the loan;
- o The businesses receiving loans are small and are not usually involved with major earth-moving or mechanical activities;

- o Most of the borrowers are involved in rudimentary activities using simple technologies; and
- o Most of the enterprises are involved in activities that currently exist or occurred before the war. No negative environmental determination exists for these.

The potential for salinity problems exists on all irrigated land plots. The technical staff at the Casier B rice farm is monitoring this situation. They are aware of the flushing procedures needed to combat excessive salinity. The VITA/PEP consultant agronomists will also monitor problems of this sort on individual pump farms. The Chari River and Lake Chad waters have a relatively low salt content, which will reduce the potential for salinity problems in these areas.

The introduction of improved agronomic practices in areas financed by VITA/PEP will permit shelterbelt introduction, selective clearing, crop rotations, and intercropping. These practices will have a positive effect on rural tree and ground cover, as well as soil fertility and moisture content. They will help combat the effects of deforestation and/or desertification in areas where VITA/PEP provides assistance.

Although VITA/PEP loans will not finance chemical purchases, Casier B rice farmers frequently use them to improve yields. Four FAO agricultural experts are assigned to oversee the technical efficiency of the Casier B program. FAO applies international standards in conformance with EPA-designated procedures regarding handling, storage and application of such chemicals. However, should it be necessary, VITA's agricultural technical assistant will also be available to monitor and advise the project's individual parcel operators on the use of chemicals.

The REDSO/WCA Environmental Officer will identify potential areas for review under each PDIP subproject. The VITA/PEP project does not appear to contain any negative environmental impact, but REDSO/WCA will have to make the final determination.

## **VII. EVALUATION ARRANGEMENTS**

### **A. IMPLEMENTATION PROGRESS EVALUATION**

VITA will review and modify the regular monitoring and self-evaluation procedures established over the past two years. These procedures keep staff, project managers, and cooperating organizations informed on current project activities and performance.

Current monitoring procedures involve collection and analysis of:

- o basic client information
- o individual business plans
- o market surveys

- o individual and aggregate repayment lists (internal and bank sources)
- o enterprise performance data
- o internal financial documents
- o results of cost minimization efforts.

Complete files are kept on individual loans from initial assessment to final exit interviews. For self-evaluation purposes, VITA/PEP reviews various files out of these data on a quarterly basis. VITA/PEP will implement a management information system to allow for more detailed and accurate data collection and storage, and more sophisticated analysis. This will preclude the kind of ex post facto massive data collection and analysis usually required during formal evaluations, and will provide continuous feedback on project performance.

## B. FORMATIVE EVALUATION

USAID will conduct an interim evaluation of the two year start-up phase of VITA/PEP activities including staffing, procurement, organization, financial management, and loan and technical impact during the fall of 1986. VITA will base adjustments in the new project plans and operations on the findings and recommendations of the evaluation.

In early 1988, at the end of two years of proposed project operations, VITA will conduct a low level interim evaluation including both non-project Chadian and VITA expertise. At this time it will be possible to determine what activity, if any, should follow the completion of the proposed project, and any turnover mechanisms required. It will also be possible to assess the impact of the four years total loan program activity in the N'Djamena area. Project activities in other parts of Chad undertaken in cooperation with different PVOs, donors, and GOC entities will also be evaluated at that time.

## C. FINAL/SUMMATIVE EVALUATION

In late 1988, VITA will conduct a final in-depth evaluation following completion of the project. A non-project Chadian and other outside consultants will participate. The evaluation will focus specifically on the success of the daily credit program operation, institutionalization and the effectiveness of cost minimization measures taken by the project. Emphasis will be on activities and lessons learned that can be replicated in Chad and other developing countries.

## VIII. NEGOTIATING STATUS

As discussed elsewhere in the proposal, other PVOs, donors, and GOC entities are requesting the service and cooperation of VITA/PEP. These institutions are waiting for the start of the new project to finalize proposals already in negotiation. No major issues are apparent in these discussions but agreement needs to

be reached on operational details.

VITA and AID have agreed in principle on major project activities and objectives. The total amounts of both AID's and VITA's contributions remain to be negotiated.

VITA has an existing "Letter of Understanding" with the GOC Ministry of Foreign Affairs. This allows VITA to conduct programs in small basic enterprises, agricultural production, farmer resources, reforestation, health and other economic and social areas of high priority in the national development program of Chad. This agreement is for an indefinite period. Either party can terminate the agreement by giving four months' written notice (See Section IX, Annex B). However, the Ministry of the Plan and Reconstruction is required to give its approval for each additional VITA/PEP activity. This includes activity scheduled under the present proposal funded through the PDIP and Risax.

**SECTION IX.**  
**ANNEXES**

**ANNEX A**

**PROJECT DESIGN:  
Narrative Summary**

**SUMMARY LOGICAL FRAMEWORK**

**PROGRAM/SECTOR GOAL**

**MEASURES OF GOAL ACHIEVEMENT**

**MEANS OF VERIFICATION**

**IMPORTANT ASSUMPTIONS**

To stimulate economic production, especially food production, through the small private business sector in Chad.

Net generation of economic benefits related to the project intervention in activity areas related to:

**Measures of Goal Achievement**

Project mid-term and final evaluations; project baseline and time series data on participating firms; national and local statistics on employment levels, business licensing, taxes, and general economic conditions.

**Assumptions for Goal Achievement**

No development of long-lasting civil or military disturbances in N'Djamena or other project area.

A concerted effort on the part of the GOC and donors to mitigate the financial crisis of CotonTchad Corporation.

To improve the quality of life for the low income population in the targeted geographic areas.

- \* Increased Production
- \* Increased Sales - wages, profits, interest, rent
- \* Income Generation
- \* Fixed Assets
- \* Employment Creation
- \* Goods and Services

Rainfall patterns will allow at least limited agricultural production.

The GOC will continue to encourage the development of its private sector.

**PROJECT PURPOSE**

**CONDITIONS INDICATING PURPOSE ACHIEVED AND PROJECT STATUS**

**MEASURES OF PURPOSE ACHIEVEMENT**

**IMPORTANT ASSUMPTIONS**

**Assumptions for Purpose Achievement**

To enhance private sector productivity by providing both urban and rural small and medium enterprises with credit, management and other direct technical assistance, and market information.

Increased productivity and improved financial performance of participating enterprises.

Favorable overall assessment of project objectives in mid-term and final analysis.

The GOC will continue to encourage the development of its private sector. Pricing policies will remain market-oriented.

Sufficient excess demand and/or underused capital, as well as reasonable import substitution opportunities, exist to ensure continued demand for private enterprise credit.

Demand for credit and technical assistance will grow as the private sector expands.



**ANNEX A**

**PROJECT DESIGN:**  
**Narrative Summary**

**SUMMARY LOGICAL FRAMEWORK**

**PROJECT PURPOSE**

**CONDITIONS INDICATING PURPOSE  
ACHIEVED AND PROJECT STATUS**

**MEASURES OF PURPOSE  
ACHIEVEMENT**

**IMPORTANT ASSUMPTIONS**

**Assumptions for Purpose Achievement**

To identify and implement a turnover mechanism resulting in the creation of a viable national credit institution.

Identification and implementation of turnover workplan. The institutionalization of the credit program.

Creation of a viable national development credit institution.

The project will pursue cost-minimization efforts so as to limit the amount of external funding necessary at the end of the project.

**Narrative Summary**

<b>PROJECT OBJECTIVES</b>	<b>OBJECTIVELY VERIFIABLE INDICATORS</b>	<b>MEANS OF VERIFICATION</b>	<b>IMPORTANT ASSUMPTIONS Assumptions for Achieving Objectives</b>
To identify and implement the turnover mechanism resulting in the establishment of a national development credit institution.	Creation of national development credit institution.	Through mid-term and final evaluations based primarily on VITA/PEP records and through periodic VITA interim reports.	Evaluations will be undertaken for this purpose as scheduled.
To train a cadre of Chadian credit specialists.	Effective loan management staff.		VITA/PEP's data collection and storage system is adequate for this task.
To increase the cost effectiveness of loan delivery.			
To minimize loan delinquencies and defaults.			
To demonstrate viability and utility of small business credit.			
To increase producer income.	Increased business profits.		
To create employment.	Number new employees hired or more fully used.		
To increase business production and profitability.	Increased quantity or quality of output and increased profits.		
To generate consumer benefits through lower priced and/or higher quality goods and services.	Decreased market prices of goods produced by project participants.		
To diversify business activities in participating enterprises.	Increase in the type of goods and services produced by individual participants.		

**Narrative Summary**  
**PROJECT OBJECTIVES**

**OBJECTIVELY VERIFIABLE INDICATORS**

**MEANS OF VERIFICATION**

**IMPORTANT ASSUMPTIONS**

To appropriately meet existing small business credit needs at an increasing rate.

Increasing or continued demand for VITA/PEP loans.

To increase fixed and durable capital assets.

Buildings and equipment that remain as assets at project completion.

To promote the adoption of improved business management and technical practices in participating enterprises.

Number of borrowers receiving technical assistance and management training.

## Narrative Summary

PROJECT INPUTS	OBJECTIVELY VERIFIABLE INDICATORS	IMPORTANT	ASSUMPTIONS
	Implementation Target (Type and Quantity)	Means of Verification	Assumptions for Achieving Inputs
Technical Assistance for the development and operation of an agricultural and small business credit program.	Director and Assistant Director (on site) with home office coordination and support staff, engaging in project management and development functions that add to local capabilities.	USAID project evaluation reports, project files, VITA/PEP monthly and quarterly reports.	Project is viable. Recruitment is timely and appropriate. No purely Chadian project alternative exists at this time due to financial/economic situation.
Management advice on enterprise development, market development, agronomic and forestry practices, food production, and marketing.	11 person months short-term TA in agronomy, agroforestry trade and market development, agroforestry, and computer use and management training.	Project budget and financial statements, implementation plan, project files/reports.	Such TA can be recruited and fielded in a timely manner. A need for them exists.
Financial Resources	\$1.2 million budgeted PVO project funds; 600,000 Risax funds; \$693,274 in loan funds.	USAID financial records, project files and reports/records, evaluation, BTCDC account records, ONDR records.	Timely disbursement of funds from USAID; project approval over time.
Equipment and Commodities.	1 Toyota land cruiser, 3 motorcycles, 4 air conditioners, 1 personal computer, 2 sets office furnishings and supplies, furnishings for houses (2 sets), transport, and communication.	Project records, USAID financial reports.	No long term disruption in procurement arrangements, continued availability of office supplies and raw materials in Chad.

## Narrative Summary

### Local Staff.

1 office manager, 4 loan officers, 3 loan monitors, 1 agriculturalists, 1 economic analyst, 1 collection officer, 9 support staff.

Payroll records, personnel evaluations.

All such people are available in N'Djamena and can be recruited and trained in a timely fashion.

VITA Contribution: Technical Volunteers and formal written responses to TA questions.

8 Technical Volunteers field trips; 150 inquiry responses.

Project records, VITA/ARL records, publications received at VITA/PEP, evaluation.

Sources of credit to private business very limited in Chad.

Existence of underused labor and capital in Chad and many people seeking improved livelihood through small business ownership or employment.

VITA has personnel and information sources sufficient to provide a detailed response to all technical questions received.

## Narrative Summary

<b>PROJECT OUTPUTS</b>	<b>OBJECTIVELY VERIFIABLE INDICATORS</b>	<b>IMPORTANT</b>	<b>ASSUMPTIONS</b>
	<b>Magnitude and Measurements</b>	<b>Means of Verification</b>	<b>Assumptions for Achieving Outputs</b>
Loan Offices.	1 main office, 1 branch office	Site visits, project files and reports, evaluation results.	Credit demand will continue and staff can be found to implement the needed office functions.
New Loans made.	340 loans.		The staff can effectively process 170 new loans a year.
Employment Creation	340 full-time jobs.	Monthly visits and project statistics.	3-4 jobs created for each urban enterprise assisted.
Evaluation and planning data re small enterprises and markets.	Complete dossiers on each loan, monthly and quarterly reports, annual aggregations, narrative reports.	Project files and computerized data base, BTCD Bank records.	The loan process will continue to allow time and expertise spent on data collection and analysis; Chadian borrowers will provide requested information.
Trained staff and entrepreneurs.	7 loan experts and other technical staff in place; 114 borrowers using business and technical methods.	Site visits, project files, and computerized data base. Evaluation reports.	The staff development and business management and planning techniques will continue to be found useful, i.e. there are gains to the individuals from both. The existence of specific technical problems and targetted solutions exists. 75% of the borrowers will make use of their training.
Turnover of development credit program to the Chadian financial system.	Institutionalization of credit office.		Overall cost minimization resulting in limited need for external administrative financial assistance.

## **Narrative Summary**

<b>New or expanded enterprises with backwards and forward linkages, expansion in goods and services.</b>	<b>114 new or expanded businesses operating with project assistance.</b>	<b>Project files, evaluation reports, site visits, data on local business conditions.</b>	<b>Financing will be forthcoming as scheduled.</b>
<b>\$693,274 loan fund in active use.</b>	<b>Number and value of loans issued, repayments received.</b>	<b>Monthly and quarterly project reports, annual aggregation, evaluations, BTCDC Bank records.</b>	<b>Potential for greater loan efficiency exists in Chad.</b>
<b>A cost-effective method of small loan disbursement.</b>	<b>Reduced administrative cost per dollar loaned and faster processing of loans.</b>	<b>Final evaluation report, project files and reports, site visits.</b>	
<b>Objectives met and establishment of a functioning counterpart lending institution.</b>	<b>A favorable evaluation regarding economic benefits and measurements of objective achievement.</b>	<b>Final evaluation report.</b>	

**ANNEX B**

**COOPERATIVE AGREEMENT**

**Between**

**The Government of the Republic of Chad**

**and**

**Volunteers in Technical Assistance**



**Cooperative Agreement  
Between  
The Government of the Republic of Chad  
and  
Volunteers in Technical Assistance**

**Article 1.** "Volunteers in Technical Assistance" (hereinafter referred to as "VITA") is a private, non-governmental, non-profit organization, founded in 1959 by a group of scientists, engineers, business people and farmers, with the objective of providing technical assistance to individuals and groups of individuals in developing countries. VITA is duly recognized as a non-profit organization by the Government of the United States of America, and is duly established in the city of Arlington, state of Virginia, with offices located at 1815 North Lynn Street, Arlington, VA 22209. VITA states its willingness to participate, at the request of the Government of Chad (hereinafter referred to as "the Government"), in the implementation of assistance and development programs in areas such as small- and medium-sized enterprises, agricultural production, water resources, reforestation, health, and other areas of economic and social activity of high priority in Chad's national development program.

