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William

REPUBLIC OF CHAD
AGRICULTURAL MARKETING AND TECHNOLOGY TRANSFER PROJECT
(677-0062)

PROJECT PAPER

PROJECT AUTHORIZATION

Name of Country: Republic of Chad

Name of Project: Agricultural Marketing and Technology Transfer

Project Number : 677-0062

1. Pursuant to the Development Fund for Africa provision of the FY 1991 Appropriations Act, I hereby authorize the Agricultural Marketing and Technology Transfer Project for the Republic of Chad (Cooperating Country), involving planned obligations of not to exceed $ 10,151 (Ten-Million-One-Hundred-Fifty-One-Thousand United States Dollars) in grant funds over a fifty-one (51) month period from the date of authorization, subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the project. Except as A.I.D. may otherwise agree in writing, the planned life of the project is fifty-one (51) months from the date of initial obligation.

2. The project will assist the Government of Chad and the Chadian private sector to achieve the project purpose of reducing the risk of investment in agricultural marketing in Chad. Support will be provided for three project components: 1) a national market information system, which will broadcast via radio wholesale prices on up to fifty markets in Chad by the end of the project, thus reducing the risk to producers and intermediaries who market crops; 2) an agribusiness support center, which will prepare business plans and feasibility studies, serve as a technology clearing house, and develop Chadian consulting capabilities, in order to reduce private investor's risks of failure in agribusiness endeavors; and 3) a series of market and policy studies and analyses on identified constraints to agricultural marketing in Chad, which will provide the GOC and A.I.D. with additional information which will reduce their risk of investment in a possible Phase 2 project.

3. The Project Agreement, which may be negotiated and executed by the officers to whom such authority is delegated in accordance with A.I.D. regulations and delegations of authority, shall be subject to the following essential terms and covenants as A.I.D. may deem appropriate:

Conditions Precedent

First Disbursement

1. Prior to any disbursement under the Grant or to the issuance by A.ID. of documentation pursuant to which disbursement will be made, the Grantee will except as parties may otherwise agree in writing, furnish to A.i.D., in form and substance satisfactory to A.I.D.:

A. A statement of the names and title of the persons who will act as representatives of the Grantee as defined in the appropriate section of the Grant Agreement, together with a specimen signature of each person named in such statement.

B. A statement of the names and titles of five senior government officials who will represent the GOC as the Bilateral Policy Oversight Committee for purposes of the Grant.

C. A statement that the Bilateral Oversight Committee (which will include representatives from A.I.D.) will meet not less than once per quarter at the request of A.I.D.

D. A statement that the GOC intends to revise and streamline procedures for registration of all businesses within one year of the date of this agreement. The revised procedures will allow businesses to be registered through a one-step application process, at one GOC office, at a cost lower than current practice.

E. A statement that the GOC intends to revise its procedures for granting access to the benefits of Regime A of the Investment Code within one year of the date of this Agreement.

Subsequent Disbursements:

Prior to disbursements under the Grant after [one year from date of Agreement], or to the issuance by A.I.D. of documentation pursuant to which disbursements will be made, the Grantee will, except as the Parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D.:

A statement verifying that the GOC has:

A. Revised procedures for registration of businesses so that registration can be a accomplished through a one-step

application, to one GOC office, at a price lower than current practice.

B. Revised procedures for granting access to the benefits of Regime A of the Investment Code.

Covenants

The Grantee will confirm:

(a) that it will undertake a review and, if indicated, revise its annual license tax (patente) so that it does not impose proportionally greater taxes on businesses which employ greater numbers of personnel.

(b) that it will undertake a review of its own tariff structure and maintain dialogue within UDEAC regarding the need to decrease tariffs for import of the following commodity categories: agricultural tools, agricultural inputs, transport vehicles (gas-oil), transport vehicles (gasoline), and spare parts for transport vehicles.

(c) that it will intensify its efforts to eliminate all roadblocks and unofficial transport fees which are prevalent in the country.

Drafted: PDO:WDeese _____

Clearances: CONT:CJohnson _____
EXO:JPenno _____
ECON:PMorris _____
HRDO:SZoghby _____
ADD:KFuller _____
RLA:MAlexander _____
AAIDREP:CPalma _____

Signature: _____
Bernard D. Wilder
A.I.D. Representative

Date: _____

REPUBLIC OF CHAD
AGRICULTURAL MARKETING AND TECHNOLOGY TRANSFER PROJECT
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GLOSSARY OF TERMS USED

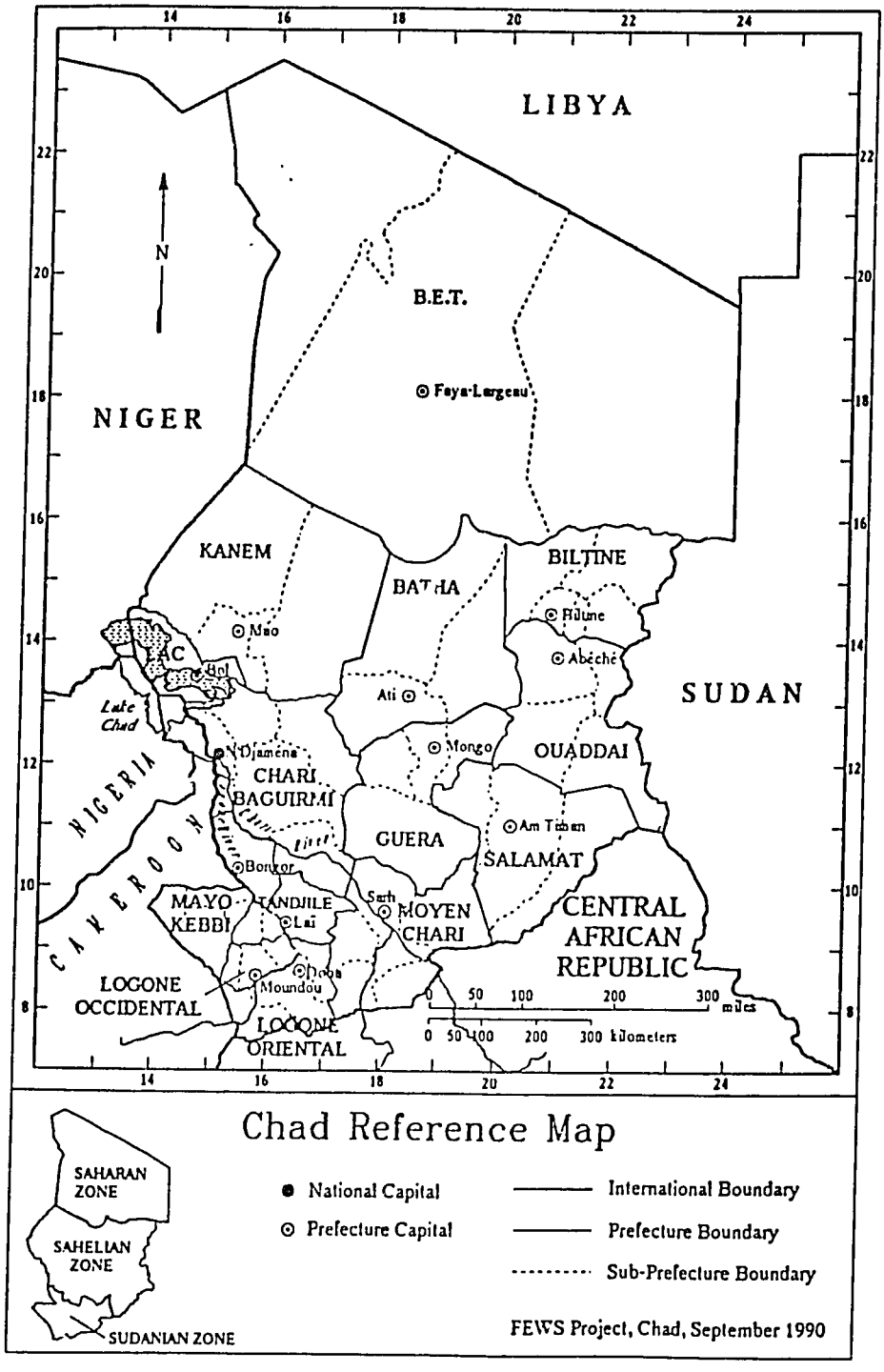
ACDI	:	Agricultural Cooperative Development International
ADD	:	Agricultural Development Division of USAID/Chad
AFF	:	Abattoir du Farcha
AFR	:	A.I.D.'s Bureau for Africa
A.I.D.	:	U.S. Agency for International Development
A.I.D./W	:	A.I.D. headquarters in Washington, D.C.
AMTT	:	Agricultural Marketing and Technology Transfer Project
ASC	:	Agribusiness Support Center
ASSAILD	:	Association d'Appui aux Initiatives Locales de Developpement
ATI	:	Appropriate Technology International
BCG	:	Boulangerie Charles de Gaulle
BEAC	:	Banque des Etats d'Afrique Central
BEC	:	Bureau d'Etudes et Conseils
BEPROCA	:	Bureau d'Etudes des Projets et de Conseil dans les Affaires
BDL	:	Brasserie du Logone
BEI	:	Banque Europeenne d'Investissement
BET	:	Borkou-Ennedi-Tibesti
BIAT	:	Banque Internationale pour l'Afrique au Tchad
BIEP	:	Bureau Interministeriel d'Etudes et de Programmation
BGMC	:	Boissons Gazeuses du Moyen Chari
BGT	:	Boissons & Glacieres du Tchad
BNF	:	Bureau National de Fret
BSA	:	Bureau de la Statistique Agricole
BTCD	:	Banque Tchadienne de Credit et de Depots
CCCE	:	Caisse Centrale de Cooperation Economique
CCVB	:	Cooperative de Commercialisation de la Viande et de Betail
CFA, FCFA	:	Francs of the Communaute Financiere Africaine, at the time of PP equal to FCFA 250-275 = U.S.$ 1.00
CILSS	:	Comite Inter-Etats pour la Lutte Contre la Secheresse Sahelienne
COP	:	Chief of Party
coro	:	Chadian unit of measure which can vary from 2 to 3 kilograms
COTONTCHAD	:	Societe Cotonniere du Tchad
CP	:	Condition Precedent

GLOSSARY OF TERMS USED (continued)

CPFF	:	Cost Plus Fixed Fee
CREC	:	Caisse Rurale d'Epargne et Credit aux Logones
CTT	:	Cooperative des Transporteurs Tchadiens
DAI	:	Development Alternatives, Inc.
DFA	:	Development Fund for Africa
DG/AGR	:	Director General of Agriculture, MARD
DIAPER II	:	CILSS project which supports GOC MIS
DSEED	:	Direction de la Statistique des Etudes Economiques et Demographiques
EEC	:	European Economic Community
FAC	:	Fonds d'Aide et de Cooperation
FAO	:	Food and Agriculture Organization of the United Nations
FED	:	Fonds Europeen de Developpement
FEWS	:	Famine Early Warning Systems Project
FFP	:	Food For Peace
FIR	:	Fonds d'Intervention Rurale
FY	:	Fiscal Year
GDP	:	Gross Domestic Product
GMT	:	Grand Moulins du Tchad
GOC	:	Government of Chad
HRDA	:	Human Resources Development Assistance Project
IDA	:	International Development Association of the World Bank
IMF	:	International Monetary Fund
IQC	:	Indefinite Quantity Contract
ITDG	:	Intermediate Technology Development Group
L/Comm	:	Letter of Commitment
LDF	:	Laboratoires de Farcha
LVO	:	Lettre de Voiture Obligatoire
MARD	:	Ministry of Agriculture and Rural Development
MCT	:	Manufacture de Cigarettes du Tchad
M&E	:	Monitoring & Evaluation
MIS	:	Marketing Information System
MSAPS	:	Ministry of Food Security and "At-Risk" Populations
MSAPW	:	Ministry of Social Affairs and Promotion of Women
MT	:	Metric Ton(s)
MTAC	:	Ministry of Transport and Civil Aviation
NGO	:	Non-governmental organization
NPA	:	Non-project assistance