**Article 2.** VITA's participation will consist exclusively in providing the Government or any government-approved private institutions with financial, material, and human resources approved by the Government, in order to carry out specific projects designed in accordance with Article 1 and agreed to by VITA.

**Article 3.** The Ministry of Foreign Affairs and Cooperation will act as VITA's liaison with the Government of Chad for all projects except those which fall under the direct management oversight of the Ministry of Plan and Reconstruction.

**Article 4.** The Government agrees to provide VITA with any document or information which VITA may reasonably request regarding any project involving partial or full participation by VITA, or any project likely to be financed by VITA.

**Article 5.** The Government agrees to provide VITA with any identifying documents deemed necessary for the legitimate conduct of its operations on Chadian territory.

**Article 6.** The Government agrees to recognize VITA's right to request from its Chadian beneficiaries all receipts and support documents deemed necessary to conform to the administrative requirements of Chad.

**Article 7.** VITA agrees not to engage in any activities considered detrimental to the Government.

**Article 8.** VITA agrees to ensure the good conduct of its staff on Chadian territory and agrees to provide a motivated and qualified staff.

**Article 9.** The Government agrees to authorize entry in Chad, exempt from any import tax or any import customs duty, of any equipment or materials imported or purchased locally by VITA for the implementation and management of VITA's operations in Chad.

**Article 10.** Any service vehicles used by VITA shall be regulated by the temporary entry legislation, within the limits set by the relevant authorities.

**Article 11.** The Government shall exempt any and all non-Chadian personnel employed by VITA and their dependents from any and all restrictions and fees applicable to the registration of aliens, work permits, certificates of registration, and any and all other formalities of the same type.

**Article 12.** Salaries paid by VITA to its non-Chadian personnel shall be governed by the fiscal system applicable to international organizations operating in Chad.

**Article 13.** The Government shall grant any non-Chadian personnel employed by VITA a temporary exemption from customs duties for the importation of their personal belongings, household items and furniture, during a period of six months starting on the date of the first performance of their duties in Chad.

**Article 14.** Each party shall have the right to terminate the present Agreement by sending written notice of one hundred and twenty (120) days to the other party.

**Article 15.** This Agreement shall take effect upon its signature. In witness whereof, the duly authorized representatives of the contracting parties have signed the present Agreement.

For VITA:

Mr. Lawrence E. Williams

Title:

Deputy Director/VITA  
Director for VITA/Africa  
Division

N'Djamena, January 21, 1984

For the GOVERNMENT OF CHAD:

For the Minister  
The Minister of Economy  
and Commerce

Title:

Ali Djalbord Diard

ACCORD DE COOPERATION

ENTRE, D'UNE PART

LE GOUVERNEMENT DE LA REPUBLIQUE DU TCHAD

ET, D'AUTRE PART

VOLUNTEERS IN TECHNICAL ASSISTANCE

---

Produced by the  
National Archives and Records Administration

ACCORD DE COOPERATION ENTRE LE GOUVERNEMENT DE LA REPUBLIQUE  
DU TCHAD ET VOLUNTEERS IN TECHNICAL ASSISTANCE

ARTICLE PREMIER. L'organisation "Volunteers in Technical Assistance" (ci-après désignée sous le sigle "VITA"), société privée, non-gouvernementale, à but non-lucratif, créée en 1958 par un groupe d'hommes de science, d'ingénieurs, d'hommes d'affaires et de fermiers pour fournir une assistance technique à des individus et à des groupes d'individus dans les pays en voie de développement, dûment reconnue par le Gouvernement des Etats-Unis d'Amérique en tant que service bénévole, dûment établie dans la ville d'Arlington, Va., et dont le Siège administratif se trouve 1315 North Lynn St., 22209, affirme sa volonté de participer, à la demande du Gouvernement du Tchad (ci-après désigné sous l'appellation "le Gouvernement"), à la réalisation de programmes d'assistance et de développement dans des domaines tels que les petites et moyennes entreprises, la production agricole, les ressources en eau, le reboisement, la santé et autres domaines économiques et sociaux ayant un caractère de haute priorité dans le programme de développement national du Tchad.

ARTICLE 2. Les interventions de VITA se feront exclusivement sous la forme de mise à disposition du Gouvernement ou d'organismes privés agréés par lui, des moyens financiers, matériels ou humains approuvés par celui-ci en vue de réaliser des projets précis conçus conformément à la volonté exprimée à l'article premier et acceptés par VITA.

./...

- 3 -

ARTICLE 3. Sauf l'exécution et le suivi des projets qui relève de la compétence du Ministère du Plan et de la Reconstruction, le Ministère des Affaires Étrangères et de la Coopération est l'interlocuteur principal de VITA ou de son représentant auprès du Gouvernement.

ARTICLE 4. Le Gouvernement accepte de fournir à VITA tout document et toute information qu'il peut raisonnablement demander sur un projet total ou partiellement assisté par lui ou susceptible d'attirer son financement.

ARTICLE 5. Le Gouvernement accepte de munir VITA de toute pièce d'identité nécessaire à la conduite légitime de son travail en territoire tchadien.

ARTICLE 6. Le Gouvernement accepte de reconnaître à VITA le droit de demander auprès des services tchadiens bénéficiaires de son assistance, toute pièce justificative jugée nécessaire pour satisfaire les demandes légitimes de leurs sources donatrices.

ARTICLE 7. VITA accepte de ne s'engager dans aucune activité jugée préjudiciable au Gouvernement.

ARTICLE 8. VITA accepte de veiller à la bonne conduite de ses employés en territoire tchadien et s'engage à fournir un personnel motivé et qualifié.

ARTICLE 9. Le Gouvernement autorisera l'entrée au Tchad, exonérés de toute taxe ou de tout droit de douane perçu sur les importations, du matériel et de l'équipement importés par VITA ou achetés sur place pour l'exécution et la gestion des opérations de VITA au Tchad.

./...

ARTICLE 10. Les véhicules de service de VITA bénéficieront du régime d'admission temporaire dans les limites fixées par les autorités compétentes.

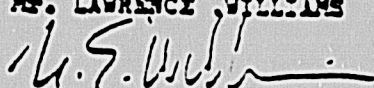
ARTICLE 11. Le Gouvernement accordera au personnel non-tchadien de VITA ainsi qu'à leurs familles, l'exemption de toutes restrictions ou de tous droits concernant l'enregistrement des étrangers, les permis de travail, les permis de séjour et autres formalités du même ordre.

ARTICLE 12. Les salaires versés par VITA à son personnel non-tchadien sont soumis au régime Fiscal applicable aux organisations internationales exerçant au Tchad.


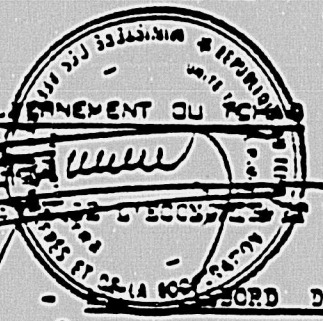
ARTICLE 13. Le Gouvernement accordera au personnel non-tchadien de VITA, le bénéfice du régime suspensif des droits de douane pour l'importation de leurs effets personnels, articles domestiques et mobiliers au cours des six premiers mois à compter de la date de leur première prise de fonction au Tchad.

ARTICLE 14. Chacune des parties peut mettre fin au présent Accord en adressant par écrit, à l'autre partie, un préavis de 120 jours.

ARTICLE 15. -Le présent Accord entrera en vigueur dès le moment de sa signature. En foi de quoi, les représentants dûment autorisés des parties contractantes respectives ont signé le présent Accord.

POUR VITA  
Mr. LAWRENCE WILLIAMS  


TITRE:  
Directeur pour l'Afrique-  
VITA

POUR LE GOUVERNEMENT DU TCHAD  
  
J. B. DIARD  
TITRE:  
Directeur Général des Douanes et de la Régulation du Commerce  


FAIT A N'DJAMENA, LE 21 Janvier 1984

**ANNEX C**  
**PRIVATE ENTERPRISE PROMOTION**  
**COST PROPOSAL**

- Summary of Direct Project Costs
- FCFA Budget
- US Dollar Budget



**ANNEX C**

**SUMMARY OF DIRECT PROJECT COSTS**

	<b>YEAR 1</b>	<b>YEAR 2</b>	<b>TOTAL</b>
<b>I. PERSONNEL</b>	<b>310,437</b>	<b>335,321</b>	<b>645,758</b>
<b>II. ALLOWANCES</b>	<b>184,349</b>	<b>79,620</b>	<b>263,969</b>
<b>III. TRAVEL &amp; PER DIEM</b>	<b>60,650</b>	<b>56,811</b>	<b>117,461</b>
<b>IV. PROJECT EQUIPMENT &amp; SUPPLIES</b>	<b>82,026</b>	<b>22,643</b>	<b>104,669</b>
<b>V. OTHER DIRECT COSTS</b>	<b>36,020</b>	<b>86,664</b>	<b>122,684</b>
<b>VI. VITA VOLUNTEER CONSULTANCIES AND TECHNICAL INQUIRIES</b>	<b>26,850</b>	<b>26,850</b>	<b>53,700</b>
<b>VII. TOTAL DIRECT COSTS</b>	<b>700,332</b>	<b>607,909</b>	<b>1,308,241</b>

PRIVATE ENTERPRISE PROMOTION ALTERNATIVE COST PROPOSAL

(IN US DOLLARS)

	Year 1				TOTAL	Year 2				TOTAL	PDIP EXPEND.	RISAXII 2 YEAR	
	Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4		Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4			TOTAL	EXPEND.
<b>I Personnel</b>													
Long Term Expat Staff	16250	16250	16250	16250	65000	17875	17875	17875	17875	71500	136500		136500
Local	29000	29000	29000	29000	116000	33350	33350	33650	33650	134000		250000	250000
Home Office Consultants	12760	12760	12760	12760	51040	13326	13326	13326	13326	53304	104344		104344
Fringes - (Expat)	35000				35000	30000				30000	65000		65000
Fringes - (Home Office)	5363	5363	5363	5363	21450	5899	5899	5899	5899	23596	45046		45046
Occupancy (16% H.O.)	3445	3445	3445	3445	13781	3598	3598	3598	3598	14392	28173		28173
	2042	2042	2042	2042	8166	2132	2132	2132	2132	8529	16695		16695
Subtotal Personnel	103859	68859	68859	68859	310437	106180	76180	76480	76480	335321	395758	250000	645758
<b>II Allowances</b>													
Post Diff. (20% Base)	3250	3250	3250	3250	13000	3575	3575	3575	3575	14300	27300		27300
Temporary Lodging	1500				1500	1500				1500	3000		3000
Rent/P.D. - 2 yrs	30300				30300					0	30300		30300
Rent/A.P.D. - 2 yrs	29455				29455					0	29455		29455
Rent/Office - 2 yrs	57600				57600					0	6000	51600	57600
Utilities - P.D.	2825	2825	2825	2825	11300	3243	3243	3243	3243	12972	24272		24272
Utilities - A.P.D.	2525	2525	2525	2525	10100	2898	2898	2898	2898	11592	21692		21692
Utilities - Office	4200	4200	4200	4200	16800	4780	2530	2530	2530	12370	17000	12170	29170
Educational Allowance					0					0			0
HHE - Storage	750				750	750				750	1500		1500
HHE - Shipment					0	12000				12000	12000		12000
Air Freight - HHE	6250				6250	7000				7000	13250		13250
Excess Baggage - Staff	1000				1000	1000				1000	2000		2000
Excess Baggage - Cons.	1000				1000	1000				1000	2000		2000
DBA/MedEvac Ins.	1316	851	851	851	3869	1339	874	874	874	3961	7830		7830
Med., Passports, etc/Staff	325				325	325				325	650		650
Med., Passports, etc/Cons.	1000				1000	750				750	1750		1750
Med., Passports, etc/VVS	25	25	25	25	100	25	25	25	25	100	200		200
Subtotal Allowances	143321	13676	13676	13676	184349	40185	13145	13145	13145	79620	200199	63770	263969
<b>III Travel/Per Diem</b>													
Staff Home Office	2900				2900	2900				2900	5800		5800
Consultants	10700				10700	4600				4600	15300		15300
In-Country Travel	7000				7000	7000				7000		14000	14000
Per diem/US/Expat. Staff	1412				1412	1412				1412	2824		2824
Per diem/US/Consultants	1300				1300	1300				1300	2600		2600
Per diem/Chad/Home Office	980				980	980				980	1960		1960
Per diem/Chad/Consultants	12680				12680	12680				12680	25360		25360
VV Travel & Per Diem	11839		11839		23678	11839				11839	35517		35517
Expat Staff - relocation					0				5400	5400	5400		5400
Expat Staff R&R					0	8700				8700	8700		8700
Subtotal Travel/Per Diem	48811	0	11839	0	60650	51411	0	0	5400	56811	103461	14000	117461