GLOSSARY OF TERMS USED (continued)

OMVSD	:	Office de Mise en Valeur de Sategui-Deressia
ONADEH	:	Office National de Developpement de l'Horticulture
ONC	:	Office National des Cereales
ONDR	:	Office National de Developpement Rural
OPIT	:	Office de Promotion Industrielle du Tchad
ORT	:	Organization for Rehabilitation through Training
OXFAM	:	Oxford Famine Relief Organization
patente	:	business license tax
PID	:	Project Identification Document
P.O.	:	Purchase Order
PP	:	Project Paper
PSA	:	Procurement Services Agent
PSTNA	:	Private Sector Training Needs Assessment
PVO	:	Private and Voluntary Organization
RA	:	Rapid Appraisal
REDSO/WCA	:	A.I.D.'s Regional Economic Development Support Office/West and Central Africa
RTS	:	Regional Telecommunications Specialist
SAP	:	Systeme d'Alerte Precoce, a famine alert project sponsored by FED
SECADEV	:	Secours Catholique au Developpement
SIMAT	:	Societe Industrielle de Material Agricole du Tchad
SME, SMEs	:	Small and Medium Scale Enterprise(s)
SODELAC	:	Societe de Developpement du Lac
SONAPA	:	Societe National de Production Animale
SONASUT	:	Societe Nationale Sucriere du Tchad
SOTERA	:	Societe Tchadienne d'Exploitation des Ressources Animales
SSB	:	Single Side Band (radios)
STT	:	Societe de Textile du Tchad
TA	:	Technical Assistance
TBC	:	Tchad Business Conseils
TCA	:	Tax Chiffre d'Affaires
UDEAC	:	Central African Customs Union
UNDP	:	United Nations Development Program
UNICEF	:	United Nations Childrens Fund
UNIDO	:	United Nations Industrial Development Organization
UNIR	:	l'Union Nationale pour l'Independence et la Revolution
USAID, USAID/Chad	:	A.I.D. Mission in Chad
VITA, VITA/PEP	:	Volunteers in Technical Assistance in Chad, which has a Private Enterprise Promotion Project


LIBYA
B.E.T.
Faya-Largeau
NIGER
KANEM
BATHA
BILTINE
Biltine
Abéché
Mao
LAC
Bol
Lake Chad
Ati
SUDAN
Djamena
Mongo
OUADDAI
CHARI BAGUIRMI
NIGERIA
GUERA
Am Timan
SALAMAT
Bongor
CAMEROON
MAYO KEBBI
TANDJILE
Lai
Sarh
MOYEN CHARI
CENTRAL AFRICAN REPUBLIC
LOGONE OCCIDENTAL
Doba
Moundou
LOGONE ORIENTAL
0 50 100 200 300 miles
0 50 100 200 300 kilometers
Chad Reference Map
SAHARAN ZONE
SAHELIAN ZONE
SUDANIAN ZONE
National Capital
Prefecture Capital
International Boundary
Prefecture Boundary
Sub-Prefecture Boundary
FEWS Project, Chad, September 1990

REPUBLIC OF CHAD
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1. BACKGROUND AND RATIONALE

1.1 Background

The Republic of Chad covers approximately 1.3 million km^2 encompassing three agroclimatic zones. The Saharan zone in the north of the country is essentially desert; the Sahelian zone in the central part is grassland; and the Sudanian zone in the south is essentially savanna. About three fourths of the country receives rainfall averaging less than 600 millimeters per year. Chad is one of the poorest countries in the world. Average per capita income in 1990 was estimated at U.S.$ 180.

Chad's population was estimated by the Ministry of Plan and Cooperation as 5.2 million in 1989, with a population growth rate estimated at 2.3 percent. The urban growth rate was estimated at 7 percent, with approximately 27 percent of the total population living in "urban" centers of over 5,000 persons. About 38 percent of the urban population lives in the capital of N'Djamena (544,000 in 1988); another 18.5 percent in the three secondary cities of Sarh (101,009 in 1988), Moundou (90,909 in 1988), and Abeche (70,928 in 1988); and the rest are spread in small market towns ranging from 5,000 - 30,000 inhabitants. Rural population densities vary from 0.2 persons/km^2 in the northernmost Saharan prefecture of Borkou-Ennedi-Tibesti (BET, which encompasses 46.8 percent of Chad's area), to 5 persons/km^2 in the Sahelian zone, to 19 persons/km^2 in the more fertile Sudanian prefectures in the southwest (ref. Map).

These relatively low population densities spread over a large area create a difficult environment for provision of key marketing services, notably transport and communications. Chad was estimated to have under 50 km of paved roads at the end of hostilities, and most key links are still not all-weather. Transportation costs for basic goods are high; vehicle operating costs for a simple four-wheel drive vehicle are generally cited at FCFA 250 per kilometer (or about $1.00/mile). A major USAID and World Bank program in road rehabilitation and maintenance is being implemented more or less on schedule, and three of the four major cities will be accessible by all weather roads by 1993.

The dispersed population also limits economies of scale for basic institutions, including markets. Chad's food crops market infrastructure is spread about in hundreds of small towns and villages, many with rotating weekly markets serving a small radius. A minimum of ninety-five percent of all food crop marketing, with the exception of rice, is carried out by the

private sector. The remaining one-to-five percent is marketed by the National Cereals Office (ONC), generally in deficit areas. Markets are not specialized, and prices can vary considerably within short distances. Purchasing power within these small areas is limited, so that an area-specific production surplus (or the arrival of a loaded 30 MT truck) can devastate prices. Relationships between and among producers, traders, wholesalers, retailers, transporters, and all combinations thereof, are complex. Actual channels of distribution are not well defined nor understood.

Approximately 80 percent of the total workforce is engaged in agriculture or related activities. With the exception of the livestock sub-sector, few producers or traders specialize; men and women farmers alike cultivate fields, undertake processing, raise a few goats or chickens, and engage in retail trade of several products over the year. Traders and transporters at the wholesale and retail levels (often both) also generally do not specialize; several major cereals wholesalers in N'Djamena, for example, also trade in groundnuts, dried tomatoes, and oilseeds. The tendency towards diversification and risk minimization is found at all levels of the economy.

While risk minimization may be an appropriate strategy for survival, given the volatile climate in Chad, it has led to a fragmentation of markets and an economy which does not foster efficiency or economies of scale. Most individuals or households have at least two, if not more, sources of revenue, often based on very short-term pay-offs. Institutional credit is virtually non-existent for all but short-term loans. Medium and longer-term investments, either in the "traditional sector" for land improvement or the "modern sector" for business expansion, are rare. Although there are a host of other important constraints to increasing production and market efficiency, the desire by entrepreneurs and financial institutions for quick turnover as opposed to longer-term growth is one that pervades all private sector developmental efforts.

1.2 Chadian Agriculture in Brief

Agriculture has been the leading sector in Chad's post-civil war economy, accounting for about 40 percent of gross domestic product (GDP) and for most of Chad's export earnings. In 1988, it accounted for 42.8 percent of GDP, broken down as 28.3 percent for food crops, 11.9 percent for livestock, and 2.7 percent for cotton. Given both its comparative advantage in food crops and other donor attention (e.g. the World Bank) to the livestock and cotton sub-sectors, A.I.D. has decided to focus efforts in food crops. Statistics on food production per agro-climatic zone for the period 1985/86 to 1989/90 are found at Table 1.

Table 1: Food Crop Production in Chad 1985-1990
(1,000 Metric Tons)

	1985/86	1986/87	1987/88	1988/89	1989/90
CEREALS	735.7	653.4	571.0	815.8	699.8
Sudanian Zone	434.9	414.6	356.7	409.3	423.9
Millet	134.4	130.3	110.4	128.9	133.1
Sorghum	260.5	229.3	197.1	208.9	216.7
Berber	15.5	17.7	13.0	25.2	23.6
Rice	7.6	14.7	19.4	28.4	27.1
Maize	16.4	22.6	16.8	17.9	23.4
Sahelian Zone	269.8	220.0	200.7	346.4	259.0
Millet	117.4	122.7	105.0	183.7	114.2
Sorghum	48.3	69.2	60.4	76.0	84.4
Berber	79.8	24.6	23.3	73.5	58.8
Rice	0.2	0.2	0.1	0.2	0.0
Maize	18.8	2.7	10.8	11.3	1.1
Wheat	5.3	0.6	1.1	1.7	0.5
Other cereals[1]	31.0	18.8	13.6	60.1	16.9
OTHER CROPS	123.0	115.4	102.7	257.7	153.8
Sudanian Zone	116.3	106.1	86.6	134.8	138.5
Groundnuts	104.9	95.8	79.1	115.4	127.2
Sesame	11.4	10.3	7.5	10.8	11.3
Fruits	n.a.	n.a.	n.a.	7.1	n.a.
Vegetables	n.a.	n.a.	n.a.	1.5	n.a.
Sahelian Zone	6.7	9.3	16.1	99.0	15.3
Groundnuts	6.6	8.4	13.6	17.7	14.1
Sesame	0.1	0.9	2.5	2.2	1.2
Fruits	n.a.	n.a.	n.a.	12.5	n.a.
Vegetables	n.a.	n.a.	n.a.	66.6	n.a.
Saharan Zone	n.a.	n.a.	n.a.	23.9	n.a.
Fruits				17.5	
Vegetables				6.4	

Notes:

1. Unspecified other cereals production from SODELAC projects.

Source: ONDR "Evaluation des superficies et productions des cultures vivrieres"; BIEP "Les fruits et legumes, investaire et diagnostique." 1989. SODELAC Annual Report.

As reflected in Table 1, cereal production dominates in both the Sudanian and Sahelian zones, with pearl millet and sorghum (red and white) being the primary crops. Groundnuts, sesame, and a variety of other foods and vegetables are grown. Food crop production is minimal in the Saharan zone, and consists mostly of wheat and forage crops grown in oases and ouadis (river beds) during seasonal flooding.

It is generally accepted that cereal production levels of 650,000-700,000 MT equate to food self-sufficiency for Chad. As shown in Table 1, this has been achieved in four of the last five seasons. After experiencing a decline due to drought in 1984/85 (not shown), overall food production nearly doubled in 1985/86, remained high in 1986/87, and declined in 1987/88 due to inadequate rainfall and a decline in areas planted. In 1988/89, output of food crops increased by over 40 percent, reflecting good rainfall, higher prices in the previous season, and increased area under cultivation. Most observers conclude that farmers' increases and decreases in area under cultivation are in direct response to prices of the previous season.

This observation underlies an important aspect of Chadian agriculture. Simply stated, the clear and overriding determinant of food crop production in Chad is rainfall, and most annual production figures bear a direct relationship to amount of rain. Much of the literature thus portrays Chadian farming systems as subsistence, where farmers produce as much as they can, given rainfall and family labor constraints, and with cereals sold only in small amounts to carry farmers through "the hungry season" before the next harvest. The lower production figures of 1987/88, however, are not just the result of lower rainfall. They reflect the fact that farmers responded to a rather spectacular drop in prices in 1986/87 in several regional markets due to two years of good rains and surplus harvest by decreasing their hectarage planted.

Although marketing data are scanty and often obtained through the delphi method, the current generally accepted assumption is that approximately 50 percent of cereals production in the Sudanian zone and about 20 percent in the Sahelian zone are marketed following years with adequate rains. The latter may indeed be simply a bridging measure to carry a family through the hungry season; the former, however, most likely represents a commercial orientation. Vegetable and fruit production is overwhelmingly produced for the market. Given poor transportation and marketing infrastructure within Chad, and because of price and exchange rate differentials, the market for surplus cereals and national horticultural production is often across the borders to Nigeria or Cameroon, rather than to deficit zones within the country.

It is emphasized that food crop marketing in Chad is almost fully a free market operation, with government policy supportive of increased liberalization. One exception to the free market situation is rice production, which in Chad, as in most of West Africa, is generally not competitive. The GOC maintains an official (but unimplementable) ban on imports and sets base prices for contract farmers in the operating area of the Office de Mise en Valeur de Sategui-Deressia (OMVSD), the parastatal concerned with rice production and marketing in Tandjile and Mayo-Kebbi prefectures. Because OMVSD has proven unprofitable, the GOC plans to privatize its operations. When this occurs, government intervention in pricing of rice will likely be eliminated.

The Office National de Cereales (ONC) is charged with maintaining food security in Chad, and maintains a national food security stock of some 20,000 MT. It additionally is charged with marketing up to one percent of cereals produced, which equates to between one and five percent of that which is marketed in a given year. ONC buys and sells based on free market prices, generally in deficit areas in the north. Given the extremely high costs of transport throughout Chad, and especially to vulnerable areas in the north, it is unlikely that the private sector would meet such needs. Most observers conclude that ONC's purchases and sales have very little effect on prices overall.

1.3 Project Development

Since its reopening in 1982, the A.I.D. program in Chad has focussed its agricultural portfolio on the key GOC goal, food security, with an emphasis on private sector production. The Mission's main agricultural field projects have been those of three U.S.-based non-governmental organizations (NGOs), which have promoted diversified, irrigated agriculture in four areas of Chad. The Mission has additionally supported bilateral projects in pest control, and a continuing PL-480 Title II program, with levels varying depending on deficits (and rainfall). Experience gained from these efforts, coupled with on-going economic monitoring and data from the centrally-funded Famine Early Warning Systems (FEWS, 698-0466) project, led in 1987 to a decision to more closely investigate the relationship of pricing and marketing to food security, with an FY 90 project envisioned.

The Mission thus initiated a series of studies and analyses to obtain a better understanding of the three critical elements of Chad's marketing system. Macroeconomic and sectoral policies and regulations that affect marketing activities were most recently analyzed in "Chad: Agricultural Marketing Policies" (Abt, 1990), which demonstrated that the policy environment is almost fully liberalized. The Mission's assessment of "hard" infrastructure focussed on Chad's most visible, and arguably most

important, developmental constraint, the national road network, which is being improved with A.I.D. and World Bank assistance. The Mission's assessment of "soft" infrastructure revealed an extensive price data collection network throughout the country, and a nascent GOC initiative to develop a national market information system. And the Mission's on-going assessment of market participants reconfirmed that there is an active and relatively prosperous private network of wholesalers, retailers, transporters, and processors meeting both domestic and some export demand.

This on-going process has provided the Mission with an improved analytical framework for assessing Chad's overall level of marketing system development. The Bureau for Africa's (AFR) recently issued "Strategic Framework for Promoting Agricultural Marketing and Agribusiness Development in Subsaharan Africa" (July 1990) suggests that agricultural marketing systems pass through five stages of evolutionary development, and categorizes Chad as a Stage One country. Figure 1 uses the AFR categories as a guide, and summarizes the Mission's conclusion that Chad holds an equal number of Stage One and Stage Two characteristics.

As summarized in Figure 1, Chad is fully into Stage Two in terms of its policy and regulatory environment, squarely in Stage One in terms of its infrastructure, and about half-way between the two in terms of market participants. The proposed project will take this as a starting point and assist in moving each of the critical marketing systems elements up another stage.

Following guidance provided by AFR during PID review (ref. Annex A), A.I.D.'s assistance to agricultural marketing in Chad will be provided in two phases. The Phase 1 project includes only one direct intervention that is expected to have significant "people level" impact, assistance to the market information system (MIS). Analyses conducted as part of PP development, coupled with positive experiences in countries with environments similar to Chad, suggest that a national MIS can have significant impact on reducing marketing risk by stabilizing supply over time and space, and reducing consumer prices in the short- and medium-term.

A second project component will support market and policy analyses and studies to provide the GOC and A.I.D. with increased information about various parts or relationships within the marketing system, thus reducing their risks of investment in both the public and private sectors. (ref. Annex H). The third project focus will be a pilot effort at direct support to agribusiness based on expressed needs of the business community, providing it technical and managerial skills to reduce risk (ref. Annex G). The results of the three components, plus judicious monitoring of selected impacts, will enable the Mission to prepare a Phase 2 mode of assistance with greater impact.

Figure 1: Chad's Stage of Market Development

STAGE ONE CHARACTERISTICS

o low population densities with many farmers located far from markets;

Chad's population densities vary considerably, from 0.2 persons/km^2 in the northernmost Saharan prefecture of BET, to 5 persons/km^2 in the Sahelian zone, to 19 persons/km^2 in the Sudanian zone. These low densities create a poor marketing environment.

o producers focus on food self-sufficiency rather than producing for markets, although they may sell small quantities of staple foods immediately after the harvest in order to meet cash requirements;

Estimates of the amount of cereals production marketed range from 10-50 %, with norms assumed at 20 % for the Sahelian zone and 50 % for the Sudanian zone. The amounts later bought back by farmers are not known, so that net portions marketed are not known.

o lack of incentives for farmers to produce marketable surplus and for private businesses to engage in marketing activities;

There are no GOC disincentives for production of surplus in cereals or food crops, except in rice. There are no major disincentives for private businesses to engage in marketing activities. The poor transportation network, high cost of transportation, and inadequate communications network may create economic disincentives. Little is actually known about farmer or trader incentive structures.

o most agricultural commodities ciruclate only in local trading networks and inter-regional trade is difficult and costly;

The channels of distribution for Chad's cereals trade are not known, but it is believed that inter-regional trade is both difficult and costly, primarily due to the poor transportation network.

o State-Owned Enterprises tend to dominate agricultural marketing, especially commerce;

The State-Owned Enterprises that have dominated cotton and sugar commodity sub-sectors are being restructured and rice is being privatized. There are no State-Owned Enterprises engaged in significant cereals or food crops marketing.

o private marketing agents tend to be small in scale and undercapitalized, and they tend to turn their stocks over as rapidly as possible;

The channels of distribution and number and types of marketing agents are not known, but it is likely that the majority are small-scale and undercapitalized.

o there is dilapidated or inadequate infrastructure.

Marketing infrastructure is inadequate.

STAGE TWO CHARACTERISTICS

o the policy and regulatory environment is being liberalized;

The environment for marketing of all food crops except rice and sugar is fully liberalized; the environment for rice and sugar is in the process of liberalization.

o there is a rudimentary extensive marketing infrastructure that serves a majority of the farmers;

Chad's marketing infrastructure for food crops (except rice and sugar) is at least 95% private, and weak. The market infrastructure for rice, sugar and cotton is undergoing restructuring.

o most farmers still process staple foodstuffs for their own household consumption;

o progressive farmers emerge and bring more land under cultivation, apply more inputs to the land, and sell a greater portion of what they produce;

Estimates of the amount of cereals production marketed range from 10-50 %, with norms assumed at 20 % for the Sahelian zone and 50 % for the Sudanian zone. Experience in small area development projects undertaken by PVO's and in the cotton areas demonstrates that when information and technology are made available, progressive farmers emerge.

o inter-regional trade in domestic staple commodities has emerged and links with the international economy are becoming stronger;

Inter-regional trade within Chad is unquantified but may be significant for certain crops. Trade with neighboring states is unquantified but believed to be significant with Cameroon and Nigeria. The constraints include limited availability of market information; the poor transport network; high transportation costs; and limited availability of capital to encourage the active participation of private traders. What cross-border trade exists is primarily contraband.

o the private sector is competing with public marketing agents;

Ninety-nine percent of cereals and food crops marketing, with the exception of rice and sugar, is wholly undertaken by the private sector. The public marketing agents involved with rice and sugar are being restructured.

o specialization is beginning to occur (e.g. transport, storage, processing); and

The trucking industry is specialized, and within the industry some specialization may be occuring. There is no specialization in storage or processing outside of the cotton, rice, and sugar sub-sectors.

o trading networks for consumer goods, especially imported manufactured items, emerge alongside input and output marketing networks.

With the exception of rice, cotton and sugar, there are virtually no input marketing networks. Trading networks for imported manufactured items are quite limited.

1.4 Conformance with A.I.D. and GOC Policy

The proposed project conforms fully with relevant A.I.D. and AFR policies and strategies. The project goal derives from AFR strategic objectives in the FY 1989-1991 DFA Action Plan, and much of the technical analysis is based on guidance in the AFR Strategic Framework noted above. The project's proposed phasing, with limited and pilot technical assistance concurrent with increased policy and sub-sector analyses, is consonant with the approach recommended by the AFR Strategic Framework regarding Stage One and Two countries (ref. Annex K).

The project's proposed support to private agribusiness for improved financial and technical planning is fully consonant with Agency policy regarding the private sector. Attention to gender issues in each of the components, and with gender-disaggregated information collection and analysis, fully follows current women in development (WID) guidelines. Two of the project components will have a neutral impact on the environment; the potential environmental impact from assistance to private agribusinesses will be assessed on a case-by-case basis in consultation with the REDSO/WCA Environmental Officer.

The proposed project is also in conformance with and supportive of the GOC's efforts to mobilize the private sector for development. As stated in its December 1989 Orientation Plan, "...the role of the State, in terms of economic and social development, is to set priorities, orient development actions, and ensure that the legislative and regulatory systems support the priorities and actions. The State will not substitute for private entrepreneurs..." (Plan d'Orientation, p. 55-56). The May 1990 "Chad Agricultural Marketing Policies" consultant report prepared as part of PP development provides an in depth assessment of the proposed "fit" between this project and GOC policy, and concludes that no serious barriers exist to successful implementation.

2. PROJECT DESCRIPTION

2.1 Project Goal and Purpose

The goal of the Agricultural Marketing and Technology Transfer (AMTT) project is to promote competitive food crop marketing, improve market efficiency and increase the role of agribusiness in the marketing process. Indicators which will be monitored to measure goal achievement include: lower marketing costs; reduced seasonal price fluctuations; increased stable supply of agricultural products across time and space; lower consumer costs; and increased value added attributable to agribusiness. It should be emphasized that measurable change in several of these indicators will be accomplished during the life

of this project.

The project purpose is to reduce the risk of investment in agricultural marketing. By the end of the four year project, the following conditions will have been achieved:

- market communication, as measured by increased market correlation coefficients, will have improved;
- private sector investment in agribusiness will have increased in relative and absolute terms; and
- the GOC will be using improved information to assess the impact of policy alternatives.

The four year effort is viewed as Phase 1 of a longer-term A.I.D. commitment to agricultural marketing in Chad. Data collection and analyses undertaken during this phase will be analyzed as part of a planned Mid-Term Evaluation in the second quarter of FY 93, which will both assess progress to date and identify areas for increased project and possible non-project assistance (NPA) to be developed during FY 93. The project thus will achieve the medium-term purpose and some impact at goal level, while setting the stage for more significant impact on the longer-term goal indicators noted above.

2.2 Detailed Project Description

The Agricultural Marketing and Technology Transfer (AMTT) project will support three components necessary to purpose achievement:

1) Support to the GOC's planned market information system (MIS), which by the end of the project will be producing demand-driven weekly market reports on Radio Chad covering up to 10 cereals in 50 markets and a minimum of 4 vegetables in 15 markets. This greatly increased availability of marketing information will directly reduce marketing risk for producers, intermediaries, wholesalers and retailers, and result in a measurable and significant impact on over two million Chadian producers and consumers.

2) Pilot-level support to promote private sector investment in agribusiness, which will lead to increases in private Chadian capital and institutional credit invested in agribusiness, in addition to the establishment of a private Chadian agribusiness consulting capability. Such increases are expected to be modest in the short-term as effective demand is not well understood, but experience gained will lead to better planning for possible Phase 2 assistance.

3) Support for the conduct of market and policy analyses which will provide GOC decision-makers with an assessment of

alternatives for policy and regulatory regimes that encourage private investment in agricultural marketing, thus reducing their risk of investment. By 1994, the regulatory environment for private business will have improved, and the GOC will have developed a strategy for improving the efficiency of the private transport industry and for enhancing the contribution of women to marketing systems. It will additionally have significantly more knowledge of private capital markets in Chad.