96

<b>IV Project Equipment/Supplies</b>														
Office Furn & Equip	10200	3700	3700	1600	19200	1100	1100	1100	1100	4400		23600	23600	
House Furnishing	3000				3000	2000				2000		5000	5000	
Vehicles	37670				37670	5665				5665	43335		43335	
Computer/Peripherals	9000				9000	3500				3500	12500		12500	
Project Equipment	1250				1250	3000				3000		4250	4250	
Shipping	8000				8000	3000				3000	11000		11000	
Procurement Fee (5%)	3456	185	185	80	3906	913	55	55	55	1078	4984		4984	
<b>Subtotal Project Equipment/Supp</b>	<b>72576</b>	<b>3885</b>	<b>3885</b>	<b>1680</b>	<b>82026</b>	<b>19178</b>	<b>1155</b>	<b>1155</b>	<b>1155</b>	<b>22643</b>	<b>71819</b>	<b>32850</b>	<b>104669</b>	
<b>V Other Direct Costs</b>														
Communications	1755	1755	1755	1755	7020	1991	1991	1991	2175	8148		15168	15168	
Office Supplies	7250	7250	7250	7250	29000	5879	5879	5879	5879	23516	12000	40516	52516	
Evaluation Team Costs									55000	55000	55000		55000	
<b>Sub-Total Other Direct Costs</b>	<b>9005</b>	<b>9005</b>	<b>9005</b>	<b>9005</b>	<b>36020</b>	<b>7870</b>	<b>7870</b>	<b>7870</b>	<b>63054</b>	<b>86664</b>	<b>67000</b>	<b>55684</b>	<b>122684</b>	
<b>VI TOTAL DIRECT COSTS</b>	<b>377572</b>	<b>95425</b>	<b>107264</b>	<b>93220</b>	<b>673482</b>	<b>224824</b>	<b>98350</b>	<b>98650</b>	<b>159234</b>	<b>581059</b>	<b>838237</b>	<b>416304</b>	<b>1254541</b>	
<b>VII LESS: PROJECT EQUIP COSTS</b>	<b>72576</b>	<b>3885</b>	<b>3885</b>	<b>1680</b>	<b>82026</b>	<b>19178</b>	<b>1155</b>	<b>1155</b>	<b>1155</b>	<b>22643</b>	<b>71819</b>	<b>32850</b>	<b>104669</b>	
<b>VIII SUBTOTAL</b>	<b>304996</b>	<b>91540</b>	<b>103379</b>	<b>91540</b>	<b>591456</b>	<b>205646</b>	<b>97195</b>	<b>97495</b>	<b>158079</b>	<b>558416</b>	<b>766418</b>	<b>383454</b>	<b>1149872</b>	
<b>IX CONTINGENCY (10% OF VIII)</b>	<b>30500</b>	<b>9154</b>	<b>10338</b>	<b>9154</b>	<b>59146</b>	<b>20565</b>	<b>9720</b>	<b>9750</b>	<b>15808</b>	<b>55842</b>	<b>76642</b>	<b>38345</b>	<b>114987</b>	
<b>X VIII + IX</b>	<b>335496</b>	<b>100694</b>	<b>113717</b>	<b>100694</b>	<b>650602</b>	<b>226211</b>	<b>106915</b>	<b>107245</b>	<b>173887</b>	<b>614257</b>	<b>843060</b>	<b>421799</b>	<b>1264859</b>	
<b>XI OVERHEAD (3% OF X)</b>	<b>114069</b>	<b>34236</b>	<b>38664</b>	<b>34236</b>	<b>221205</b>	<b>76912</b>	<b>36351</b>	<b>36463</b>	<b>59122</b>	<b>208847</b>	<b>286640</b>	<b>143412</b>	<b>470052</b>	
<b>XII TOTAL COSTS (VI+IX+XI)</b>	<b>522141</b>	<b>138815</b>	<b>156266</b>	<b>136610</b>	<b>953832</b>	<b>322300</b>	<b>144421</b>	<b>144063</b>	<b>234164</b>	<b>845748</b>	<b>1201519</b>	<b>590061</b>	<b>1799580</b>	
<b>XIII VITA CONTRIBUTION *</b>	<b>6712</b>	<b>6712</b>	<b>6713</b>	<b>6713</b>	<b>26850</b>	<b>6712</b>	<b>6712</b>	<b>6713</b>	<b>6713</b>	<b>26850</b>	<b>53700</b>		<b>53700</b>	
<b>XIV REVOLVING LOAN FUND *</b>	<b>86661</b>	<b>86661</b>	<b>86662</b>	<b>86662</b>	<b>346646</b>	<b>86662</b>	<b>86662</b>	<b>86662</b>	<b>86662</b>	<b>346648</b>		<b>693294</b>	<b>693294</b>	
<b>XV TOTAL PROJECT COSTS</b>	<b>615414</b>	<b>232188</b>	<b>249641</b>	<b>229985</b>	<b>1327328</b>	<b>415674</b>	<b>237795</b>	<b>238238</b>	<b>327539</b>	<b>1219246</b>	<b>1255219</b>	<b>1291355</b>	<b>2546574</b>	

\* PLEASE NOTE: Neither the VITA CONTRIBUTION nor the REVOLVING LOAN FUND represent PDIP or RISAX monies. For convenience, the VITA CONTRIBUTION is shown in the PDIP column because it represents a dollar value. The REVOLVING LOAN FUND is shown in the RISAX column because it represents an PCFA to dollar value.

**ANNEX C**

**FINANCIAL PLAN  
COST PROPOSAL NOTES**

**I. PERSONNEL/SALARIES**

**A. Long-term Expatriate Staff**

Project Director, Year One: \$38,850 plus  $\frac{1}{3}$  for Year Two and  $\frac{1}{3}$  for Year Three  
Assistant Project Director, Year One: \$23,100 plus  $\frac{1}{3}$  for Year Two and  $\frac{1}{3}$  for Year Three

**B. Local Staff**

4 loan officers	1 collection officer
3 field loan controllers	1 accountant
1 agriculturalist	1 bookkeeper
1 economic analyst	3 secretaries
1 office manager	3 drivers
	1 messenger

**C. Home Office Staff**

Regional Director (15% at \$60,000/yr)  
Program Officer (60% at \$28,000/yr)  
Asst. Program Officer (50% at \$20,000/yr)  
Admin. Asst. (40% at \$16,000/yr)  
Inquiry Coordinator (2 days/mo)  
Misc. Staff (editorial staff, translator, temporary typist, technical assistance, etc.)

**D. Consultants: Professional Fees**

Agronomist/Agroforester (4 person-months, 2 trips)  
Mktg./Commercialization Specialist (4 person-months, 1 trip)  
Computer Expert (2 person-months, 1 trip)  
Miscellaneous (1 person-month, 1 trip)

**E. Fringe Benefits**

The VITA fringe benefit rate is calculated for both home office and long-term expatriate staff at the rate of 27% of base salary. The fringe benefits include health and life insurance, retirement plan, FICA, unemployment insurance, workmen's compensation, sick leave used, and holidays.

## **F. Occupancy**

Occupancy is calculated at the rate of 16% of base home salaries and represents the application of rent expense to employee activities.

## **II. ALLOWANCES**

### **A. Post Differential**

Post differential is calculated at the rate of 20% of base expatriate salaries.

### **C. Rent**

2 years rent are paid in Year One of project.

## **III. TRAVEL/PER DIEM**

### **A. Staff**

(1 round-trip Washington to N'Djamena, \$2900)

Home Office: 2 round trips

Consultants: 5 round trips (including 1 trip to be used as needed)

### **B. In-country Travel**

Estimate for travel to and from N'Djamena, including travel as needed to Bongor.

### **C. Per Diem in USA**

Expat Staff : 5 days x \$121/day

Consultants : 15 days x \$121/day

### **D. Per Diem in N'Djamena**

Home Office Staff: 22 days x \$84/day

Int'l Consultants: 300 days x \$84/day

### **E. VITA Volunteer Travel & Per Diem**

8 trips x \$2900/trip

Approximately 16 days/8 Volunteers x \$84/day

#### IV. PROJECT EQUIPMENT AND SUPPLIES

##### A. Office Furniture/Equipment

Includes two sets of office equipment (\$3350 each and purchase of four air conditioners (\$800 each).

##### B. Household Furniture

Includes two sets of bedroom furniture for three guest houses (\$1200 each).

##### C. Vehicles

Includes purchase of new project vehicle (\$35,000) and three motorcycles (\$1500 each).

##### D. Computer/Peripherals

Includes purchase of one additional IBM XT personal computer (\$5000).

##### E. Project Equipment

Technical equipment needed by Irrigation Agronomist and Agroforester.

#### V. OTHER DIRECT COSTS

##### C. Evaluation Team

Cost for three-person team is as follows:

Total person days	117	
Per Diem: Pre/post consultancy work in US (63 days x \$121/day)		\$ 7,623
In-country (84 days x \$84/day)		7,056
Travel: 3 round trips x \$2900/trip		8,700
Professional Fees: 117 person-days x \$260/day		30,420
Medicals, passports, visas, DBA/SOS, etc.		1,201
<b>TOTAL</b>		<b>\$55,000</b>

## **VI. OVERHEAD RATE**

The VITA provisional overhead rate is negotiated between AID/Washington and VITA. Based on a review of past experience and a projection for the current year, the rate used in the proposal is 34%. Overhead is charged against all direct costs except equipment and materials.

## ANNEX D

## ILLUSTRATIVE COMMODITY AND EQUIPMENT LIST

No.	Item	Source	Cost/\$US
4	Air conditioners	local	3,200
2	Office Furniture & Equipment	local	20,400
2	Bedroom Sets for Guest House	local	5,000
1	Toyota Land Cruiser	Cameroon Code 935	35,000
3	Motorcycles	local	4,500
	Operation/Maintenance of all project vehicles	local	3,835
1	Personal Computer/peripherals	USA	12,500
	Technical Field Project Equipment	USA	4,250
	Shipping & Procurement Charges	USA	15,984
	<b>TOTAL</b>		<b>\$101,469</b>



## ANNEX E

### VITA/PEP STAFF JOB DESCRIPTIONS

#### I. LONG-TERM PERSONNEL

##### A. VITA OVERSEAS STAFF

##### 1. Project Director

The VITA/PEP director is in charge of all aspects of the project's in-country activity. Specifically, he:

- o coordinates project assistance and VITA liaison with USAID/Chad as well as with concerned GOC ministries and agencies
- o identifies an appropriate mechanism for turning the project over to a Chadian institution, designs a detailed workplan to institutionalize the project and implements the turnover
- o develops and oversees staff management training programs
- o develops and implements programs to screen applicants for loan eligibility
- o develops and implements programs to provide management training and technical assistance to borrowers
- o works closely with Chadian institutions to develop cooperative loan program
- o develops and implements pilot loan programs to determine the best means of meeting the needs of each targeted sector
- o identifies program needs
- o requests and coordinates consultant activity, Volunteer resources and use of VITA inquiry services
- o monitors the loan program and tracks late payments
- o initiates proper legal procedures in cases of borrower defaults
- o monitors the ratio between the amount of money lent and operating costs

- o prepares quarterly, monthly and other periodic financial reports for USAID/N'Djamena and VITA/Arlington
- o prepares monthly program activity reports for VITA/Arlington and quarterly reports for USAID/N'Djamena

**Qualifications:**

- o minimum two years LDC field experience in supervised credit, loan fund management or business development
- o ability to monitor loan funds and project operating budget
- o ability to compile and analyze financial data
- o ability to organize and coordinate training programs
- o excellent written and oral communication skills
- o excellent interpersonal and cross-cultural skills
- o ability to relate to USAID and host country officials as well as local staff members, business people, and low-income borrowers
- o experience in small business management
- o an advanced degree in business management and/or economic development
- o fluent French

**Length of Employment: Two years**

**2. Assistant Project Director**

The Assistant Project Director will work directly with the Project Director to assist him in all matters relating to the project and its administration.

**Tasks:**

- o in collaboration with the project director, examine turn-over options and design detailed workplan to institutionalize project
- o design training programs and materials for Chadian counterparts and other Chadian personnel involved in implementation and eventual turnover of the project

- o determine commodity and equipment requirements and prepare specifications for procurement
- o identify needs, make requests and coordinate use of VITA resources (documents, publications, short-term consultants, etc.)
- o provide technical assistance to local businesspeople to improve the products and services they sell
- o assist the Project Director with the preparation of periodic reports to VITA and USAID/N'Djamena

**Qualifications:**

- o LDC experience in credit management, preferably in the Sahel
- o experience in monitoring project financial performance
- o ability to compile narrative, statistical and financial reports
- o ability to design and implement training programs
- o ability to work with host-country nationals
- o a degree in business administration
- o fluent French

**Length of employment: Two years**

**B. VITA/PEP NATIONAL STAFF**

**1. Loan Officers**

- o organize potential client dossiers
- o contact clients directly, before and after loan distribution
- o visit client project sites and evaluate soundness of project
- o present potential project dossiers to administration

- o make monthly project follow-up visits
  - o schedule project site visits by site-checkers
  - o participate in the twice-weekly staff meetings
- 2. Office Manager**
- o coordination of national staff activities
  - o liaison between VITA/PEP and GOC offices when applicable
  - o direct involvement with turnover implementation.
- 3. Loan Monitors**
- o make monthly visits to each loan site
  - o keep project staff up to date on client status
- 4. Agriculturalist**
- o survey major TA needs and problems of farmers
  - o with assistance of expatriate staff, determine which problems can be minimized through short-term periodic consultations such as layout of simple irrigation systems, appropriate choice of equipment
  - o with assistance of expatriate staff, develop system of delivering technical assistance in terms of logistics, scheduling and record keeping
  - o provide technical assistance where needed
- 5. Economic Analyst**
- o perform economic analyses on all potential project dossiers
  - o perform spreadsheet analyses on all applicable project dossiers
  - o determine repayment schedules for all approved loan applications
  - o determine repayment schedules for rescheduled loans as needed
  - o organize sectoral studies (e.g. agriculture, poultry, cereal mills)

- o organize questionnaires for sectoral studies
- o help coordinate VITA/PEP - GOC contacts
- o participate in the twice-weekly staff meetings

#### **6. Accountant**

- o oversee all project fund accounts (currently four)
- o manage project checking accounts
- o administer project national staff payroll
- o report to GOC tax office
- o organize project monthly financial reports to be sent to VITA/Arl
- o handle project liaison with Chadian banks

#### **7. Accounting Assistant**

- o oversee project loans issued/repayments made
- o control aggregate repayment situation for all project loans
- o generally assist project accountant
- o generally assist project controllers
- o administer petty cash

## **II. Short-Term Personnel**

Short-term personnel will consist of:

- o agronomist/agroforester
- o marketing/commercialization specialist
- o computer expert.

See the attached scopes of work for specific tasks and personnel qualifications.

## AGRONOMIST/AGROFORESTER

### A. BACKGROUND

VITA/PEP's supervised credit program provides loans to small and medium scale private business people. These loans emphasize agricultural production and processing. Loan funds are being invested in irrigation equipment and land development.

Agricultural technology, crop cultivation practices, and on-farm water use are sub-standard. This results in marginal yields and minimum or non-existent net profits. Both loan repayments and continued farm operations will be in jeopardy if increased production is not achieved.