This Phase 1 project is planned for a 51 month period, i.e. through the first quarter of FY 1995. The total budget is estimated at U.S.$ 13.86 million, of which $ 10.15 million will be provided by A.I.D. (73 percent) and $ 3.71 million equivalent in kind by the GOC (27 percent).

The bulk of A.I.D. funding will be provided through an institutional contract for long and short-term technical assistance (TA), limited equipment and supplies, and short-term U.S., third country, and in-country training. The contractor will establish an independent AMTT project office under the auspices of the Ministry of Agriculture and Rural Development (MARD). The office will be staffed by Chadian professional and support staff, and will serve as a base for three long-term expatriate specialists, as follows:

- A Chief of Party/Senior Policy Analyst (3.5 person years) will be responsible for all activities of the office, and will have primary responsibility for the studies and analyses component. S/he will coordinate closely with a senior-level GOC Policy Oversight Committee to ensure that studies undertaken are disseminated, discussed, understood, and applied to policy and investment decisions.

- An Agribusiness Development Specialist (2 person years, renewable for 1.5 years based on results) will also be based at the project office in a small Agribusiness Support Center (ASC), and will work with a host of private sector institutions and individuals to promote and enhance agribusiness in Chad; and

- A Market News Coordinator (3.5 person years) will receive administrative support and overall guidance from the project office, but will be based at the Bureau de la Statistique Agricole (BSA) to assist in implementation of the MIS.

The efforts of the long-term specialists will be supplemented by provision of basic equipment and supplies (information hardware and software, vehicles, single sideband (SSB) radios; 9 pm U.S., 18 pm third-country, and several hundred person days in-country training; and 96.5 expatriate and 326 pm

Chadian (147 pm professional and 179 pm enumerators/research assistants) short-term TA in selected fields.

Each of the components is summarized in the following paragraphs, and discussed in more detail in Annexes F (Market Information System), G (Agribusiness Support Center), and H (Market and Policy Analysis).

2.2.1 The Market Information System. The technical analyses in section 5.1 and Annex F demonstrates that Chad is "intervention ready" for a national market information system (MIS). Activities under the Market and Policy Analyses and the Agribusiness Support Center components are essentially information-gathering and pilot efforts which should lead to longer-term shifts in policy and investment in the public and private sectors. The MIS is expected to have more immediate benefits to market participants. Experience supports the assumption that Chad's private market participants will respond to market signals, and that by FY 1995, improved market communication, as measured by increased market correlation coefficients, will be contributing to lower marketing costs, reduced seasonal price fluctuations, an increased, stable supply of products across time and space, and lower urban consumer prices.

The principal objectives of a market information system, as defined by a recent CILSS seminar in Bamako, are:

- to improve market participant access to information in order to support market liberalization, increase producer bargaining power, improve market flows, and increase consumer choice; and

- to improve market intelligence in order to facilitate policy formulation by government decision makers and donor agencies.

A recently established Chadian MIS committee has been working towards these objectives with a national focus: 1) the harmonization of numerous on-going data collection efforts in the country; 2) the centralization of data processing and analysis; and 3) the timely dissemination of accurate market information based on user needs.

The MIS committee includes representatives from the Bureau de la Statistique Agricole (BSA) of the Ministry of Agriculture and Rural Development; ONC and the Systeme d'Alerte Precoce (SAP) of the Ministry of Food Security; the Office National de Developpement Rural (ONDR) of the Ministry of Agriculture and Rural Development; and Direction de la Statistique des Etudes Economiques et Demographiques (DSEED) of the Ministry of Plan and

Cooperation. The MIS committee was established in January 1990 and has undertaken the following since that time: 1) conducted an inventory of numerous price data collection activities in the country; 2) sent 7 Chadians to the CILSS-sponsored seminar in Bamako on MIS in the Sahel; and 3) initiated two test surveys, on prices and market typologies. The MIS committee is currently actively planning for a major national seminar in December 1990 to disseminate findings of the test surveys, and hopes to begin broadcasting prices for up to 30 markets in January 1991.

The AMTT project will support and enhance these activities over the next four years. Working with the BSA as the lead GOC agency, USAID will provide funding for an expatriate Market News Coordinator for 3.5 years, 14 pm expatriate and 50 pm Chadian enumerators as short-term TA, 18 pm third-country training, several hundred days of in-country training, and information and telecommunications equipment and supplies. These inputs will support achievement of the key component output of a functioning market information system for cereals and horticultural crops by 1994.

USAID support to the MIS will focus on four major activities:

- a diagnostic phase, including 1) rapid appraisal of the marketing system for key horticultural crops, tomatoes, onions, and garlic; 2) a more detailed study of the millet and sorghum commodity sub-system, and 3) an initial survey of user needs, and periodic user assessment of MIS effectiveness;

- on-going reliable and timely collection, processing, analysis, and dissemination of price and market information for key cereal and horticultural crops in an increasing number of markets and products over the life-of-project;

- development of institutional capacity through training, internal evaluation, and phasing of improvements; and

- annual external evaluation of MIS performance.

The rapid appraisal of tomatoes, onions, and garlic sub-systems will be undertaken through a separate contract (IQC or centrally-funded buy-in) early in the project to enable planners to include these key vegetables in the MIS as soon as possible. The millet and sorghum commodity sub-system study will be initiated in FY 1992, and will be a more detailed year-long study designed to provide in-depth information on the marketing systems for Chad's primary food crops. This latter study will thus be managed under the project's Market and Policy Analyses component described in 2.2.3 below. The user needs surveys will be

undertaken through BSA with consultant assistance. Findings from these activities will be fed back into the on-going MIS for improved, targeted, collection and dissemination activities.

Data collection, processing, analysis, and dissemination will be undertaken through the several organizations currently involved in the MIS committee. BSA currently has 69 enumerators in the field and 5 data processors in N'Djamena working on the MIS, with projections for modest staff increases in processing to meet the needs of the planned system. The choice of BSA as the lead implementing agency is summarized in the Administrative Analysis (seccion 5.4.2) and described in more detail in Annex F.

Enumerators will report to N'Djamena weekly using an existing SSB radio network that will be improved with project resources. Processing and analysis will be undertaken at BSA headquarters, with improved programs and training providing increasingly sophisticated analyses over the life of the project. Dissemination will be undertaken by Radio Chad, initially through its regularly scheduled "Radio Rurale" series in 5 languages, and later at specific times in specific languages for targeted audiences, as determined through user surveys. A recent FAO survey found that 64.2 percent of households in N'Djamena have radios, and, although in rural areas this figure is undoubtedly lower, experience suggests that radio is an effective means of national communication. Special attention will be given to women's access to and use of the MIS information in the user surveys, to better direct Radio Chad as to any women-specific listening needs.

Institutional capacity at BSA and selected participating organizations will be increased through on-the-job training of data analysts by both the Market News Coordinator and the in-country FEWS representative, as well as topical, formal, short-term, in-country training courses. These will be conducted both by local specialists (i.e. enumerator training, basic computer skills) as well as by expatriate short-term consultants. Approximately 18 pm of short-term third-country training and study tours are programmed for specialized computer training, and for attendance at CILSS conferences and other "target of opportunity" events.

By the end of the project, a functioning market information system for cereals and horticultural crops will be providing demand-driven weekly market reports on Radio Chad on up to 10 cereals in 50 markets and on a minimum of 4 vegetables in 15 markets. Data generated by BSA will document increases in market correlation coefficients. After 3 or 4 years of operations, historical data will enable project evaluations to assess changes in marketing costs, seasonal price fluctuations, supply of products across time and space, and the effect on urban consumer

prices as a result.

2.2.2 The Agribusiness Support Center (ASC). The decision to provide assistance to the MIS is based in part on the Mission's assumption that Chad's active private sector market participants will respond to market signals. Project analyses demonstrate that what little is known about these participants indicates that they tend minimize risk by limiting investment to short-term, high margin trading activities. The project will provide technical and managerial assistance to the private sector to reduce its risk, and to stimulate private investment--both individual and institutional--in agribusiness. It is assumed that increased private investment in such areas as improved storage, packaging, processing, and transport will lead to lowered costs and improved competition in the Chadian agricultural marketing system.

The AMTT will support, on a pilot basis, the creation of an Agribusiness Support Center (ASC) to provide technical assistance and information services to agribusinesses in Chad. The ASC will initially be staffed by the expatriate Agribusiness Development Specialist and one Chadian professional. Although for administrative efficiency it will be based at the AMTT project office and receive support from same, it will have a separate entrance (or separate floor) and signboard and will maintain a separate identity as part of the private business community.

The ASC's targeted clients will be existing, privately or cooperatively owned and operated, Chadian small- and medium-scale enterprises (SMEs) engaged in or with a linkage to agricultural production. As described in Annex G, the SME label applies to the middle range of Chadian enterprises. The ASC will not service the very large state- and foreign-owned agribusinesses, nor will it pursue the vast micro-enterprises that make up much of the informal sector. Priority will be given to enterprises which emphasize use of local, as opposed to imported, resources, promote Chadian employment and value added, and which show promise for productive growth. Geographic focus during the first two years will be on such enterprises in Chari-Baguirmi (around N'Djamena) and the corridor running from the southwest near Moundou through N'Djamena to the shores of Lake Chad. This area has the highest concentration of business activities. Given the large number of women engaged in both production and processing, it is expected that no less than 30 percent of ASC clients will be women.

Given the uncertain effective demand (as opposed to expressed need, which is considerable) for the proposed services within the client group, the ASC will be considered a pilot effort and operate on the principal of "start small, go slow." The functions of the ASC will be:

1) to work with local entrepreneurs to identify and undertake feasibility studies of and develop business plans for new and/or expanded agribusiness ventures in Chad. In the early stages of the project, the ASC may have to identify and pursue possibilities on its own rather than relay upon demand from its customers. As it becomes established in the N'Djamena business community, it should be able to attract clients who have already identified a potential investment. As part of this effort, the ASC will establish and maintain relations with the formal banking community and the Volunteers in Technical Assistance (VITA) lending program, and will serve as an "honest broker" between potential investors and entrepreneurs.

2) to provide agribusiness technology information that will be appropriate for the scale of undertaking in which Chadian entrepreneurs are willing to invest. The ASC will use its resources to help prospective investors and business operators obtain information about production, processing, and other post-harvest handling equipment. In order to provide potential investors and organizations supporting agribusiness (GOC and other donor project, NGO's) access to information, the ASC will establish a small documentation center with catalogues and suppliers' brochures, emphasizing regional suppliers as well as such "appropriate technology" sources as the Intermediate Technology Development Group (ITDG) in London, and VITA and Appropriate Technology International (ATI) in the U.S.

3) to strengthen local consulting firms to service the needs of their existing and potentially new agribusiness clients, so that the support function for agribusiness is firmly established in Chad.

Potential clients will initially be solicited through a number of venues: focus group interviews and seminars with representatives of specific types of enterprises; referrals from and direct contact with the Chamber of Commerce, commercial banks, and VITA; referrals and direct contact through NGO's; and individual interviews through the private sector network in N'Djamena. Indeed, the "Lists of Persons Contacted" in the series of reports leading up to and including this PP forms the basis for the beginning of an active client group.

The ASC will thus function as a combination consulting firm and lobby for private agribusiness in Chad. Given these attributes, the Mission has carefully considered appropriateness of establishing it as a subsidized independent entity, given the potential for competition with existing public and private sector groups carrying out these functions. In terms of the public

sector, the Mission has assessed the past and present performance of the GOC Office de Promotion Industrielle du Tchad (OPIT) and determined that the ASC will have little effect on its portfolio. That is, OPIT's target group is large-scale, export or import-substitution industries in all sectors. The ASC's target group is SME, domestically oriented businesses involved in agriculture. The two entities will complement the work of each other, rather than compete.

Neither will the ASC compete with the USAID/Chad-funded VITA/Private Enterprise Promotion project. VITA is a lending program, and as such must avoid possible conflicts of interest in developing client dossiers which it must later evaluate for funding. It provides no pre-loan technical or management services. The ASC will thus also complement VITA's program--as well as those of the commercial banks--by providing professional services to develop high quality bankable dossiers.