Primary production inputs are either not readily available or are being improperly used. Vegetable seeds for the major irrigated crops lack resistance to local disease and insects, and could be better adapted to the Chadian irrigated land environment. Virus diseases are a particular problem. Application of irrigation water to the crops is both untimely and in improper amounts. Land leveling and distribution canals both from the pump and the fields need to be greatly improved.

Agroforestry is not a well established concept in Chadian agriculture though Chad's sub-Saharan location is characterized by wind erosion, desertification and a shortage of wood products. The exception is the ongoing CARE agroforestry project in the Bongor area. Agroforestry along with improved irrigation and crop production practices is seen as a technology to be promoted by the VITA/PEP program. Even the smallest of farms has non-productive areas suited to tree production. There is a strong demand in the country for all tree products.

Agroforestry is seen as a viable basis for enterprises to supplement other farm income and requires comparatively small capital or labor investments. Although there is very little experience or expertise with agroforestry in Chad, the development of agroforestry on loan recipient farms could be a profitable venture. However, very little information specific to Chad is available. The Consultant will have to rely heavily on his experience in similar ecologies to determine needs and make recommendations to develop Chad's agroforestry sector.

## B. TASKS

- o Study irrigation practices in use on surveyed farms and on government projects to determine irrigation practices and identify problem areas. A field trip should be made to neighboring irrigated projects on the Chari river in Cameroon.
- o Make recommendations for appropriate land farming and water distribution systems.
- o Develop or import prototypes of necessary land farming and canal digging equipment appropriate to the small scale irrigated farms in Chad.
- o Make recommendations for the rate and timing of water applications for major crops and soil types.
- o Study the vegetable seed situations and make recommendations for making better adapted and more resistant seed stock available.
- o Observe existing irrigated crop cultural practices and make recommendations for improvement within the constraints of production inputs and technology currently available in Chad.
- o Establish on-farm demonstrations in the major areas of irrigated agriculture of improved:
  - land leveling and water distribution systems with appropriate locally available equipment.
  - vegetable seed better adapted to local conditions than currently available.
  - application of irrigation water with appropriate amounts and timings.
  - cultivation practices for land preparation. Seeding, weeding and harvesting to increase both quantity and quality.
- o Increase the knowledge of all concerned staff of appropriate improved irrigation and agronomy practices.
- o Provide the staff agriculturalists with sufficient training and knowledge to continue, improve and expand demonstrated irrigation and agronomic practices.

- o Survey Chad and appropriate neighboring countries and gather information on local problems and resources (e.g. the CARE project). He will interview people knowledgeable in both areas. He will be accompanied by a Chadian counterpart.
- o Make recommendations for tree species and cultural practices to meet Chadian needs. These should evolve into detailed recommendations showing the inputs and practices required to meet specific needs for fuel, lumber, or forage tree production adaptable to the various major tree production environments of Chad, i.e. Soudanian, Sahelian and Saharan zones.
- o Train VITA/PEP and interested GOC staff in agroforestry practices and introduce them to sources of further assistance for continued development of agroforestry in Chad. Consult with CARE agroforestry staff for local technical information.
- o Establish on-farm demonstrations of practical agroforestry culture in the major Chadian growing environments.
- o Supervise preliminary economic studies of the income potential from various agroforestry enterprises, i.e. fuel, lumber, and forage.
- o Adapt methods from other similar environments and conduct additional agroforestry research as needed.
- o Develop preliminary recommendations for a series of recommendations for fuel, lumber, and forage production in the Soudanian, Sahelian, and Saharan zones of Chad.
- o Based on these recommendations, establish one agroforestry production demonstration in each of the three zones.
- o Work regularly with Chadian staff agriculturalists and provide on the job training in irrigated agronomy.
- o Submit a final report in draft form to the Project Director before leaving the country.

### C. QUALIFICATIONS

- o Extensive experience establishing small scale irrigation projects in the Sahel or in similar environments.
- o Proficiency in basin and row irrigation from surface or well sources using low lift pump or indigenous manual or animal powered devices.



- o Extensive experience in analyzing site specific problems and devising feasible solutions with limited local equipment and facilities.
- o Background in land preparation and establishing distribution systems from water source to crop site.
- o Knowledge of irrigated sub-tropical and temperate crop agronomy and cultivation methods.
- o Ability to interrelate and work closely with host country farmers and technical staff on farm irrigation projects.
- o Expert current knowledge of woody species and applications to the small farm enterprise as one component of a total farming operation.
- o Knowledge of varieties, seed sources and cultural practices for fast growing fuel, lumber, and forage species applicable to Sahelian or similar environments (both irrigated and rainfed conditions).
- o Knowledge of disease, insects, fertilizers and seasonal water requirements.
- o Broad field experience in sub-Saharan environments (humid Soudanian, semi-arid Sahelian, arid Sahelian zones).
- o An advanced degree in agronomy, agroforestry or related studies.
- o Fluent French.

Duration of consultancy: 4 months

The consultancy will be divided into two phases of two months. Phase One will extend over the first two months of the project. Phase Two will take place during the rainy season of Year Two.

The Consultant will report directly to the Project Director.

## **EXPORT MARKETING/COMMERCIALIZATION SPECIALIST**

### **A. BACKGROUND**

As a result of the collapse of world cotton markets, which provided Chad with 80% of its foreign exchange revenues, Chad must quickly find new opportunities for export both in terms of products and markets. Opportunities exist to facilitate this task using both loan capital resources and technical assistance.

### **B. TASKS**

- o Review current and pre-war Chadian exports and exporters, their destination markets, historical and current volumes and values, and marketing channels used.
- o Examine current and anticipated world prices for Chadian products.
- o Analyze world market demand for these products.
- o Identify and assess competing commodity sources in world market and marketing channels used in importing countries.
- o Prepare a detailed report discussing the potential volume and value of Chadian exports over the next 5 years. Include a discussion of the technical constraints on the expansion of export production as well as the market's economic and financial constraints.
- o Recommend policy changes, public and private investments, and technical assistance. These recommendations will include transport, quality control, packaging, advertising, improvements in Chad's marketing approach as well as discuss export-related pricing issues.
- o Review possible import substitution opportunities and recommend means of using them.
- o Meet with existing producers and develop strategies for expanding current exports and/or entering new markets.
- o Contact specific foreign importers to determine their requirements for accepting Chadian exports.
- o Draft a technical report showing how Chadian producers could be induced to begin production of commodities which are not produced locally in significant quantities. The

report will specify technical requirements and other marketing activities needed to enter specific export markets.

- o Review current market activity in the project's operating radius.
- o Review business sectors for VITA involvement.
- o Inform clients on the financial benefits and technical aspects of new or modified technologies.
- o Advise clients on how to overcome market constraints and develop appropriate marketing strategies.
- o Identify specific investment opportunities.
- o Submit a final report in draft form to the Project Director before leaving the country.

### C. QUALIFICATIONS

- o Extensive experience in export markets, particularly in Europe, North Africa, and the Gulf States, for manufactured and agricultural products.
- o In-depth knowledge of products, world prices and trends, quality and supply reliability issues, as well as familiarity with companies handling Sahelian exports.
- o Advanced degree in agricultural business economics, finance, marketing and/or other relevant fields.
- o At least 5 years experience in export marketing.
- o Fluent French.
- o Working knowledge of Arabic desirable.

Duration of Consultancy: Four months

The Consultant will report directly to the Project Director.

## COMPUTER EXPERT

### A. BACKGROUND

In addition to VITA/PEP's requirements for internal management information, the project has diverse audiences interested in keeping up with its activities and performance.

For instance, USAID/Chad gauges the project in the Chadian context and within the framework of the "Country Development Strategy Statement." The Mission also uses qualitative and quantitative project information for planning future in-country activities. AID/Washington monitors and backstops all field projects and evaluates their effectiveness. VITA's home office in Arlington, Virginia needs constant up-to-date information on the project to monitor its performance, improve home office support, assess the desirability of replicating the project in other countries, and constantly improve VITA's performance capability.

As the US Government foreign aid policy seeks to encourage development through the private sector, small/medium enterprise projects are being closely monitored. Because of their reporting requirements, these projects need to maintain very current and detailed information on their operations.

Because these projects are not fully understood in terms of how they generate benefits and what are cost-effective ways to do so, the specific needs for information are unclear. VITA/PEP receives many requests for information from each of its associated organizations and generates quantities of information for internal control purposes. This has made it difficult to design an information system within the project which would be flexible enough to meet the demands of all types of requests. Most responses are formulated in an ad hoc fashion. Most information is manually calculated. Although the project has received an IBM PC, the limited training the staff has received to date limits their ability to use the machine and they remain unable to manage project resources more effectively and to shape audience perceptions of the project's performance.

### B. TASKS

- o Design an information management system which will not only provide internal management and monitoring data but will also provide the information needed to do an analysis of economic impacts and trends. This will permit the project to monitor itself and adjust its activities accordingly.

The data structure should be able to collect information from a random, stratified sample of current clients and from future applicants. .

- o Train loan officers in the use of the data base.
- o Train the loan officers in the use of surveys.
- o Set up borrower and data files so that baseline data can easily be assessed and analyzed.
- o Input the basic data and test the system functions.
- o Train designated staff member in the purpose and use of the system.
- o Train the designated staff member to make basic modifications to the system.
- o Prepare a user's manual for the system.
- o Submit a final report in draft form to the Project Director before leaving the country.

#### C. QUALIFICATIONS

- o Experience in designing and implementing computerized management information systems, most preferably for financial institutions or development finance organizations.
- o Full working understanding of IBM PCs and compatible software for database management, spreadsheet analysis, and statistical, financial, and project analysis.
- o Fluent written and spoken French.
- o Experience in training others in use and minor modifications of management information systems.

Duration of Consultancy: Two months

The Consultant will report directly to the Project Director.

## ANNEX G

### FINANCIAL ANALYSIS

#### A. SMALL FARMER LOAN PROGRAM

To meet GOC and USAID objectives of increasing food production and availability, VITA will focus a major portion of its loan program on small farm enterprises. Following is a description of the financial rationale, costs, and benefits to the individual farmer resulting from a typical VITA/PEP loan.

**Loan #1.** A farmer is provided an animal-drawn plow in Bongor on credit of FCFA 25,000. The borrowing farmer (of which there are now 20 at Casier B) then arranges to use the plow to service up to 20 1/4 hectare plots for other farmers in addition to his own land. The other farmers' incentive to hire consists of the higher rice yields they get from properly tilled land, and the absence of other service options. Market analyses indicate that sufficient demand exists, and the timing of farming operation allows for the farmer to undertake servicing the 20 plots. At FCFA 4,000 to 5,000 per plot, the farmer could potentially gross FCFA 80,000 to 100,000 in the first season. Even netting out the loan repayment and potential operating costs of up to FCFA 40,000 the farmer could make FCFA 40,000 to 60,000 profit each season. This is a nominal return on the initial investment of between 160% and 210%. Although we clearly expect farmers to continue using the plows beyond the first season, even if they did not, the investment would be highly profitable.

**Loan #2.** As an incentive to repay the first loan, a second loan will be available virtually automatically to those who repay. It will allow the purchase on credit of an ox-cart valued at FCFA 80,000 to 100,000. Ox-carts were selected as a loan item based on market observations of the constant demand for farm-to-Bongor market transport of rice and other crops.

- o Standard ox-carts can move ten 80 kg bags per trip, and during harvest season the owner could feasibly expect to make two trips daily, five days weekly for four weeks (40 trips).
- o In current money terms, transport fees are FCFA 200-250 per 80 kg bag or FCFA 2,000 to 2,500 per trip, and FCFA 80,000 to 100,000 per season. Farmers would, however, incur some operating costs as well. We anticipate that repayment may take two to three seasons and will schedule

accordingly. An ox-cart of this sort will normally be usable for at least 5 years. Rates of return can only be estimated, for example:

Ox-cart cost: FCFA 100,000  
Seasonal earnings: FCFA 80,000  
Seasonal operating costs: FCFA 25,000  
Seasonal repayment (with interest and compounding):  
1) FCFA 40,000 2) FCFA 40,000 3) FCFA 40,000

#### Cash Flow:

Year 1): +FCFA 15,000  
Year 2): +FCFA 15,000  
Year 3): +FCFA 15,000  
Year 4): +FCFA 55,000  
Year 5): +FCFA 55,000

This is a conservative scenario allowing for net earnings of FCFA 155,000 in nominal terms over 5 years, or about a 30% annual average return.

Loan #3. A third loan will in most cases be granted upon repayment of the second loan, involving the provision of a second oxen team on credit. In some cases the oxen team will be part of the loan for a plow or the ox-cart. An oxen team is currently valued at between FCFA 100,000 and 140,000. We expect the team to be used for additional plowing, transport, land clearing and land farming activities which will generate additional income similar to the ox-cart loan. Repayment of the loan is thus expected to take no more than three seasons.

#### B. URBAN PERIMETER ENTERPRISE LOANS

Urban perimeter enterprise loans will focus on horticultural producers, small-scale millers, poultry farmers, and other small-scale enterprises in the food production and processing sectors. These will include loans for fishpond harvesting, agricultural transport, cold storage, irrigation pumps, as well as farm implement repair shops.

VITA/PEP plans to issue 114 urban perimeter enterprise loans. Under the current project, loans for this purpose have averaged \$6,000. Typically, these loans are used to finance the purchase

of capital assets critical to the economic health and growth of the particular business activity. Frequently, project beneficiaries invest in the following types of equipment:

- o small irrigation pumps, to increase food crop yields, thereby increasing producer income and domestic food supply;
- o vehicles, to transport produce to market, thereby increasing producer income and potentially reducing consumer prices; and
- o cold storage units, to prolong the life of the commodity, thereby stabilizing producer income and increasing the availability of the commodity throughout the year.

Access to the loan fund provides small urban perimeter entrepreneurs with capital assets indispensable for the establishment and/or expansion of the individual's business. Without this loan fund, no credit would be available to such small business people. Once the initial capital outlay has been made and financial returns begin to accrue, the greater income resulting from the investment permits the entrepreneur to handle loan repayments comfortably.

After the client has established a regular repayment record, the client develops good credit standing with both VITA/PEP and the BTCDC, where the client has an individual account, and becomes eligible for additional project loans. The principal and interest repayment revolve into the project loan fund, and become available for new clients as well as for clients applying for second loans.