The Mission will work with Chad's existing private sector consulting firms. One of the later activities of the Chadian office of the Sahel Regional Financial Management Project (SRFMP, 625-0974) was to institutionalize a capacity for financial management training and consulting. The ASC will continue this effort. It will contract with the local consulting firms for specific tasks, and ASC long- and short-term personnel will undertake co-training and co-consulting as a means of building skills. Through this collaborative approach, it is anticipated that by the end of the project at least one private consulting firm will have specific in-house expertise in agribusiness development.

This desire to strengthen rather than compete with the existing firms also dictates that the ASC charge fees for its services. Its fee structure will be based on the principle that clients should have to pay the local market equivalent for expatriate technical assistance, were comparable assistance available locally. This approach will avoid any market distortions from arbitrarily set fees. The ASC will deposit fees in a separate account from the AMTT's operations account, and develop guidelines and procedures for use of these funds to defray the local costs of workshops and seminars, in collaboration with the Controller's Office, USAID/Chad.

During Year 1 of the project, the ASC will need to undertake at least 2 feasibility studies on its own initiative and not at a client's request. It will use these documents as marketing tools to provide its potential clients concrete evidence of the types of services it can provide and products it can produce. These initial efforts will be used to solicit future business. After that, and once the ASC begins undertaking assignments initiated by a client's request, it will begin charging fees.

Short-term consultants to be engaged by the ASC will cover a number of skill areas. Broad-based needs assessments have been undertaken by a number of consultants in recent years, and such exercises are not viewed as necessary. Rather, consultants will be utilized for product- or skill-specific tasks, ranging from improved packaging of fresh tomatoes to cost effective pump management to analysis of the domestic market for pre-processed cereal products, and other products from locally grown crops, based primarily on specific client demand. The ASC will strive to use local consultants to the maximum extent possible and call upon expatriate assistance only the skills sought are not available locally. The primary contractor will be encouraged to call upon resources from a number of venues, such as the International Executive Service Corps, the American Society of Agricultural Consultants, and Volunteers in Overseas Cooperative Assistance (VOCA), for such specialized skills. It is unlikely, however, that the ASC would use an expatriate to undertake a domestic market study. Local firms know the intricacies of the local much more intimately than any expatriate could hope to know. Expatriate consultants will be called upon for specific, usually technical, tasks.

Given difficulties anticipated in identified expatriate trainers who speak Chadian Arabic, and the low (26 percent) proportion of French literacy in Chad, in-country training and seminars will be carried out to the extent possible through existing Chadian consulting firms. If necessary, the project will support training-of-trainers for this purpose. The project office will collaborate with the A.I.D. centrally-funded Human Resources Development Assistance (HRDA, 698-0463) project in this regard.

The effectiveness of the ASC in meeting client group needs will be assessed after 18 months of operation, to determine whether the project should continue to finance the ASC or use its resources to shift support to agribusiness to a different venue. Should progress be satisfactory, the component (and expatriate specialist) will be retained until the end of the project.

The key AMTT <u>outputs</u> against which to measure such success will be:

- Private Chadian capital invested in agribusiness will have increased: after 18 months, at least one new agribusinesses or product line will have entered the market, and by the end of the project, at least four new agribusinesses or product lines will be established; after 18 months, at least 1 existing business will be implementing new business plans, and by the end of the project at least 4 will have expanded

sales; and by the end of the project the number of private agribusinesses registered with the Chamber of Commerce will have increased by 50 percent.

- The number and volume of loans to male and female owned agribusinesses will have increased: by the end of the project, loans to agribusinesses, by gender of owner, will have increased at BTCD and/or BIAT, and at VITA. A baseline for measurement of increases will be established during Year 1 of the project.

- A private Chadian agribusiness consulting capability will be established, as measured by consultant rosters and client lists.

Assistance provided under this component will mobilize the investment of local capital into productive, value-adding enterprises that are based upon locally grown and produced agricultural commodities. The ASC will respond to expressed demand of the agribusiness community for technical and managerial assistance, and be constantly monitored and evaluated on its ability to meet the needs of its clients. Over the longer term, a strengthened agribusiness sub-sector will increase agriculture's contribution to value added nationwide.

2.2.3 Market and Policy Analyses. A.I.D. assistance to the MIS and the agribusiness community will provide a wealth of empirical and experiential data on Chad's marketing infrastructure and its market participants on which to formulate future plans. Analyses undertaken during PP development demonstrate that although the policy and regulatory environment is almost fully liberalized, a number of actions are called for to strengthen it.

A.I.D. assistance under this component is directed at enabling the GOC to use improved information to assess the impact of various policy alternatives. Topics to be addressed will meet the following criteria:

1) The proposed study will provide basic information on key elements of the marketing system which are currently not well understood; and/or

2) The proposed study will provide identification of key policy, regulatory, and "soft" infrastructure constraints to efficient functioning of the system; and/or

3) The proposed study will provide analysis of alternatives to alleviate constraints, including analysis of the impact of the various alternatives.

Each of these three criteria will be assessed against the overarching criteria of the potential for the topic studied to have a significant impact--i.e., a positive and sustainable benefit to the national economy and to Chad's poor majority--on the agricultural marketing system. Topics that have been identified during PP development fall into three basic categories, which are summarized below.

Precisely defined policy and regulatory bottlenecks for which clear solutions have been generally identified, and which have modest short-term but potential significant long-term impact. These include the need to simplify the business registration system, to simplify the process of gaining access to the benefits of the Investment Code, and to reform the license tax (patente) so that it is not regressive. The first two are well understood by the GOC, and the Mission is thus including them as Conditions Precedent under the project (ref. section 6). Funds are provided for short-term TA to assess the impact on revenues if the GOC so requests, although given the size of the formal business community such impact is expected to be slight in the short-term. Reform of the license tax is more complex and forms part of the IMF's agenda in its overall assessment of the fiscal system and fiscal administration. The Mission has thus included its reform as a project Covenant, with funds available for consulting assistance to assess the impact of alternative reforms should the GOC and IMF so request. Given the small size of the formal business community, potential short-term impact to GOC revenues is expected to be modest. The potential for significant impact to the economy over the longer-term is great, however, as the informal sector moves into the formal sector and such processes and taxes become more important.

Precisely defined policy and regulatory bottlenecks for which alternative solutions and potential impact are more difficult to assess. The key bottleneck included in this category is the high import tariffs (30-50 percent) on agricultural tools and equipment, agricultural inputs, and transportation equipment, including spare parts. Given the rapidly changing structure of the cotton and rice commodity systems, which have been the primary markets for tools, equipment, and other inputs (including fertilizer, which was liberalized last year), the effective demand for such commodities and thus potential impact of decreasing tariffs is not known. The effective demand for lower tariffs on transportation equipment, including spare parts, is believed to be quite high. The customs tariffs on these goods, however, are made within the Central African Customs Union (UDEAC), and cannot be changed by Chad alone. The World Bank and IMF will be working with UDEAC in the near future, and the special problems of UDEAC's landlocked members are on the agenda. The Mission has thus included reform of these tariffs as a project Covenant, with funds provided for

consulting assistance to assess potential impact should the GOC so request.

Generally defined bottlenecks encompassing policy, infrastructure, and market participants, which are more complex to understand and change, but if changed could have a significant impact due to complex linkages throughout the economy. Topics identified for further research in this category include Chad's transport industry, particularly the private sector truck fleet; private financial services and capital markets; market participants and channels of distribution of specific major commodities; and the role of women in agricultural marketing. Funding is provided for short-term technical assistance (Chadian and expatriate) and operating costs for initial and follow-up studies to better define the parameters of each topic, and to identify potential venues for change.

The component will be managed on a day-to-day basis by the COP/Policy Analyst of the AMTT contract team, in consultation with the USAID/Chad Project Officer. In order that the component foster a continuing process of information collection, analysis, dissemination, and possible application, however, the Mission will ask the GOC to form a senior level Bilateral Policy Oversight Committee for purposes of the component. Given the focus on agricultural marketing, the GOC representatives will be appointed from the following ministries: Agriculture and Rural Development, Food Security and At-Risk Populations, Plan and Cooperation, and Commerce and Industry. Additional representation from the Ministry of Finance, and of Transport and Civil Aviation, may be sought during specific topical studies. USAID/Chad representation will include the A.I.D. Representative or his designee, the Agricultural Development Officer, and the Program Economist. The formation of the Bilateral Policy Oversight Committee is included as a Condition Precedent for the project.

The COP/Policy Analyst will develop annual workplans for the component which will be reviewed and approved by the Committee each year. Thereafter, the Committee will meet at least once quarterly to review findings of completed studies, to assess progress of studies in process, and to propose or consider topics for future studies. Where findings appear significant, the Committee will develop and sponsor appropriate venues for widespread dissemination and discussion, including seminars, roundtables, and similar events. Where recommendations are immediately implementable, they will be pursued by USAID/Chad as part of its on-going policy dialogue. Given the key topics identified above, by the end of the project the following outputs will have been achieved:

- An improved regulatory environment for agribusiness will

be instituted by the GOC, including but not limited to a simplified business registration process by FY 1992; a simplified process for access to Regime A of the Investment Code by FY 1992; and revision of the patente by FY 1993.

- A strategy for improving the efficiency of the private transport industry will be developed by the GOC and private transporters;

- A strategy for enhancing women's roles in agricultural marketing will be developed by the GOC; and

- The GOC will have detailed analyses of the behavior, incentive structures, and expectations of private investors, which should enable it to formulate a more supportive policy and regulatory environment.

Component inputs include 64.5 pm of short-term expatriate and 147 pm professional (64.5 pm each A.I.D. and GOC) and 129 pm enumerator/research assistant pm of Chadian TA. Chadian participation on specific studies will be obtained on a study-by-study basis from the public and private sector research and consulting community. As described in the Administrative Analysis (section 5.4), the interministerial office for studies and projects (BIEP) is a planned key collaborator in many of these efforts.

2.3 Relationship with Other A.I.D. Projects

The AMTT project is designed to complement planned and on-going A.I.D. efforts in Chad. Annexes F, G and H contain detailed information about A.I.D. and other donor efforts which relate to each of the three project components. Selection of the particular topics to be studied under the Market and Policy Analyses component is based partially on experience to date of other A.I.D. projects, notably those of VITA in its lending program and of Africare, CARE, ORT, and ACDI in their area-specific agricultural development efforts. Of particular interest to these NGO efforts will be the study and analysis of private financial services and capital markets early in the project. A.I.D.'s on-going experience with road rehabilitation and maintenance under the Road Maintenance Project (677-0050) will serve as a basis for much of the analysis under the proposed private sector transport study.

The ASC technical and managerial assistance will also enhance PVO activities, and on-going collaboration with VITA in N'Djamena and its new Moundou office is planned. The ASC will also collaborate closely with USAID/Chad's Training Office as it increases in-country private sector training under HRDA.

Assistance to the GOC for the MIS has been designed in close collaboration with the Chad Representative for the centrally-funded FEWS project. The FEWS representative will be closely involved in development and implementation of the MIS, and will provide 3 hours/week on-the-job training to BSA staff in computer skills and analysis techniques during the project. The BSA and AMTT Market Coordinator will coordinate closely with USAID's PL-480 Title II program management to minimize the impact of donated cereals on prices.

2.4 Relationship with Other Donor Projects

As discussed in more detail in Annexes F, G, and H, numerous donors are involved in various aspects of planned AMTT activities. The World Bank and International Monetary Fund (IMF) are working with the GOC in structural adjustment and are particularly active in the restructuration of the cotton sector, and planned privatization of OMVSD (rice) and SIMAT, the state-dominated agricultural equipment and tools company. The AMTT COP/Policy Analyst will maintain close relations with the Bank on all aspects of planned policy analysis. The Bank will also be undertaking a financial sector review in FY 1991, which is likely to have implications for both the market and policy analysis component and for the ASC. Under its Social Dimensions of Adjustment project, the Bank will support a major household expenditure survey which will provide a wealth of baseline information against which to measure policy impact. The FAO is providing long-term technical assistance to BIEP, and resident FAO experts will thus also participate in BIEP's work on the AMTT studies.

The United Nations Industrial Development Organization (UNIDO) supported OPIT operations for several years, and is currently involved with the Ministry of Commerce and Industrial Development in future planning. Although it is likely that these activities will focus on industries that are larger than those targeted by the ASC, staff of the latter will maintain a dialogue to avoid duplicating efforts. Several NGO's are involved in work with cooperatives and pre-cooperatives ("groupements"), and the ASC will seek to provide useful assistance where indicated.

The GOC's on-going coordination of the numerous donor-funded data collection efforts in cereals prices and supply is fully discussed in Annex F. Of key importance is the overall support to MIS development provided by the Comite Inter-Etats de la Lutte contre la Secheresse Sahelienne, or CILSS. Project designers have worked closely with the CILSS representative in design of AMTT support to the MIS, and continued close collaboration is envisioned during implementation.

3. BUDGET AND FINANCIAL PLAN

3.1 Cost Estimates

The total cost of the AMTT project is estimated as U.S. $ 13.86 million, of which 73 percent, or $ 10.15 million, will be provided by A.I.D., and 27 percent, or $ 3.71 million, will be provided in kind by the GOC. Table 2 summarizes costs by component and source of funds.

Table 2: Agricultural Marketing and Technology Transfer Project Life-Of-Project Costs per Component and Source of Funds (U.S. Dollars 1,000)

Source / Component	A.I.D. FX	A.I.D. LC	GOC LC	TOTALS (%)
Marketing Information System (MIS)	2106.8	173.4	3603.4	5883.6 (43)
Agribusiness Support Center (ASC)	1921.0	207.2	0.0	2128.2 (15)
Market and Policy Analyses	3496.1	690.7	102.0	4288.8 (31)
Project Support, Audit, Evaluation	1169.4	386.1	0.0	1555.5 (11)
TOTALS	8693.3	1457.4	3705.4	13856.4 (100)

The detailed component budgets are provided in the overall project budget found at Annex J, Detailed Budgets and Cost Estimates.

Table 2 demonstrates the level of the GOC's commitment to the MIS in terms of funding. The GOC contribution covers salaries (90 percent of funding), office supplies, and operation of the four BSA vehicles (10 percent). Assessment of the contribution is based on the salaries and fringe of the BSA Director, 9 BSA headquarters staff, 12 field supervisors, and only its 38 permanent enumerators (its 20 contract enumerators are not included). The budget assumes a limited increase in headquarters personnel for radio operation (2 persons at headquarters) over the life of the project. It also includes salaries and fringe for limited existing SAP and ONC personnel, primarily enumerators, who will be working on the MIS.

The GOC contribution to the Market and Policy Analyses

component is based upon personnel and in-kind resources to be provided for the topical roundtables.

A.I.D. funding of project inputs per each of the three main components for the life of the project is presented in Table 4.

Table 3: Agricultural Marketing and Technology Transfer Project A.I.D.-Funded Inputs by Component for the Life-Of-Project (U.S. Dollars 1,000)

Component / Use	MIS	ASC	Policy	Supp.	TOTALS
I. Personnel					
A. Salaries	327.4	555.6	1146.9	399.2	2429.1
B. Overhead, Fringe Allowances	880.6	1020.7	1730.6	234.9	3867.0
C. Travel & Per Diem	271.7	349.7	818.9	89.0	1529.3
II. Training	257.3	0.0	305.0	0.0	562.3
III. Commodities	327.4	83.2	97.5	168.6	676.7
IV. Other Costs	215.8	119.0	87.7	663.8	1086.3
A.I.D. TOTALS	2280.2	2128.2	4186.8	1556.7	10150.7

A summary discussion of the basis of cost estimates per component follows. Detailed budget breakdowns and a discussion of unit costs used are found in Annex J.

MIS Cost Estimates

A.I.D. funding for MIS personnel costs (salaries, overhead, fringe, allowances, travel, per diem) covers the Market News Coordinator for 3.5 years; up to 14 pm months of short-term expatriate TA for the initial user needs assessment (1 pm) and annual user surveys (3 pm), three annual internal evaluations (3 pm), computer assessment and training (4.3 pm), and in-country training (2.8 pm). It also provides for 50 pm of Chadian research assistants over the life-of-the-project to work on the user surveys.

A.I.D. will fund up to 18 pm of third-country training for personnel associated with the MIS, primarily in computer skills in West Africa. Limited funding is also provided for in-country

training, including enumerator and supervisor training, workshops, and MIS roundtables.

The major commodities for the MIS include the purchase and installation of approximately 50 SSB radios, with appropriate power sources, and the purchase and installation of 8 computers and related hardware and software, including 2 UPS units and a generator for the BSA offices to assure continued data processing capabilities. A.I.D. will also procure one vehicle, to be used by the Market News Coordinator for supervisory work. Funding for other costs includes vehicle, generator, and equipment operations and maintenance, as well as limited funding for Radio Chad program development.

ASC Cost Estimates

A.I.D. funding for personnel will cover up to 3.5 years of the Agribusiness Development Specialist, and 18 pm each of expatriate and Chadian consultants to work on specialized business plans or feasibility studies. It also covers the salaries and fringe of one Chadian professional and one secretary/receptionist who will staff the ASC. All other component support personnel costs are covered by the AMTT office (see below). Because the long-term specialist will essentially be training at all times, through co-consulting with Chadians and working intensively with private entrepreneurs, no training funds are provided *per se*.

Commodities covered under this component include one four-wheel drive vehicle, 4 computers and related hardware and software (2 base and 2 laptop), purchase of documentation and resources for the information centers, and other equipment and supplies for business plan preparation. Other costs included in this category are limited to vehicle operations and maintenance; other operations and maintenance costs are included as general project support.

Market and Policy Analysis Cost Estimates

The bulk of A.I.D. financing for this component covers personnel. In addition to 3.5 years of the Chief of Party/Policy Analyst, funding is provided for 64.5 pm each of expatriate and Chadian professional consultants to carry out the studies described in section 2 above. (An additional 64.5 pm of short-term Chadian professionals will be provided in-kind by the GOC, through various offices' participation on specific studies). Funding is also provided for up to 129 pm of Chadian enumerators or research assistants to gather data or interpret during the studies. Detail on the number of person months per study is provided in the draft scopes of work found as attachments to Annex H.

Training costs under this component cover up to 9 pm of U.S. study or observation tours for GOC officials, to reinforce policy dialogue on specific topics of mutual interest. An additional 9 pm of third country training is provided for similar trips to other countries, i.e. Bangladesh for rural credit schemes.

Commodities procured for this component include 1 four-wheel drive vehicle and 8 computers (2 base and 6 laptop), to be based at the project office but used by short-term TA in the conduct of the studies, and some basic supplies and equipment for the studies. Other costs cover vehicle operation; all other operations and maintenance costs for equipment purchased are covered under general project support, below.

Evaluation, Audit, and Project Support

The personnel costs attributed to this component include 2 pm per year of contractor home office support, primarily for locating consultants and background materials and resources necessary to project implementation. Four pm each of expatriate and Chadian consultants are provided for the mid-term and final project evaluations. A total of 4 pm are provided for the two planned project audits. The personnel funding also includes Chadian staff of the AMTT office, i.e., Administrator, Accountant, Bookkeeper, Administrative Assistant, Documentalist, Secretary/Receptionist, Drivers, Guards, and Janitors. No training costs are attributable to this category.

Commodities included in this category are those necessary for the operation of the AMTT project office, but not allocated directly to any one component. These include 1 four-wheel drive vehicle, 2 mobylettes and 4 computers and related hardware and software for office management staff, a photocopier, a generator and UPS, and office furnishings. Other costs cover the rental, utilities, operation and maintenance of the office.

Table 4 provides a summary of anticipated expenditures by component by fiscal year for the life of the project.

TABLE 4

AMTT OVERALL PROJECT BUDGET
BY FISCAL YEAR

($ 000)

OVERALL AMTT PROJECT BUDGET	FY 91			FY 92			FY 93			FY 94			FY 95			TOTAL		
	USAID			USAID			USAID			USAID			USAID			USAID		
Line Item	FX	LC	GOC	FX	LC	GOC	FX	LC	GOC	FX	LC	GOC	FX	LC	GOC	FX	LC	GOC
I. SALARIES	110.3	46.1	498.1	537.1	283.9	538.9	469.4	228.1	585.2	415.2	191.4	614.5	102.3	45.2	348.3	1634.3	794.6	2585.0
II. ALLOW,O'HEAD,FR	310.9	13.8	149.4	1080.5	77.4	161.7	1021.3	60.3	175.5	932.7	48.8	184.4	306.9	13.7	103.7	3652.2	214.0	774.7
III.TRAVEL/PER DIEM	113.7	22.0	0.0	402.6	79.3	0.0	414.8	53.8	0.0	304.5	38.4	0.0	91.1	9.0	0.0	1326.7	202.5	0.0
IV. TRAINING	0.0	18.4	2.6	132.4	37.6	3.7	139.0	38.9	3.7	145.8	40.3	3.7	0.0	10.5	2.6	417.2	145.7	16.3
V. COMMODITIES	630.8	10.5	0.0	24.3	5.5	0.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	655.1	21.8	0.0
VI. OTHER COSTS	114.2	7.8	71.4	242.1	21.6	75.0	277.4	22.7	78.7	291.2	23.8	82.7	82.6	3.1	21.7	1007.5	79.0	329.5
TOTALS	1279.9	118.6	721.5	2418.0	505.3	779.3	2321.9	409.6	843.1	2089.4	342.7	885.3	582.9	81.5	476.3	8693.0	1457.6	3705.5

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3.2 Financial Plan and Management

As described in more detail in section 4, Implementation Plan, the AMTT project will be implemented primarily through a direct A.I.D. institutional contract, with the contractor responsible for prudent management of funds provided under the contract. Under the supervision of the Chief of Party, a Chadian Administrator, an Accountant, and a Bookkeeper will be responsible for any local procurement or expenditures. As described in section 4, the only high-value procurement planned under the contract is for the computers and related hardware and software. All other procurements are small value and are expected to be a mix of local and U.S. shelf-item purchase.

As detailed in section 4, A.I.D. will undertake initial procurement of selected goods and services, and will reserve funds for U.S. and third country training, evaluations, and audit. Two audits are planned during the life of the project, one at mid-term (if deemed necessary by USAID/Chad) in second quarter FY 1993 and one towards the end of FY 1994.

Project Methods of Implementation and Financing are summarized in Table 5. All procurement of goods and services not specifically listed as Direct Payment or Direct Letter of Commitment will be undertaken by the institutional contractor as part of the major contract described in section 4. The goods and services required for each component are summarized in section 3.1 above and found in detail in the component budgets at Annex J.

Table 5: Agricultural Marketing and Technology Transfer Project Methods of Implementation and Financing (U.S. Dollars 1,000)

Method of Implementation	Method of Financing	PP Text Ref.	Approx. $
Services			
TA - IQC for business reg.	Dir.Payment	4.1.2	$ 25
TA - IQC for MIS Seminar	Dir.Payment	4.1.2	25
RA Vegetables - IQC or central-funded buy-in	Dir.Payment	4.1.2	225
Mid-Term Evaluation - IQC	Dir.Payment	7.2	60
Mid-Term Audit - AID cont.	Dir.Payment	3.2	60
Final Evaluation - IQC	Dir.Payment	7.3	60
Final Audit - AID contract	Dir.Payment	3.2	60
Residential Mtnce. - AID contract	Dir.Payment	4.1.2	122
Office Mtnce -AID contract	Dir.Payment	4.1.2	53
TA - project implementation, CPFF Direct AID contract	Dir.Payment or Dir.L/Comm	4.1	est. 8,100
Goods			
SSB radios - AID P.O.	Dir.Payment or Direct L/Comm	4.1.2	100
Vehicles - AID P.O.	" "	3.1	143
Residential furnishings, appliances, security radios	" "	4.1.2	79
Basic office furniture, UPS, generator, for AMTT office	" "	Annex J	75
Residential leases, utilities	Dir.Payment	4.1.2	LOP 350
AMTT Office lease, utilities	Dir.Payment	4.1.2	LOP 234
Training			
U.S. & 3rd country Sr. Level Observation Tours-outside of contract	Direct Payment	4.1.2	209

4. IMPLEMENTATION PLAN

4.1 Project Management

4.1.1 Institutional Contractor. The AMTT project will be implemented primarily through a direct A.I.D. institutional contract awarded through full and open competition early in the project. The successful bidder will be responsible for provision and support of the long- and short-term TA, short-term third country training, and limited commodity procurement summarized in sections 2 and 3 and elaborated in Annexes F, G, and H. The contract is expected to be signed no later than June 1991 and is planned for a 42 month period. A full draft scope of work for the institutional contractor forms an Appendix to this PP.