## ANNEX E

### ECONOMIC ANALYSIS

"The economic costs of a project consist primarily of out-of-pocket expenditures and usually are recognized easily. Economic benefits are more difficult to discern, because a portion of them is indirect and because they must be pruned of opportunity costs to arrive at a net figure."

"Searching for Benefits", p.5  
AID, 1985

The attached section from the AID publication, "Searching for Benefits", describes in detail the methodology of cost-benefit calculation for small-scale enterprise assistance development projects. Since VITA/PEP, which provides credit and technical assistance to small and medium scale enterprises, is such a program, it is useful and appropriate to apply this methodology to analyze VITA/PEP and to assume that it is generating similar economic benefits.

VITA/PEP incurs two principal economic costs, the financial costs of the project and the time and labor which the GOC contributes to project implementation. Section IX, Annex C provides a detailed picture of the project's financial costs. The GOC Ministry of Plan and Reconstruction, in the course of its normal sphere of operations, provides some project oversight, as do the Ministry of Agriculture and the ONDR.

The primary economic benefits of this project are increased income and production. Credit and technical assistance provide entrepreneurs with the opportunity to establish and/or expand their business activities. These new activities generate additional employment not only for the primary loan beneficiaries, but also for other family members who may be involved with the business and/or for any additionally hired part-time, full-time, or seasonal employees. The resulting increased income raises these individuals' standard of living, the impact of which affects the entire economy.

VITA/PEP's small-scale enterprise assistance also results in increased production of goods and services. Investment in larger working spaces, equipment, manpower, training and/or raw materials creates additional productive capacity of targetted private sector activities. This can eventually result in not only reduced consumer prices for certain goods and services, but also in foreign exchange savings from increased diversification of national production.

Provision of training and credit to small-scale entrepreneurs who otherwise would not be able to participate in the formal economy generates two more significant benefits. It results in a more

skilled workforce and it establishes formal credit ratings for borrowers who would otherwise not be eligible to receive credit from commercial institutions..

An integral part of VITA/PEP is the training of staff to efficiently manage and maintain the operation of the loan program after project completion. Staff training has taken place since project inception on a daily basis and will continue during the new project. The staff can easily be incorporated into the management of whichever type of lending organization is selected at project turnover.

The benefits of private enterprise development have additional effects which are transmitted throughout the economy. Backward linkages are created when VITA/PEP clients increase their demand for locally produced supplies. Final demand linkages are created when individuals whose income has increased as a result of project activities demand goods and services which they could not previously afford.

VITA/PEP's emphasis on the agricultural sector and the low-income population heightens the impact of project-generated benefits. The project addresses the GOC's first priority by focussing on food production and agricultural development. The project addresses development objectives by targetting the low-income population. By weighting the benefits according to GOC and USAID priorities, a more realistic assessment of VITA/PEP's benefits becomes possible. The following excerpt from "Searching for Benefits" supports this method of benefit calculation.

## METHODOLOGY OF BENEFIT CALCULATION

From A.I.D. Evaluation Special Study No. 28,  
"Searching for Benefits". June 1985. pp.5-14, 109

In one way or another, the usefulness of any development project comes down to a judgment about the benefits created relative to their cost. The economic costs of a project consist primarily of out-of-pocket expenditures and usually are recognized easily. Economic benefits are more difficult to discern, because a portion of them is indirect and because they must be pruned of opportunity costs to arrive at a net figure. Economic benefits measured most generally are all net additions to the national income.

Intermediate indices of project success--sometimes given prominence in impact evaluations--include new employment, new firms, creation of additional productive capacity, and expanded industry sales. In all these cases, the additional income associated with the intermediate index is the true benefit; for example, employment without income is of little utility. Larger firms or more investment are only desirable to the degree that they generate more income.

In the aid programs being considered, loan funds and technical assistance are provided to small-scale enterprise producers to enable them to increase their sales. What the effect of increased sales will be on national income depends on 1) the size of the sales increase, 2) the degree of unused capacity in catering to consumer demand deriving from the income generated by the project, and 3) the opportunity cost of the additional factors of production used by all of the affected firms--mainly labor and imported inputs--that must be netted out.

In advanced economies, similar lending and technical assistance projects involving banks and consulting firms have an automatic benefit-cost index, namely their rate of return on capital employed. With all costs and benefits internalized in the firm and with the profit rate measuring the excess of benefits over costs, there can be no need for such arduous calculations. Can credit and technical assistance agencies in developing countries be judged on the same basis? If the institution cannot cover its own costs, can we safely assume that social costs exceed social benefits? Although social costs may well exceed social benefits, we cannot be sure. Conditions in most developing countries deviate so widely from the conditions of the fully integrated, competitive market economy that "private profitability" cannot be taken as a reliable index of "social profitability".

What are these deviations from the model market economy that make benefit-cost calculations necessary? Why might a market-losing credit institution be socially profitable? First, most developing countries are not full-employment countries, both in the sense that there is extensive underemployed labor and that many pro-

ducers--almost all small-scale producers and some portion of large-scale producers--have demand-related excess capacity. Second, external economies are more prevalent in developing countries; for instance, a successful lending project in a localized country often results in increased competition and price reductions to consumers (a benefit the firm cannot capture). Third, because of imperfect markets and extensive government intervention, the prices of products and factors of production often do not reflect their true scarcities; overvalued wage rates and undervalued foreign exchange are two such distortions that tend to understate the social profitability of small-scale enterprises producing tradable goods.

The main purpose of social benefit-cost analysis is to recalculate all costs and benefits using the true scarcity prices that would obtain in a distortion-free, competitive economy.

We now can state concretely how benefits are measured. Defining value added in any firm as gross output less purchased inputs from other firms, we can see that the value added within the individual firm is equal to wages, rent, interest, and profit. This value added is equal to the income of the four factors of production. The increase in value added as a result of the project will overstate the benefit if the new employees left a previous job and were not replaced or were replaced by less productive workers. An appropriate subtraction is required for the lost output ("opportunity cost of labor").

Beyond direct value added, there are two indirect benefits in the form of value added generated in firms outside the project. First, the purchased input component of sales of client firms is a benefit to the extent that these materials are produced within the country and that they are new production rather than sales diverted from other customers. This is termed "backward linkage". Second, a portion of the direct labor income will be spent on consumer goods and services from producers who have unused capacity. This is termed "final demand linkage".

A simple example may be helpful to illustrate these three major elements of the aggregate benefit. Consider a single-client firm; for example, a carpentry shop. Before the loan, monthly sales of this three person firm were \$150, of which \$60 went to purchased inputs (lumber, nails, glue), \$25 went as wages to a journeyman, with a residual \$65 "profit". This last is apportioned as follows: 1) an unknown amount in-kind to an apprentice, 2) an implicit wage to the entrepreneur, and 3) a return to his capital and risk taking. As a result of the new orders financed by the loan, sales rise to \$250 and a new apprentice is taken on. Of the incremental sales of \$100, purchased inputs absorb \$40.

Benefits are as follows: incremental wages = \$0; incremental profits = \$60; new employment = one apprentice; total direct value added = \$60. With respect to the backward linkage to firms outside the project that results from the \$40 of new raw material

purchases, we assume that 40 percent represents the opportunity cost of labor and foreign exchange content. Thus the net backward linkage is 60 percent of \$40, = \$24. Regarding the final demand linkage to firms outside the project, we assume that the additional profit income will be spent and that one-third of it will go to domestic producers of consumer goods and services who have excess capacity. If we allow a 40 percent opportunity cost as before, the net final demand linkage is 20 percent of \$60 = \$12. The aggregate of direct and indirect benefits now comes to \$60 + \$24 + \$12 = \$96.

Figure 1 illustrates the above case in more detail, showing how the linkage effects interact over subsequent rounds of expenditures. The \$100 of new sales financed by the loan in Round I gives rise to value added in the client firm of \$60 and then in subsequent rounds another \$56.24 sales, of which \$33.75 is value added. (1) Note that the truncated method used in the text yields a higher figure (\$96) than the more precise expansion (93.75) displayed in Figure 1. This is true even though the expansion picks up higher order income effects; that is, the indirect income created by both the backward linkage and the final demand linkage gives rise to yet further income effects. The explanation is that in the expansion there is a 40 percent opportunity cost deducted from the backward linkage at every stage. (2)

Although other benefit components are also measured--training, price reduction, diversion benefits, and weighted wages for the very poor--normally, the increase in sales is central in determining the level of aggregate benefits. Given the size of opportunity costs we assume, only in rare cases does the sum of direct and indirect value added exceed the increment in sales.

Thus the sales response of the client firms is the focus for estimating project benefits. This naturally leads to the question of causality. Is it legitimate to attribute an observed increase in sales over a 2- or 3-year period solely to the receipt of a loan? Taking the polar case, could it not be that the same increase in sales would have occurred without the loan? Some event or combination of events--a new road, rising consumer income, a reduction in supply (rise in price) of formal sector goods--raises the profitability of production, which induces the entrepreneur to cut back on family consumption (increased

---

(1) The \$60 of value added in the client firm must be adjusted for the opportunity cost of the new apprentice, perhaps half the journeyman's wage of \$25.

(2) This outcome depends on the relative shares of value added and the purchased inputs in sales. As the share of VA rises and PI falls, the income effects are enlarged and the backward linkage opportunity costs are diminished. When VA/sales = 66.6 percent, the two methods give identical results; for all higher VA proportions, the expansion method produces a higher benefit.



savings) or divert capital from another use to finance the expansion of output. One way to test this would be to use a control group, taking the differential increase (or decrease) in sales as being attributable to the loan. (3) But does this do the trick? If capital was diverted from another use, that other (invisible) income was lost to the control group but not to the loan recipients. If it was financed by a sudden spurt in savings, the control group suffered a reduction in its real economic welfare. Equally, loan recipients may be diverting a portion of their loan to nondesignated uses, perhaps uses with a higher value-added payoff, all of which goes unreported. For all of these reasons, use of a conventional control group will underestimate the net benefit of loan finance.

The proportion of the sales increase that results from the receipt of the loan, as well as the extent of benefits from loan diversion, is a matter that must be determined by a close reading of each case.

Another thorny issue is the opportunity cost of labor. It is common wisdom that there is substantial unemployment in both the village and urban economy of high birth rate poor countries: a new job in microenterprise reduces the number of unemployed on a one-on-one basis. It is the wisdom of economic theory that human ingenuity and competitive labor markets abhor unemployment: a new job in microenterprise reduces output elsewhere in the informal sector or the household economy. In the first case the opportunity cost of labor is zero, in the second it is somewhere near the going rate in the informal sector. A review of empirical studies supports two limited generalizations: 1) during the peak agricultural season the opportunity cost of labor is well reflected in the rural wage rate, and 2) male heads of microenterprise typically have job opportunities elsewhere. For the rest, albeit each case will vary with local circumstances, we believe that the applicable mechanism is that of a "ladder of job step-up." This approach holds that the job vacated by the new microenterprise employee is taken over by someone previously engaged in less productive activity, and so on down the ladder until the final person is vacating a state very close to full employment.

And now to the immediate application. The evaluation reports contain some statistics for all client enterprises and detailed data (including sales, purchased inputs, some measure of profits wages, and—types of employees) from a roughly representative

(3) We used control groups in the two instances where they existed. As a general rule, control groups are not an available choice. Firms only cooperate with those who demand sensitive information if it is a precondition for a loan or technical assistance. Except under unusual circumstances, entrepreneurs will not agree to serve as a control group.

sample of the entire population. The basic techniques for applying a uniform set of estimating principles to five unique situations where not only opportunity costs and linkage coefficients may vary but where there are issues of data reliability--respondent ignorance, intentional misreporting, nonrandom samples, a range rather than a single reported figure--is to construct two polar benefit estimates, a minimum and a maximum.

In the minimum case, in the absence of information to the contrary, we apply the following conventions:

1. The lower end of all range estimates is the actual figure.
2. No firms or jobs are saved as a result of the loans and assistance.
3. All labor is treated as having an opportunity cost equal to the wage rate.
4. There are training benefits equal to half the journeyman wage rate for each apprentice.(4)
5. Net backward and final demand linkages are zero.
6. Consumer benefits from price reductions or price increases prevented are zero.
7. There are no benefits from loan diversion.

In the maximum benefit case we make the following set of assumptions in the absence of information to the contrary:

1. The upper end of all range estimates is the actual figure.
2. Firms and jobs are saved equal to the differential reduction of firms and jobs in the control sample.
3. Only the entrepreneur is treated as having opportunity cost.
4. There are training benefits equal to half the journeyman wage for each apprentice.

---

(4) We assume that the apprentice's "wage" is composed of in-kind payments equal to half the wage rate and a training benefit equal to the other half.



5. A premium of 540 percent is added to the wage payments (including apprentice in-kind income calculated at half the wage rate) as a benefit of improved distribution of income.
6. Net final demand linkages are equal to 20 percent of direct value added.
7. Net backward linkages are equal to 70 percent of purchased inputs, exclusive of those purchases attributable to retail trading firms. (5)
8. Consumer benefits are equal to the initial quantity times the price reduction, plus the additional output times half the price reduction. (6)
9. There is a diversion benefit.

There are several conventions for handling missing information, which are common to both the worst and the best cases. It is assumed that there are 300 working days in the year. One-half of loans in default for 12 months or more are treated as unrecoverable, and hence are added to project costs. Finally, we treat the timing issue uniformly. We infer from the evaluator's report that the average firm is in the program for (say) 1.5 years, and we are told that there was new employment of 1,500 and an increase in annual profits of \$500,000. We do not assume that these magnitudes were reached on the first day of the program and, hence, can be multiplied by the number of years in the program. Rather, we assume that they commenced at zero on the average borrower's first day and rose at a uniform rate attaining the reported magnitude on the day of the evaluation; we take the value at the midpoint of the time interval. Thus, in the example above, the project gave rise to 1) incremental person-years of employment of 1.5 average-years-in-program x 1,500 x .5 time

-----  
 (5) We assume that the expansion of trading firms does not normally lead to higher national retail sales but to a displacement of less efficient forms of distribution. The new set of backward linkages is roughly offset by the disappearance of another set somewhere else. This is not to suggest that providing assistance to retail or wholesale traders might not be highly beneficial on other grounds (e.g., opening up previously isolated market areas, as a channel of credit to low-income customers, or as a prelude to going into manufacturing).