On behalf of the contractor, USAID/Chad will rent and provide advance procurement of basic furniture and electrical equipment for a separate project office in N'Djamena as a base for project implementation. The office lease, utilities, and maintenance will be managed directly by USAID/Chad for the duration of the contract. Funds are provided under the contract for additional furnishing and equipping, staffing, and operating this office for a 42 month period. The COP/Policy Analyst and the Agribusiness Development Specialist will work in the office on a day-to-day basis, as will short-term consultants associated with the Market and Policy Analyses and ASC project components. The Market News Coordinator will have an office at BSA on a day-to-day basis, but will receive administrative support and technical guidance from the COP. Short-term consultants under the MIS will work primarily at BSA.

Because of the large number of short-term consultants anticipated, and the dearth of services in N'Djamena for vehicle and computer rental or other support services, the office will maintain adequate transportation and information processing personnel and equipment to internally support a moderate number of consultants at any given period. Funds are budgeted for 4 four-wheel drive long wheel base vehicles (1 at BSA for the MIS, 1 for the ASC, 1 for the Market and Policy Analyses component, and 1 for office needs), and for 7 base and 8 laptop computers (3 general office needs, 2 plus 6 Market and Policy Analyses, 2 plus 2 ASC). When not in use by a consultant team, the equipment will be prudently maintained at the AMTT office and staff will be deployed on other project activities.

In order to avoid "raids" on USAID, other donor, and GOC libraries by short-term consulting teams, the AMTT office will maintain a comprehensive library of key documents on agricultural marketing and agribusiness. A Chadian documentalist and adequate funds for reproduction are provided for this purpose.

Given the limited types and values of planned commodity procurement, use of a specialized procurement services agent (PSA) is not indicated. As discussed in section 4.2.2 below, direct A.I.D. procurement of SSB radios for the MIS and vehicles for the AMTT office will be undertaken prior to contractor arrival. The only other high-value commodity procurement is approximately $ 131,000 of computers and printers to be allocated among the three components. This procurement will be an early action under the contract, for which the contractor will be encouraged to use specialized home office services. All other commodity procurement will be small value, either local shelf-item or periodic shipments from the U.S., which will be managed the COP with assistance from a Chadian Administrator.

Limited short-term third-country training is also provided under the contract for all three components. Illustrative use of these funds will be for attendance at regional seminars by BSA staff, and regional computer training for BSA or private consulting firm staff. The Mission will reserve funding for similar "targets of opportunity" for senior GOC officials in the U.S. and third countries.

The contractor will be supervised by and report to USAID/Chad, and will work with key GOC office and private entrepreneurs as described in section 2.2 above. The project management responsibilities of A.I.D. and the GOC are summarized in the following sections.

4.1.2 USAID/Chad. The contractor will report to and be supervised by the Agricultural Development Division (ADD), USAID/Chad. During project start-up, the ADD will be responsible for finalizing the scope of work for the main contractor and ensuring timely contract negotiation. Upon the arrival of the TA team, estimated for June 1991, the ADD will provide guidance and direction to the team for all aspects of implementation. Involvement of other divisions of USAID/Chad in project implementation will be allocated through the AMTT Project Committee.

Prior to the TA team's arrival, the Mission will undertake a number of A.I.D.-direct procurement actions which are necessary to smooth project implementation. These start-up requirements are summarized below:

Services

- 2 weeks assistance from the A.I.D. Regional Telecommunications Specialist (RTS) based in Yaounde to develop detailed specifications and a recommended procurement plan for approximately 50 SSB, high frequency radios, with appropriate energy sources, to be provided to

BSA for the MIS; the RTS has already begun a review of appropriate specifications during PP design.

- up to 1 month short-term TA to assist the GOC in assessment of the impact to revenues from simplifying the processes of business registration and of obtaining access to the benefits of Regime A of the Investment Code; a draft Scope of Work for this consultancy is provided as Attachment H-3 to Annex H, estimated cost $ 25,000;

- up to 1 month short-term TA to participate in preparations for and the conduct of the December 1990 MIS seminar; a draft Scope of Work for this consultancy is provided as an attachment to Annex F. If the GOC delays in satisfying Conditions Precedent to Disbursement, the Mission will fund this consultancy out of PD&S funds, estimated cost $ 25,000.

- approximately 8 months of short-term expatriate and 8 months of short-term Chadian TA to conduct the Rapid Appraisal of Tomatoes, Onions, and Garlic Commodity Sub-Systems; a draft scope of work for the RA is found as Attachment H-4 to Annex H, estimated cost $ 225,000;

The two latter consultancies--for the MIS seminar and the RA--will either be undertaken through separate IQC contracts or as one buy-in to an appropriate centrally-funded contract. Given the specialized nature of the radio procurement and business registration services, the consultants will be sought separately through appropriate IQCs.

Goods

- procurement of approximately 50 SSB radios, with appropriate energy sources, per the recommendations of the RTS, estimated installed cost $100,000;

- advance procurement of 4 four-wheel drive, long-wheel base vehicles for the AMTT project office, estimated cost $ 143,000);

- advance procurement of residential furnishings and appliances and security radios for the three long-term advisors, estimated cost $ 79,000.

- advance procurement of basic office furniture and equipment for the AMTT project office, estimated cost $ 75,000.

Prior to the arrival of the team, the Mission will lease residences and the AMTT office and arrange proper up-grading so

that the advisors will be able to "hit the ground running" when they arrive. Following standard Mission practice, residential and office maintenance will be undertaken through the existing USAID/Chad maintenance contract.

USAID/Chad will retain funding for participant training under the Market and Policy Analysis component, the audits, and the evaluations. All other procurement of goods and services will be undertaken by the main TA contractor. Detailed commodity lists for each component and for the overall AMTT office are found in the detailed budgets in their respective annexes and in Annex J.

4.1.3 Government of Chad. The lead GOC agency for the project will be the Ministry of Agriculture and Rural Development (MARD), acting through the Director General of Agriculture (DG/AGR). The DG/AGR will assure that required GOC approvals, contributions, and participation are made available to the TA team as indicated.

The MIS will be implemented by the Bureau de la Statistique Agricole (BSA), within the MARD. The project Administrative Analysis, at section 5.4, summarizes the detailed analysis in Annex F that supports this choice. Involvement of other GOC and donor-supported entities, including ONC, ONDR, and SAP, will be coordinated through the existing MIS Committee. The DG/AGR will assure that all GOC resources required for the BSA's successful implementation of the MIS are provided on a timely basis.

The ASC will be essentially implemented independently, under the general guidance of the DG/AGR. The Agribusiness Development Specialist is expected to liaise frequently with the Ministry of Commerce and Industry and the Chamber of Commerce during implementation, but will work most intensively with the private sector.

The Market and Policy Analyses Component will be implemented by the contractor under the guidance of the senior level, multi-ministry Policy Oversight Committee formed for that purpose. The Committee will meet quarterly to determine the topics and levels of effort of future studies and to ensure dissemination and application of study results. Participation of other GOC entities, such as BIEP or DSEED, will be decided in consultation with this Committee.

4.2 Implementation Schedule

An overall project implementation schedule is presented as Figure 2. Detailed implementation plans for each of the components are presented in Annexes F (MIS), G (ASC), and H (Market and Policy Analyses).

Figure 2: Implementation Schedule

Action \ Fiscal Year	FY 91				FY 92				FY 93				FY 94				FY 95			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
ProAg Signed	XX																			
ProAg CPs and Covenants																				
Committee established and functioning		XX																		
Business Registration			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Investment Code Access																				
- negotiated	XX																			
- TA provided		XX																		
* Revisions made				XXXX																
Patente Tax																				
- negotiated	XX																			
- TA provided						XX														
- GOC reviews							XXXXXXXXX													
* Revised tax									XX											
Tariffs																				
- negotiated	XX																			
- Bank/IMF review		XXXXXXXXXXX																		
- dialogue, reviews				XX XX	XX XX XX XX XX XX XX XX															
- TA provided									XX											
- GOC & UDEAC reviews										XX XX XX XX XX XX XX										
* Tariffs revised														XX XX						
Start-Up Study																				
Vegetables RA																				
- PIO/T issued	XX																			
- Study Undertaken		XXXXX																		
- Final report			XX																	

* Items marked with an asterisk are project outputs.

Figure 2: Implementation Schedule (continued)

Action \ Fiscal Year	FY 91				FY 92				FY 93				FY 94				FY 95			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Start-Up Procurement																				
Business Reg. TA																				
- PIO/T issued	XX																			
- TA in-country		XX																		
HIS Seminar																				
- PIO/T issued	X																			
- TA in-country	XX																			
SSB Radios																				
- PIO/C issued		XX																		
- Frequencies obtained			XX																	
- P.O. Issued			XX																	
- Radios installed																				
Vehicles																				
- PIO/C issued		XX																		
- P.O. issued			XX																	
- Vehicles in-country				X																
Institutional Contract																				
SOW finalized	X																			
PIO/T issued	XX																			
RFP issued		XX																		
Award Made				XX																
TA Arrives				XX																
TA In-Country				XXXX	XXXXXXXXXXXXXXXXXXXXXXXX				XXXXXXXXXXXXXXXXXXXXXXXX				XXXXXXXXXXXXXXXXXXXXXXXX				XXXX			
TA Annual Plans				X				X				X				X				
TA Quarterly Reports					X	X	X	X	X	X	X	X	X	X	X	X	X			
TA Departs																		XX		

Figure 2: Implementation Schedule (continued)

Action \ Fiscal Year	FY 91				FY 92				FY 93				FY 94				FY 95			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
MIS																				
Initial workshop to assess activities				X																
User Needs Surveys				XX				XX				XX				XX				
Annual Internal Eval.								XX				XX				XX				
Training																				
- In-Country Computer from FEWS (3 hrs/wk)		X	X	X	X	X	X	X												
- Enumerator Workshops			X					X				X				X				
- Supervisor Workshops			X				X		X		X		X		X		X			
- HQ Data Processing (Consultant)						X				X				X				X		
- Regional Training							X				X				X					
Market and Crop Coverage & Weekly Broadcasts																				
* 10 cereals in:																				
- 30 markets	X	X	X	X	X	X	X	X	X	X	X	X								
- 40 markets													X	X	X	X				
- 50 markets																		X	X	X
* 4 vegetable, 15 markets			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ASC																				
Feasibility Study/ Business Plan					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
*New Agribusinesses								X				X					X			X
*New Product Lines								X				X					X			X
*Local Consulting Firms Developed					X	X	X	X	X	X	X	X	X	X	X	X	X	X	XXX	

* Items marked with an asterisk are project outputs.