(6) In theory, the price reduction on the initial quantity is merely a redistribution of income from the producer to the consumer, not an additional benefit to the system. In practice, the evaluation reports only tell us the actual change in profits, given that the price reduction has in fact occurred, so the gain in real income from lower prices is properly counted as a benefit.

adjustment = 1,125, and 2) incremental profits of  $1.5 \times \$500,000 \times .5 = \$375,000$ .

Having constructed our minimum and maximum estimates, we proceed to fix a "most likely" intermediate estimate for each benefit subcomponent. Here we bring into play everything we know about the economy (e.g., unemployment levels, the ratio of intermediate good imports to GDP, movements in consumer income), all the internal evidence from the evaluation report, and the personal opinions of those with direct knowledge of the project to make final judgments about apportioning causality and about the size of the linkages. The sum of these subcomponents is the overall final benefit measure of the project.

Compared to benefits, calculating costs is very simple. They include all administrative expenditures, bad debt, and capital erosion. No charge is made for cost of-funds, as indeed the projects are not so charged; it is, however, implicit in the judgment on the adequacy of the project's internal rate of return. Capital erosion is the shortfall of the effective interest rate below the rate of inflation. Where it occurs, it is an income transfer from the lender to the borrower and will be reflected in higher benefits. The offsetting debit is a cost borne by the lender, which must be covered to maintain a financial portfolio that does not diminish in real terms.

The particular form of benefit-cost calculation to be used for this comparative study is the internal rate of return. Alternative measures--net present worth, benefit-cost ratio, net benefit-investment ratio--entail applying a discount rate that reflects the opportunity cost of capital. Even if an accurate rate could be determined for each of the five countries, different time discounts would partially obscure the lessons that a standardized measure can disclose. The internal rate of return, analogous to the yield on a bond, enables direct comparisons to be made and allows for individual situational judgments.

Looking from a distance at the benefit-cost estimates that come out of this process, what can be said about the likely bias of the results? On the side of overestimation, there is clearly substantial uncertainty about the magnitude of displacement effects and resource opportunity costs. Although we believe we have been very conservative in constructing our conventions, we may not have been conservative enough. Where it is an important component of the total, the benefits from loan diversion are arbitrary in the extreme. Also, the cost figures are surely too low: early investigation and preplanning costs of most projects are not reported, nor are ad hoc outside contributions received by the FVOs; shared overheads often are not taken fully into account.

Against three upward biases, we can place a somewhat longer list of downward biases, which tend to restore confidence in our calculations, or at least in the absence of any tilt towards

favorable results. First, there is the high-universal intentional underreporting of sales by tax-fearing entrepreneurs in the one case where data was available to estimate this figure (Peru) it was 40 percent. Hence there is a systematic bias to underestimate direct and indirect value added. Again, all these countries have overvalued domestic currencies, and because the import content of small-scale enterprise output is substantially less than that of the goods which they substitute, the direct and indirect value added, measured by "border prices", is understated. Third, most of these projects are only 3 to 5 years old so that the high fixed costs of startup and of learning from early mistakes tend to inflate the administrative expenditure per dollar lent relative to its long-term level. Fourth, the .5 time adjustment convention clearly understates the speed with which working capital loans take their effect--again, benefits are too low. Finally, in the two cases where price reductions are important, the benefit figure is understated because it omits the increases in efficiency that are forced on nonassisted firms selling the same products and the consumer surplus enjoyed by their customers.

In sum, while benefit-cost estimates derived by our method are subject to a considerable degree of uncertainty, there is as much reason to believe they are too low as to believe they are too high.

A final word about the future use of this type of methodology for computing benefits. Where one is not limited to re-analysis of completed survey data, it is possible to improve the reliability of benefit measurement by entering a few additional items into the survey instrument and by conducting a few interviews with nonassisted firms. Areas where the margin of error can be greatly reduced include the .5 time adjustment, the opportunity cost deductions for both backward linkages and final demand linkages, undervalued foreign exchange, the diversion benefit, and influence of omitted variables.

Questions to be included in the survey of assisted enterprises include the following: What were sales 6 months and 12 months after receiving the loan? What was the wage of the most recently hired worker in his or her previous job? What job did the last worker who left go to and what was the wage? What job did the last departing apprentice go to and what was the wage? What proportion of purchased inputs were imported items? What other developments have affected sales in addition to the receipt of the loan?

Nonassisted competitors' firms should be questioned concerning the trend in their sales and their knowledge of any specifics of loan diversion engaged in by their more fortunate brothers. Brief interviews with a few producers in each of four or five product lines that figure prominently in backward linkages (e.g., lumber, sheetmetal, printed cloth) will yield answers on the extent of excess capacity and the import content of these products. Similar

interviews can be held with some of the consumer goods producers (e.g., shoes, beer, bicycles). Additional information on final demand linkages can be gleaned from rural household expenditure surveys. Some idea of the degree of underpricing of foreign exchange can be obtained by ascertaining the black market exchange rate.(7)

---

(7) A computational note: As will be seen in subsequent sections, our re-analysis of the field evaluation has required several thousand calculations. The figures have been checked and rechecked, and we are confident that whatever clerical errors remain are in the fourth (4th) or fifth (5th) digit, representing a possible error of less than 1 percent.

**Table 31. Project Design and the Structure of Benefits  
(benefit components as a percentage of total cost)**

Item	PfP	UNO	IDH	DDF-M	DDF-S	FDR
Direct Value Added (a)	18.1	63.6	33.6	393.8	397.4	51.5
Training Benefit	0.3	1.2	3.6	8.1	---	0.4
Distributional Benefit	10.3	2.8	9.7	42.0	197.8	3.8
<b>External Economies:</b>						
Forward Demand Link.	4.9	10.8	29.0	89.0	76.0	11.0
Backward Linkage	10.4	14.1	31.9	20.9	---	26.6
Consumer Benefit	53.6	---	---	---	140.0	---
Diversion Benefit	4.3	40.2	16.7	---	6.0	12.1
	----	----	----	----	----	----
<b>Total Benefit</b>	<b>101.9</b>	<b>132.7</b>	<b>124.5</b>	<b>553.8</b>	<b>817.2</b>	<b>105.4</b>
<b>Total Cost (b)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Page 109

(a) Wages, profit, interest, rent, labor less opportunity cost.

(b) Capital erosion from inflation accounts for the following proportion of total cost: PfP = 4%, UNO = 34%, IDH = 10%, DDF-M = 8%, DDF-S = 14%, and FDR = 94%.

## ANNEX I

### ADMINISTRATIVE DOCUMENTATION

Following are copies and translations of several administrative documents VITA/PEP uses to approve and track loans and do business planning, as well as a full list of all forms used.

Previous Page Blank

**I.A. APPLICATION FORM**

**I. Applicant Information:**

1. Name and First Name: \_\_\_\_\_

Age: \_\_\_\_\_ National Identity Card No.: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

Marital Status: \_\_\_\_\_

Number of Dependent Children: \_\_\_\_\_

Number of relatives employed in business: \_\_\_\_\_

Applicant's Educational Background:

-----  
-----

Applicant's previous employment  
(at least three most recent employers)

Name of Company	Position Held	Length Held	Reason for Leaving
--------------------	------------------	----------------	-----------------------

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Professional References:

\_\_\_\_\_  
\_\_\_\_\_

2. In what year did you start your business? With what funds?  
What funds are presently available to you?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3. How many times have you moved your company in the past? Why?

---

---

4. Give a short history of your company and its development:

---

---

---

---

---

5. Company successes:

---

---

6. Company difficulties and failures:

---

II. Employee Information:

1. Indicate the number of employees presently employed by the company: \_\_\_\_\_

2. Mention any problems you have had with your employees (lack of professionalism, low production rate, theft, etc.)

---

---

---

3. Average time employees remain with company before resigning:

---

4. Name the person who manages the company when you are absent (your relationship to the person, his/her qualifications, length of time he/she has been employed in the field, etc.):

---

---

---



III. Project Information: -

1. Project Characteristics:

Name of Project: \_\_\_\_\_

Address: \_\_\_\_\_

Project Objectives: \_\_\_\_\_

Amount of Loan: \_\_\_\_\_

Purpose of Loan: \_\_\_\_\_

Administrative and technical expertise of applicant:  
\_\_\_\_\_

2. Requested Length of Loan: \_\_\_\_\_

3. Applicant's past loan history: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. Type of guarantee (list of furniture, equipment, tools, permanent or semi-permanent housing, etc):

<u>Description:</u>	<u>Value:</u>
_____	_____
_____	_____
_____	_____

All goods purchased with the loan (e.g. machines) remain the property of VITA until full reimbursement has been received.

Name of guarantor: \_\_\_\_\_

Profession: \_\_\_\_\_

Address: \_\_\_\_\_

Date: \_\_\_\_\_

Signature of Applicant: \_\_\_\_\_

**I.B. MARKET STUDY**

1. What products are necessary for your activities?  
(Raw material, seeds, pharmaceutical products)

List

Price

---

---

---

---

---

Other costs (installation fees, repairs, etc.).

-----

2. Who are/will be your suppliers?

Name

Product

Origin

-----  
-----  
-----  
-----

Other comments:

-----  
-----

3. Who are/will be your principal competitors?

-----  
-----

4. Who are/will be your actual or potential customers?  
(Give details - general and particular):

Name

Product/Service Address

Former Client  
(yes/no)

-----  
-----  
-----  
-----

Other comments:

-----  
-----  
-----

5. What are your receipts/turnover?\_\_\_\_\_

a) Before the loan?\_\_\_\_\_

b) What will be your receipts/turnover after the loan?  
-----

List the sources used to determine these figures.

-----  
-----  
-----

6. On what basis do you think customers will buy your product or request your services rather than those of your competitors?\_\_\_\_\_

-----

● In what way is your production method more efficient?  
-----

● More reasonable profit margin. Why are the competition's less reasonable?\_\_\_\_\_

-----

● Quality. Explain:  
-----  
-----  
-----

● Availability:  
-----  
-----  
-----

● Regular supply and sufficient quantity assured:\_\_\_\_\_

- Accurate stock forecast: \_\_\_\_\_  
\_\_\_\_\_
  
- Technical, administrative and commercial expertise:  
-----  
-----
  
- Other:  
-----  
-----

Date: \_\_\_\_\_

Signature of Applicant: \_\_\_\_\_

I.C

Number of Loan Deposits Rec'd: \_\_\_\_\_

Date: \_\_\_\_\_

For The Year: \_\_\_\_\_

Sector	Jan	Feb	Mar	1Q Tot	Cum	Apr	May	Jun	2Q Tot	Cum
--------	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Services

Food Prod.

Fabrication

=====

Sector	Jul	Aug	Sep	3Q Tot	Cum	Oct	Nov	Dec	4Q Tot	Cum
--------	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Services

Food Prod.

Fabrication

**I. D GUARANTEE**

I the undersigned (name) \_\_\_\_\_,  
(profession) \_\_\_\_\_ (address) \_\_\_\_\_,  
agree to act as guarantor for (name of applicant) \_\_\_\_\_,  
\_\_\_\_\_ (applicant's profession) \_\_\_\_\_,  
(applicant's address) \_\_\_\_\_,  
for a loan of (amount) \_\_\_\_\_ plus the interest rate  
charged by VITA (Private Enterprise Project), 17 Ave. Charles de  
Gaulle, N'Djamena.

In witness thereof the undersigned have hereunto executed and  
delivered:

N'Djamena, (date) \_\_\_\_\_

\_\_\_\_\_  
(Guarantor)

\_\_\_\_\_  
(Guarantee)

## **I.E LOAN AGREEMENT**

Between the undersigned:

For VITA represented by the Director on the one hand

and Mr.

on the other,

hereinafter referred to as the BORROWER,

have agreed to advance credit under the conditions following below.

### **LOAN ESTABLISHMENT**

VITA grants the Borrower who accepts it, a credit in the amount of CFA francs:

for the financing of:

This project will be executed on the property cited in:

Certificate of Occupancy No.

in the normal possession of under administrative certification.

Under the terms of the present contract, the Borrower surrenders:

in guarantee of this loan and following liquidation presently in force.

### **REIMBURSEMENT**

The interest rate applied to this loan is 12% per year. The Borrower agrees to reimburse the amount of the above loan the principal and interest of which are:

according to the following schedule of payments:

The Borrower agrees to make his/her payments to VITA/PEP in accordance with the conditions of this contract.

#### GENERAL CONDITIONS

The present loan is granted under the following conditions:

1. Monthly payments collected in Bongor will be redeposited in VITA's account (01-01655-8-006) with the BCTD in N'Djamena.
2. The sums loaned will become immediately and irrevocably due if:
  - a. a payment is defaulted one month after its due date and eight days after receipt of a formal request for payment
  - b. one of the clauses of this contract is not executed
  - c. and, finally, if the justifications, documents, and information submitted by the Borrower are found to be false or inexact, the Borrower will be found guilty of fraud against VITA.
3. If for any reason repayment is not received, VITA has recourse to appropriate legal means to recover the loan funds.
4. The Borrower will be assessed all court costs, duties, and fees incurred through the above litigation.
5. The Borrower agrees to reimburse VITA for the total amount of the loan plus interest as stipulated in the present contract.
6. All reimbursements not borrowed on time will be subject to a penalty fee of 2% per day.
7. The Borrower agrees to maintain a daily record of accounts to assume prudent use of the loan funds (receipts, expenses, savings). This record will be available for VITA to verify during follow-up visits.
8. VITA retains the right to make sure that the loan funds are being used wisely and that the project is being selected in accordance with the terms and conditions of the present contract.
9. A work session between VITA and the Borrower will be scheduled for each quarter to review and discuss the project's evaluation.



**COMPETENT COURT**

All disputes arising from the execution of the present contract will be settled before the court of N'Djamena having jurisdiction over such matters. This would remain in force even in cases where the guarantee is being called in or where there is a plurality of defenders.

Signature of the Borrower:

Signature of the Guarantor:

(Please affix the note  
"Read and Approved")

For VITA:

The Project Director:

Stamp/Signature of the Prefect of Mayo Kebbi:

## I.F DOCUMENTS TO BE SUPPLIED BY THE SME

### Loan Request

Project Overview (objective, justification, activities, etc.)

Copy of the applicant's birth certificate

Two (2) i.d. photos

A bank statement

A scope of work (Describe briefly how you manage or plan to manage the business)

A proforma invoice of materials to be purchased

An estimate of other costs (labor, piping, etc.)

Plans of the terrain and the irrigation

Production plan (planting, harvesting, selling)

A statement of the land allocation

An estimate of receipts and expenditures

Personal contribution to the project (in-cash or in-kind)

MAISON D'ENTREPRISES PRIVÉES  
17, Avenue Charles De Gaulle  
B.P. 1109 - Tél. n° 20 - 01

N'DJAMENA ( Rép. du Tchad )

FICHE DE RENSEIGNEMENTS

1. RENSEIGNEMENTS SUR LE DEMANDEUR

Nom et Prénoms \_\_\_\_\_

Age : \_\_\_\_\_ Carte d'identité Nationale n° \_\_\_\_\_

Adresse \_\_\_\_\_

Téléphone \_\_\_\_\_

Situation familiale \_\_\_\_\_

Nombre d'enfants à charge : \_\_\_\_\_

Nombre des parents qui travaillent dans l'entreprise : \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Formation du demandeur : \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Emplois antérieurs exercés par le demandeur ( donnez au moins les trois ... )

<u>Nom de l'Entreprise</u>	<u>Emploi exercé</u>	<u>Durée</u>	<u>Raison de votre départ</u>
----------------------------	----------------------	--------------	-------------------------------

_____	_____	_____	_____
-------	-------	-------	-------

_____	_____	_____	_____
-------	-------	-------	-------

_____	_____	_____	_____
-------	-------	-------	-------

Nom des personnes avec lesquelles vous avez des relations professionnelles : \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. En quelle année avez-vous commencé vos affaires ? Avec quel fonds ? Et quel fonds disposez -vous actuellement ?

3. Combien de fois avez-vous déplacé votre Entreprise par le passé. Pourquoi ?

4. Parlez du passé de l'Entreprise et de son évolution :

5. Les réussites de l'Entreprise :

6. Les difficultés et les échecs de l'entreprise :

DES EMPLOYÉS

121

Indiquez le nombre des employés qui travaillent actuellement dans l'entreprise

_____	_____
_____	_____
_____	_____
_____	_____

Retracez les problèmes que vous avez eu avec les employés ( manque d'habileté professionnelle, faible production, vol etc... ).

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

La durée moyenne du temps que les employés travaillent dans l'entreprise avant de démissionner.

\_\_\_\_\_

\_\_\_\_\_

Nom de la personne qui gère l'entreprise à votre absence ( relation avec la personne, qualification, combien de temps elle travaille dans ce domaine ... ).

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

III. RENSEIGNEMENTS SUR LE PROJET:

RESERVE A VITA

1. CARACTERISTIQUE DU PROJET :

Nom du projet : \_\_\_\_\_

Adresse : \_\_\_\_\_

Les objectifs du projet :

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Montant du prêt : \_\_\_\_\_

Utilisation du prêt : \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Connaissances techniques et administratives du demandeur :

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Durée souhaitée du prêt : \_\_\_\_\_

3. Expérience du demandeur avec les prêts antérieurs :

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. Nature de la garantie ( détail, mobilier, équipement, outillage, maison en dur ou semi-dur...)

Description

Valeur

• • •

Tous les biens achetés avec le prêt ( par exemple une machine )  
pourront rester propriété de VITA jusqu'au remboursement total.

Nom de l'avaliseur : \_\_\_\_\_

Fonction : \_\_\_\_\_

Adresse : \_\_\_\_\_

Date : \_\_\_\_\_

..... Signature du demandeur,

VITA  
PROJET D'ENTREPRISES PRIVÉES  
17, Avenue Charles De Gaulle  
B.P. 1109 - Tél. 20-01

N'DJAMENA ( Rép. du Tchad )

ETUDE DE MARCHÉ

1. Quels sont les éléments qu'il vous faut pour vos activités ? ( matières premières, semences, produits pharmaceutiques ... ).

LISTE

PRIX

- Autres frais ( installation, réfections ... ).

2. Quels sont/seront vos fournisseurs de ces éléments ?

NOM

PRODUIT

PROVENANCE

Autres remarques :



3. Quels sont/seront vos concurrents principaux ?

4. Quels sont/seront vos clients effectifs et potentiels ?  
Donnez des précisions ( en général, en particulier ).

<u>Nom</u>	<u>Produit/Service</u>	<u>Adresse</u>	<u>Ancien client</u> ( oui / non )
------------	------------------------	----------------	---------------------------------------

Autres remarques :

5. Quelles sont vos recettes/Chiffre d'affaires ?  
Avant le prêt :

b) Quelles seront vos recettes/Chiffre d'affaires ?  
après le prêt :

Citez les documents utilisés pour les déterminer.

6. Pourquoi pensez-vous que les clients achèteront vos produits ou solliciteront vos services au lieu de ceux de vos concurrents ?

- Méthode de production plus efficace comment ?

- Marge bénéficiaire plus raisonnable. Pourquoi les autres sont-ils moins raisonnables ?

- Qualité : Expliques :

- Disponibilité :

- Approvisionnement régulier, assuré et achat en quantité suffisante :

- Prévision de stockage assuré :

- Connaissance technique, administrative et commerciale.

- Autres :

Date \_\_\_\_\_

Signature du demandeur.

re de demandes reçues Date le 19 Août 1984

Pour l'année 1984

128

S E C T E U R	PREMIER TRIMESTRE					DEUXIEME TRIMESTRE				
	Jan.	Fév.	Mars	Total	Tot.Cum.	Avril	Mai	Juin	Tot. T.Cum.	
Services										
Production Alimentaire										
Fabrication										
	TROISIEME TRIMESTRE					QUATRIEME TRIMESTRE				
	Juillet	Août	Sept.	Total	T.Cum.	Oct.	Nov.	Déc.	Total	T.Cum.
Services	3	12	12	27	27	18	28	17	63	90
Production Alimentaire	4	7	3	14	14	5	6	10	21	35
Fabrication	2	4	1	7	7	3	4	2	9	16
	9	23	16	48	48	26	38	29	93	141

Nombre de demandes reçues Date le 19 Août 1985

Revisé le 5 novembre 1985

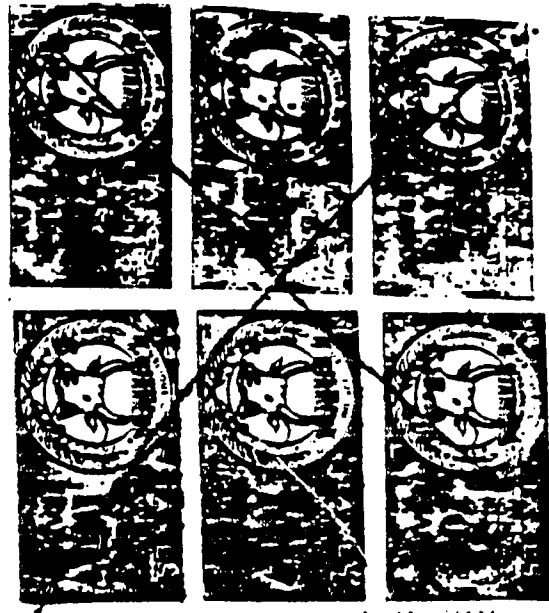
Pour l'année 1985

S E C T E U R	PREMIER TRIMESTRE					DEUXIEME TRIMESTRE				
	Jan.	Fév.	Mars	Total	Tot.Cum.	Avril	Mai	Juin	Tot.	T.Cum.
Services	33	29	23	85	175	16	5	4	25	200
Production Alimentaire	13	13	14	40	75	12	6	7	25	100
Fabrication	5	2	9	16	32	7	1	3	11	43
	51	44	46	141	282	35	12	14	61	343

	TROISIEME TRIMESTRE					QUATRIEME TRIMESTRE				
	Juillet	Août	Sept.	Total	T.Cum.	Oct.	Nov.	Déc.	Total	T.Cum.
Services	6	11	11	28	228	14	13	7	34	262
Production Alimentaire	17	5	12	34	134	8	9	3	20	154
Fabrication	1	4	5	10	53	1	0	1	2	55
		20	28	72	415	23	22	11	56	471

315/85

N° 03/85



Aval  
faul

Je soussigné Monsieur **ABAKAR DJIDA ABAGAMA** Commerçant  
B.P. 774 N'DJAMENA accepte avaliser Monsieur **MOUSTAPHA BRANDI**  
Commerçant B.P. 576 N'DJAMENA pour le prêt d'un montant de  
2.370.000 Fra ( Deux million trois cent soixante dix mille ) de fra F.  
plus les interets accordé par Vita ( Proget d'Entreprises Privées )  
17 Avenue Charle de gaule N'Djaména.

En foi de quoi cette attestation lui est délivr e  
pour servir et valoir ce que de droit.

Fait à N'Djaména , le 03/ Juin 1985

L'avaliseur

BAKAR DJIDA ABAGAMA

Bon pour la certification  
intérieure de la signature de  
**M. ABAKAR Djida Abagama**  
le 03 - 06 - 1985

L'avalisé

MOUSTAPHA BRANDI

EL HADJI B. 130

VITA

PROJET D'ENTREPRISES PRIVEES  
17, Avenue Charles DE GAULLE  
B.P. 1109 - Tél. 20-01 et 21-59

N° \_\_\_\_\_

CONTRAT DE PRET

Entre les soussignés :

VITA représenté par son Directeur,

d'une part,

et Mr.

d'autre part,

ci-après dénommé l'EMPRUNTEUR,  
ont été arrêtées ainsi qu'il suit les conditions d'une ouverture de  
crédit.

OUVERTURE DE CREDIT

VITA ouvre les présentes à l'Emprunteur qui accepte, un crédit de  
francs CFA :

Destiné à financer :

Ce projet sera exécuté sur un terrain faisant l'objet :

de l'autorisation d'occuper n°

- de la possession coutumière suivant attestation administrative

L'Emprunteur cède par les présentes :

Le taux d'intérêt applicable au présent crédit est de 12 % l'an.  
L'emprunteur s'oblige à rembourser le montant du crédit ci-dessus ouvert en principal et intérêt : selon les modalités suivantes :

L'emprunteur s'engage à effectuer ses versements à VITA/FRP Bongor conformément au présent contrat.

### CONDITIONS GENERALES.

La présente ouverture de crédit est faite sous les conditions suivantes :

1) Le paiement des mensualités collectées à Bongor sera reversé dans le compte de VITA ouvert dans les livres de la BTCD à N°DIAMBA sous le n° 01 01655 8 006.

2) Les sommes prêtées deviendront immédiatement, intégralement et irrévocablement exigibles :

- a) à défaut de paiement à son échéance d'une mensualité et huit jours après une simple mise en demeure .
- b) en cas d'inexécution d'une clause quelconque du présent acte
- c) enfin, dans les cas où les justifications, documents et renseignements fournis par l'emprunteur seraient reconnus faux ou inexacts, celui-ci se serait rendu coupable de mesures dolosives ou frauduleuses envers VITA.

3) Dans le cas de non remboursement pour un motif quelconque, VITA sera appelé à avoir recours à des mesures contentieuses pour arriver au recouvrement de sa créance.

4) L'emprunteur supportera les frais, droits et honoraires des présentes et leurs suites.

5) L'emprunteur s'engage à rembourser à VITA le montant total du prêt et les intérêts comme stipulé dans le présent contrat.

6) Tout remboursement non honoré à bonne échéance sera passible d'une majoration de 2 % par jour de retard.

7) L'emprunteur s'engage à tenir un livre journal pour contrôler sa caisse ( Recettes, Dépenses et Epargnes ) qui sera mis à la disposition de VITA pour une vérification éventuelle lors de ses visites de suivi.

8) VITA se réserve le droit de s'assurer de la bonne utilisation des sommes prêtées et de l'exécution du projet conformément au présent contrat.

9) Une séance de travail réunissant VITA et le promoteur est prévue au trimestre afin de discuter l'évolution des travaux du dit projet.

TRIBUNAL COMPETENT.

Pour toutes les contestations à naître de l'exécution de la présente convention les parties déclarent expressément faire attribution de juridiction au tribunal compétent de N'DJAMENA et cela même en cas d'appel en garantie ou de pluralité de défenseurs.

Fait à Bongor, le

en 4 exemplaires originaux.

Signature de l'Emprunteur  
( Veuillez porter la mention  
manuscrite " Lu et Approuvé " ).

Signature de l'Avaliseur.

Pour VITA,  
Le Directeur du Projet.

Visa/Signature du Préfet du Mayo Kebbi.



VITA

PROJET D'ENTREPRISES PRIVÉES  
17, Avenue Charles De Gaulle  
3.P. 1.09 - Tél. 20-01  
N°DJAMENA ( Rép. du Tchad ).

DOCUMENTS ET RENSEIGNEMENTS A FOURNIR PAR LES P.M.E.

- Une demande de prêt
- Un aperçu sur le projet ( objectif, justification, activités ... )
- Une copie d'acte de naissance
- Deux photos d'identité
- Un relevé de compte bancaire
- Une méthode de travail ( Parler sommairement de la façon dont vous gerez ou  
Un plan de travail vous allez gérer l'affaire ).
- Une facture proforma des matériaux à acheter
- Un état récapitulatif des recettes et des dépenses ( autant d'un mois de 6 à  
12 mois minimum )
- Un devis estimatif des autres coûts afférents ( assurance, commission ... )
- Un plan du terrain + un plan d'irrigation
- Un planning de production ( Semence - Récoltes - Vente )
- Une attestation d'attribution de terrain
- Une prévision des recettes et des dépenses
- Un apport personnel au projet ( en espèce ou en nature ).

ANNEX J

PROJECT IMPLEMENTATION SCHEDULE  
VITA/PEP PHASE II PROJECT TIMELINES

Activity	Year 1											Year 2													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
<b>Phase I</b>																									
-----																									
Hire New Staff																									
Train New Staff																									
Technical Assistance:																									
--Agronomist/Agroforester (4 person mos.)																									
--Marketing/Commercialization Spec. (4 person mos.)																									
--Computer Expert (2 person mos.)																									
Select New Candidates/Assist/Make Loans																									
<b>Phase II: Evaluation/Turnover</b>																									
-----																									
Periodic Self-Evaluation																									
Modification/Adjustments																									
Establish Turnover Plan																									
Final Evaluation/Close-Out																									
Implement Turnover Plan																									

31

ANNEX K

**VOLUNTEERS IN TECHNICAL ASSISTANCE**

**Capability Statement**

**August 1985**

**Volunteers In Technical Assistance, Inc. (VITA)  
1815 North Lynn Street, Suite 200  
Arlington, Virginia 22209 USA**

**VOLUNTEERS IN TECHNICAL ASSISTANCE (VITA)  
CAPABILITY STATEMENT  
(AUGUST 1985)**

A small group of scientists, engineers, and business people with a sense of social responsibility created VITA in 1959. Since then, VITA has grown into a major private voluntary organization, providing technical assistance to people in more than 100 developing countries. VITA is registered as a 501 (c)(3) nonprofit organization.

VITA's founders recognized that the best contribution to world peace and stability was the relief of fundamental sources of conflict, including disparities between rich and poor. In that capacity, VITA serves as a link between technology, the issues, and the problems encountered in developing countries. VITA seeks practical ways to put science and technology to work for people in the world's poorest countries, demonstrating how modern technologies such as microcomputers and communication satellites directly benefit villages all over the world. But it also helps people use their own skills and resources in new and more efficient ways to provide basic life necessities--food, water, energy, and shelter.

VITA offers services in most technical areas, but emphasizes the following fields: renewable energy applications, agriculture and food processing, water supply and sanitation, housing and construction, small business development, and information management. In addition, VITA is a leader in helping developing countries use modern communications technology to meet their information needs in these critical areas.

**Resources**

VITA brings together a unique combination of resources in an integrated, synergistic system based on 25 years experience in grappling with development issues. The professional staff is experienced in technical fields, business, computer technology, project planning, communications, and library science. A unique problem-solving service offered by mail has served to put VITA at the hub of a development network of thousands of organizations and businesses around the world; direct contact with these groups provides an ongoing measure of the needs and issues of people in the developing countries. VITA maintains one of the world's leading libraries on technologies of proven interest to developing countries and has published more than 100 books, technical papers, and manuals on these subjects. VITA also publishes VITA

News, a quarterly magazine devoted to technology and development.

The heart of VITA's activities is its worldwide network of 5,000 volunteers--engineers, business people, agriculturalists, energy experts, economists, sociologists, planners, bankers, and other professionals who donate their time and expertise to help others. Staff members work with these volunteer consultants to provide a wide range of services, including on-site consultations, project planning and management, feasibility studies, publications development, and other technical services.

VITA's professional application of technical resources has gained wide recognition. Its services have been recognized in the U.S. National Paper for the United Nations Conference on Science and Technology, in the Harvard Business Review, the UN publication Development Forum, and numerous professional journals, and by government development agencies, corporations, and other FVOs.

Development Business, the business edition of the UN's Development Forum, recently said of VITA, "...over the years the organization has become a global specialist in the little-understood business of purveying technical information to the Third World....It is perhaps the only organization in the world that today stands on the threshold of developing a comprehensive and systematic method for achieving Third World economic development through technology transfer."

VITA is concerned not only with disseminating information on useful technologies, but with the technology of information transfer itself. It is adapting state-of-the-art communications technologies to the practical information needs of developing areas.

For example, VITA's unique library holdings--full text, abstracts, and bibliographic data--are accessible in hard copy, microfiche, and computer for on-site use by developing country information centers. VITA's library service was a major contributor to DEVELOP, a database on technology ideas established by the Control Data Corporation. VITA trains students from developing countries in both manual and computerized methods of information systems management through its Information Resources Training Course, which is offered twice annually. It also provides computer and information consulting services to Third World institutions. Its work has been supported by Control Data, the Apple Computer Company, IBM, Kaypro, and USAID.

To facilitate the flow of technical information, VITA has spear-

headed a pioneering program to link users in developing countries in a communications network centered around a low-earth orbit satellite. Called PACSAT, the satellite will use low cost, battery or solar-powered ground stations to make rapid communications more economical for developing areas. This project is being organized in cooperation with the Radio Amateur Satellite Corporation (AMSAT) and the University of Surrey in Great Britain, and has attracted the interest of dozens of potential users around the world. PACSAT is scheduled for launching in 1987. A prototype began operations in March of 1984.

VITA applies its resources in an integrated system that includes:

- Technology Transfer Services
- Business Services
- Project Management

### **Technology Transfer Services**

Technology transfer services, VITA's traditional mechanisms for fostering Third World development, comprise a wide range of activities and functions. These include information delivery, training, short-term consultancies, field studies and evaluations, technical panels and conferences, and publications.

**Information Delivery.** For more than 25 years, VITA has provided effective technical information in response to inquiries from people in developing countries. The organization has responded to over 50,000 inquiries from small businesses overseas, foreign governments, foreign aid agencies, universities, and individuals working in various development sectors. Questions range from designing a windmill rotor to managing a small business. A trained information manager handles each request, using information from VITA's Documentation Center, volunteer experts, and worldwide institutional contacts. During 1984 VITA answered over 2,000 inquiries on energy, agriculture, food and nutrition, construction, water resources, crafts, industries, and other subjects.

**Information Services Training.** VITA's Documentation Center offers a special training program that teaches individuals and groups how to establish and operate a specialized information-handling system. Students learn how to run a documentation center or library, develop library skills, disseminate information, and operate a skills bank. The course also includes a component on computerized information systems. To date, 65 students from 25 countries have participated. The course, which is given at VITA headquarters each April and October, is offered in French or Spanish, in addition to English.

VITA information specialists and volunteer experts also travel to developing countries to help groups set up documentation centers, libraries, outreach programs, and other services. For example, VITA has provided on-site training for information centers in Colombia, Burkina Faso, and Papua New Guinea.

**Consultancies and Referrals.** VITA responds to requests from development agencies, businesses, and others by providing expert consultants for specific short-term assignments, or by giving referrals and biographical information for selected persons. Each person is screened carefully for interest and skill level. Most names come from VITA's staff and computerized roster of "VITA Volunteer" experts.

VITA provided more than 230 on-site consultancies and individual consultant referrals during 1984. VITA consultants offered advice on cocoa production and enterprise development in Honduras; renewable energy, energy conservation, and management in Djibouti; the production of ceramics in the Caribbean; the commercial production of CINVA-Ram machines in Guinea; the formulation of an international woodstoves network; and dozens of other areas. In addition, VITA helps groups fill long-term specialized positions in developing countries.

**Technology Development and Dissemination.** VITA works with local institutions on long-term efforts to develop and promote needed technologies. For example, VITA and the Mexican Instituto de Investigaciones Electricas (IIE) are testing improved low-cost windmills in Cuernavaca to generate electricity or pump water, a project supported by the General Electric Company and Sperry-New Holland. In the Sahel and in Somalia, VITA project staff have developed energy-efficient stoves that are finding ready acceptance through regular market channels. In the Caribbean, VITA and the Government of Monserrat developed more efficient ways of producing and distributing charcoal, a project funded by the Caribbean Development Bank. Similarly, VITA worked with the Solar Energy Lab in Mali to develop renewable energy devices, and with the International Institute for Tropical Agriculture in Nigeria to develop no-till farming tools.

VITA staff experts and volunteers also travel to developing countries for shorter periods to promote new technology ideas. They can plan and hold workshops (small-scale hydro-power in the Dominican Republic, rice production in Papua New Guinea, simple building block production methods in Kenya), provide hands-on training (ceramics production in Haiti, animal waste recycling in Egypt, workshop management in Mali), participate in technical conferences (satellite communications in Thailand, microcomputers in Kenya and Sri Lanka, biogas in Central America, agricultural machinery in China, renewable energy in Rwanda), and provide similar services.

In a related area, VITA prepares major studies of technologies or development issues for clients in the public or private sector. For example, it has studied stove testing methods for the National Academy of Sciences, charcoal production for the Caribbean Community Secretariat, commercial use of biogas for USAID/Morocco, and simple windmills in Thailand.

**Project Surveys, Planning, and Evaluation.** VITA helps other institutions survey program opportunities, plan specific projects, and evaluate completed efforts. VITA has done major surveys for both the public and private sectors in developing countries. Its staff and volunteers can assess the range of technologies, needs, and development services available in a specific region. VITA teams have studied microcomputer applications to famine relief in Ethiopia; neighborhood development resources in Egypt; long-term energy needs in Djibouti; conversion of parastatals to private management in the Bahamas; postharvest food systems in Central Africa; and the impact of industrialization in western Indonesia. In Guinea and Bolivia, VITA conducted extensive surveys of private groups developing alternative technologies.

VITA also helps institutions plan specific projects. For example, it worked under contract to review possible projects for the World Bank headquarters in Washington, D.C., and did on-site evaluations of energy efficient designs for the Bank's low-cost housing projects in Djibouti. VITA helped the Presiding Bishop's Fund for World Relief in New York design a project in Honduras. It also did a feasibility study for the Meals for Millions Foundation on a proposed project to organize small farmers in Ecuador to produce soybeans.

Evaluation is also part of VITA's activities. VITA staff analyzed a five-country USAID energy program in Central America and a national energy project in Ecuador. VITA staff experts also joined World Bank teams to evaluate forestry projects in Niger and Tanzania, and a woodstoves project in Ethiopia. Another VITA staff member traveled to Colombia to evaluate a project for PACT, Inc. Other VITA evaluations studied an animal husbandry project in the Philippines, a poultry project in Kenya, a fish farming project in Tanzania, etc.

**Technical Panels.** VITA convenes expert panels to discuss and make recommendations about specific technologies or development problems. Several recent panels have dealt with ways that developing countries might apply modern technologies, such as computers, remote sensing, advanced poultry production methods, and high-tech agriculture. Other panels have studied little-used but promising crops, wood-burning cookstoves, charcoal briquetting, lime production, solar salt production, and torque-matching mechanisms for windmills. In its concern with the business side of technology development, VITA has held panels on enterprise development



marketing, and related subjects. Other panels have discussed technology options for Egypt, Zimbabwe, and other nations.

**Publications.** VITA publishes over 100 manuals and bulletins on technologies useful for developing nations. Many of the publications derive from inquiries received from people in developing countries or from on-going projects. Others have been prepared on commission, from Peace Corps or the al Dir'iyyah Foundation, for example, or in collaboration with such groups as CODEL, the Intermediate Technology Development Groups, and Mexis for Millions. VITA's most requested publications include titles on village technology, wind power, wood-burning cookstoves, fish farming, pumps, grain storage, renewable energy, and various business subjects. Many are available in French and Spanish.

A new series of technical papers, "Understanding Technology," provides authoritative introductions to 75 of the most requested technical areas in clear language and easily readable format. A second series in preparation profiles small industries, providing basic information on resources, outputs, facility layout, marketing, etc.

VITA also publishes VITA News, a quarterly magazine that covers new technologies in international development and related subjects. The magazine is read widely in both industrial and developing countries and is recognized for its original reporting, how-to presentations, and readable format. It also offers a unique promotional opportunity for products and services of interest to those living or working in developing countries.

### **Business Services**

In response to increasing demand for business information, VITA developed two new services--VITA Venture Services (VVS) and VITA Information Services (VIS).

VITA Venture Services offers a wide variety of services to U.S. and LDC firms seeking cooperative ventures and investment opportunities. Operating on a fee-for-service basis, VVS services to the private sector include:

- o license inquiry service to help define needs;
- o administrative support;
- o investment workshops to promote business opportunities, in cooperation with the Overseas Private Investment Corporation, (OPIC), the Department of Commerce, the Small Business Administration, and the Export-Import Bank;
- o brokering;

- o patent and trademark searches; and
- o confidential independent analyses of specific technologies and technical proposals.

VVS services to LDC governments include:

- o planning and implementation of industrial investment campaigns in the U.S.;
- o assistance in helping displaced workers in government-owned sectors make the transition to private industry through new small business development; and
- o development of information management capabilities

VVS has sponsored investment seminars on India and China, and plans discussions on Thailand and Indonesia, with additional meetings devoted to India and China also. VITA represents the interests of a number of U. S. companies in developing countries and one Indian businessman observed, "I got more done in three days with VVS than I could have in a month on my own."

VITA Information Services offers access to a broad range of resources--technical, marketing, and financial. VIS offers the following services on a fee-for-service basis or by subscription:

- o quick, up-to-date literature searches compiled in a customized report;
- o document delivery;
- o state of the art technical reports;
- o consultants in engineering, agriculture, business, science, and education--most with language skills and overseas experience.
- o information management training;
- o logistical liaison and temporary support services in Washington, D. C., and
- o personal contact with customers, suppliers, prospective partners, and joint-venture financiers to help keep business ventures on track.

## **Project Management**

VITA designs and manages major projects that help improve the quality of life in developing countries. In this regard, all aspects of procurement and contract management, as well as staffing, implementation, and oversight are provided by a professional team. VITA currently manages contracts, grants, and cooperative agreements worldwide, in areas as varied as postharvest food systems, energy conservation, and small enterprise development.

Recent VITA efforts have included:

- o **Developing a national energy strategy in Djibouti.** An expert VITA team is working with the government of this small East African nation to develop a National Energy Institute that will formulate long-term energy policy and develop, test, and promote renewable energy and energy conservation technologies. The four and one half year contract is funded by USAID.
- o **Producing an improved cash crop in Belize.** In conjunction with the Pan American Development Foundation (PADF), the Hershey Corporation, USAID/Belize, and the Ministry of Natural Resources the Belize Accelerated Cocoa Production Project provides direct assistance to small and medium farmers in Belize to expand cocoa production through the use of improved cocoa varieties and processing methods.
- o **Improving water supplies in Honduras.** The Honduras Development Project for the Bay Islands, in conjunction with the PADF, USAID/Honduras, and the Roatan Development Committee, seeks to install and develop a viable system to operate and maintain potable water and human waste disposal systems in approximately 20 low-income communities. The project also assists in the development of small business by providing technical assistance and small loans through a commercial credit program established at a local bank.
- o **Promoting private sector growth in Chad.** A small business development project in Chad is designed to generate employment opportunities by providing technical assistance and small business loans.
- o **Increasing food supplies in the Central African Republic.** A four-year program in CAR is designed to provide technical assistance and training in identifying and reducing postharvest losses due to rodents, insects, birds, and fungi, and in improving food processing methods.