Figure 2: Implementation Schedule (continued)

Fiscal Year / Action	FY 91				FY 92				FY 93				FY 94				FY 95			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Market & Policy Analyses																				
Millet/Sorghum Study					XXXXXXXXXXXXXXXXXXXXXX															
Capital Markets Studies							XXXXXX		XXXX											
* Detailed info. available															XXXX					
Transport Industry																				
- Prelim Study							XXXX													
- Report & Roundtable								XX												
- Follow-On Studies									XXXX											
* GOC Strategy Dev.												XXX								
Women's Study																				
- Prelim Study										XXXXXX										
- Report & Roundtable												XXX			XX					
- Follow-On Studies																XX				
* GOC Strategy Dev.																				
Audit									XX								XX			
External Evaluations										XX						XX				
Phase 2 Designed											XX	XX	XX							
Phase 2 Authorized													XX							

* Items marked with an asterisk are project outputs

5. SUMMARIES OF ANALYSES

5.1 Technical Analysis

5.1.1 Market Information System. Numerous organizations, both government and donor agencies, currently collect information on cereals, fruits, and vegetables in Chad. A recent bulletin on price data collection by four government organizations and one donor organization (BSA, ONC, ONDR, DSEED, and SAP) revealed cereals price data collection in 174 markets. Rather than create a new data collection system, implementation of a sustainable MIS should attempt to use the existing infrastructure. While coordination of efforts is the ultimate goal, the first step requires a complete inventory of data collection efforts, including the location, intervals, collection methods, and frequency and means of distribution. This inventory is presented in Annex F, and forms the basis for the design of A.I.D. assistance to the planned national MIS.

The annex identifies four key issues which must be resolved during the project: 1) the institutional location of the MIS; 2) selection of markets; 3) harmonization of data collection methods; and 4) lack of basic information on Chadian agricultural markets. The first issue, institutional location of the MIS, is discussed in summary in the Administrative Analysis at section 5.4 and in detail in Annex F. USAID/Chad will work with the DG/AGR and relevant individuals prior to and during the December, 1990 MIS seminar to assure that BSA is chosen as the lead agency.

The second issue, selection of markets, is based on the current concentration of existing data collection efforts in the Sudanian zone. While this may reflect population concentration and number of markets to some extent, there is still a lack of data collection in certain areas with an over-abundance in other areas. In some villages, as many as three organizations are collecting the same data. Additionally, it is not necessary to cover all markets within the same market area; in those areas where markets are communicating (price differences reflect transportation and handling costs only), information may not be necessary, particularly within short distance. The market typology survey that is now underway may correct some of these deficiencies, but is flawed in terms of timing (it should be undertaken post-harvest). In addition, the MIS Committee has made no plans for a user-needs survey or publicity campaign to ensure that markets selected address users' needs.

If the MIS Committee does move ahead with its planned January 1991 inauguration of the MIS, the project will not be able to greatly influence initial broadcasts. Funds have been provided for a senior consultant with extensive experience in MIS in other countries to attend the December seminar, to offer

advice and counsel on some of these issues. In addition, within six months of the arrival of the TA team (anticipated for June 1991), the Market News Coordinator will undertake the following activities: 1) undertake a two-day workshop to assess the first six months of MIS activities; 2) initiate a user-needs survey (and user assessment of effectiveness to date); 3) arrange an assessment of the MIS computer system, to assure market correlation analyses are accurate; and 4) organize a publicity campaign. The deficiencies noted above will thus be eliminated within the first 18 months of the system's operation.

The third issue, **harmonization of existing data collection systems**, recognizes that coordination of existing systems is more cost-effective than the institution of a new one, but that these systems vary in methods and quality. Harmonization of the efforts must address a number of issues, including: level of transaction, units of measure, grades and standards, and method of sample selection. In terms of the first, level of transaction, the analysis recommends initial broadcasts at the wholesale level. Interviews with wholesalers and retailers during PP design indicate that economies of scale allow wholesalers to respond more easily to market information than small-scale retailers. If the MIS plans to facilitate market flows, the wholesaler group is the one most likely to take advantage of the information to move crops from surplus to deficit regions.

The issues of units of measure, grades and standards, and method of sample selection will be addressed by the Market News Coordinator in collaboration with counterparts at BSA. Funds are provided for annual enumerator and supervisor training and follow-up to ensure that norms chosen are understood and applied as the system grows.

The fourth issue, **lack of information of Chadian agricultural markets**, recognizes that while a number of useful studies exist, there is still a lack of basic information on the marketing system to operate and maintain an effective MIS and monitor its impact. Examples of MIS information needs are production information, market organization, demand, and prices, including historical trends and current correlation coefficients. The project will address this lack of information in three ways: 1) the MIS will immediately begin to provide basic price data which will begin to establish historical trends and will provide initial correlation coefficients against which to measure impact; 2) the Mission will contract for an early (January - March 1991) rapid appraisal of key vegetables (tomatoes, onions, garlic) to enable BSA to construct a market typology and include these commodities in broadcasts during the first year; and 3) under the Market and Policy Analyses component, the project will fund an in-depth, year long, millet and sorghum sub-system study to

provide much needed information on the channels of distribution (domestic and cross-border) for Chad's primary cereals production. Additional commodity sub-system studies will be undertaken if indicated.

The technology for the MIS exists in Chad and is being utilized by BSA and cooperating agencies. Enumerators report weekly prices on an SSB radio network to BSA headquarters in N'Djamena, or relay such information through other radio nets. The RTS/Yaounde will work closely with the Mission to assess the extent and condition of the existing net, and to recommend specification for new or replacement radios, including power sources. Funds are provided for up to 50 SSB radios should the RTS so recommend.

BSA headquarters has two computers and staff trained in basic data entry and analysis. The project will provide up to ten additional computers for BSA and collaborating agencies, and short-course and on-the-job training in entry and analysis techniques. One of the first consultancies under the institutional contract will be to assess programs used and to make recommendations for modification.

Radio Chad broadcasts nationally in several languages and has a dedicated and creative staff able to develop specialized programs for specific target audiences. Although the levels of radio ownership in rural areas are not known, observation and experience suggest that radio is an effective means of national communication.

The Financial and Economic Analysis at section 5.2 demonstrates that the MIS is cost-effective and financially sustainable, in that it builds on existing data collection systems, and that recurrent costs to BSA will not increase more than 2 percent over the life of the project, excluding inflation.

The MIS is thus considered technically feasible. By the end of the project, Chad will have a functioning, sustainable market information system for cereals and horticultural crops which is producing weekly demand-driven broadcasts on up to 10 cereals in 50 markets and on a minimum of 4 vegetables in 15 markets. Market communication will be measured through data obtained under the MIS, and will demonstrate increased market correlation coefficients, thus indicating reduced marketing costs.

5.1.2 Agribusiness Support Center. The PID review cable sets forth the major issue the technical analysis of the Agribusiness Services Center is to address. The cable raises concerns about the nature, scope and demand for the services of the agribusiness support center. The technical analysis in Annex G addresses each of these issues, albeit in reverse order.

The demand for the services of an agribusiness support center is uncertain, but the need for one is clear if USAID/Chad wishes to have an impact on the operators, supporters and coordinators that comprise the agribusiness sector in Chad. The operators are the enterprises that actually produce, transport, store, process, wholesale, retail, and/or export a crop or animal product as it move from producer to consumer. The supporters are the firms that provide essential goods and services to the operators. This group includes input suppliers, financial institutions, consultants, extension services, and agriculture research organizations. The coordinators are the government agencies, trade associations, and, in a developing country context, the donors, who coordinate various aspects of the food-and-fiber system.

The agribusiness sector in Chad reflects the economy at large. Formal sector firms, i.e. ones that are registered and pay taxes based on written and audited accounting procedures, are fewer in number and generally larger in size than the enterprises that comprise the informal sector. The latter is best characterized by the thousands of micro-enterprises, i.e., the millet beer breweries, and grain mills that are found throughout the neighbors and villages. There are a few large firms, either government owned or joint government-private sector ventures, that dominate certain sub-sectors. The most notable examples are COTONTCHAD and STT in the cotton sub-sector, SONASUT in sugar, and MCT in tobacco. SIMAT, the agricultural equipment manufacturer, is also in this group. As a major supporting enterprise, it provides services across commodity sub-sectors. There is a larger group of SMEs, which in Chad means any business with 15 to 125 employees.

These actors carry out their roles in the different commodity sub-sectors that are the elements of the agribusiness sector. Looking at the interrelationship of these functions within specific commodity sub-sectors, the major constraints on agribusiness become clear. The major constraints are the ones that cut across the grain, fruit and vegetable, livestock, oils, cotton, sugar, tobacco, and gum arabic sub-sectors.

Many factors combine to constrain agribusiness development in Chad. Chad is one of the poorest countries in the world. The local demand for food, especially the processed foods that are major products of the agribusiness sector, is limited. But this is not a constraint unique to agribusiness, it has an impact on all areas of private sector development.

Transportation is another constraint that not only cuts across the major commodity sub-sectors that comprise the agribusiness sector, it effects the country's overall

development. The transportation constraint is not only a function of the poor conditions of the country's road network, though this is the most obvious element of it. There are other elements. According to the Chamber of Commerce, the nearest port is Port Harcourt in Nigeria, which is over a 1700 kilometers by road, river and rail from N'Djamena. The most used port is Douala, over 2000 kilometers by road and rail. Finally, there is no rail service in the country and limited air freight services.

Substantial donor support, including A.I.D. financing, is helping to rehabilitate the country's roads. An argument could made that the single best thing to do to promote agribusiness development in Chad would be to increase the Mission's contribution to this rehabilitation effort. It is hard to argue against this approach. An improved road system will only make it easier and less expensive for input suppliers to deliver their seed, fertilizer, machinery, equipment, and credit. Better roads will also make it easier and less expensive to provide extension services and disseminate research results. Producers need a better road system to reduce the costs of transporting their goods to market. Better transportation might also help the food processors reduce not only the costs they pay for these crops and livestock, but also the imported items they need to operate their plants. Finally, a better transportation system might help to reduce the cost of exporting agricultural products in which Chad has a competitive advantage in world markets.

The financial constraints are also imposing. The country's major agribusiness and industrial firm, COTONTCHAD, has long had a voracious appetite for short-term credit. Of late it has also increased its demand for medium- and long-term funds as well. This massive demand risks to crowd smaller, and presumably to the banker riskier, borrowers out of the market. The formal banking system in Chad is not going to provide the longer term financing that agribusiness investments require.

This analysis concludes that any effort to promote private agribusiness development in Chad strive to mobilize the capital resources that exist outside the formal financial sector. An investment promotion strategy presupposes that there are sound investment opportunities. The evidence gathered by the Mission is not conclusive in this regard. The grain subsector might offer some possibilities for value-added processing if it can be shown that the country's growing urban population has the appetite and checkbook for products processed from locally produced grains. The fruits and vegetable sub-sector may also have some promise. Possibilities that are worthwhile to investigate include efforts to extend the growing season, either by introducing new varieties or improving the post-harvest handling infrastructure, i.e. cold storage. Exports of fruits and vegetables also may prove feasible. Lastly, although of

lesser importance to USAID because of the involvement of other donors, is the livestock sector. Evidence herein suggests that Chad is not meeting the export demand for its meat products. Efforts to increase the country's export capabilities could prove remunerative. All of these possibilities need further investigation.

An investment promotion strategy also presupposes that investment capital exists. The PP team believes that it does, although again the evidence is not conclusive. Some private entrepreneurs have capital, though in the current economic environment they are more likely to invest in short-term trading activities rather than in longer term, value-adding endeavors. There have been at least a handful of entrepreneurs who have taken a look at potential agribusiness investment opportunities, and that is an encouraging sign. The pilot-level ASC will work with these entrepreneurs, and others to be identified, to encourage their investment and growth.

5.1.3 Market and Policy Analyses. The GOC has undertaken a number of major policy changes in recent years, and, with donor assistance, is essentially restructuring its economy to depend less on cotton and its conglomerate, COTONTCHAD, and more on its diverse private sector to fuel economic growth. In the last few years, it has stripped ONC of all functions relating to price controls, and focussed its mandate squarely on maintaining food reserves. As described in Annex G, it is in the process of liquidating, privatizing, and/or restructuring virtually all state-owned enterprises, in meat, hides and skins, rice, sugar, cotton, textiles, and agricultural tools and equipment. It has recently liberalized the fertilizer market, and eliminated several protectionist barriers to trade. It has also abolished the previous state-controlled trucking monopoly, and has officially (although not effectively) abolished roadblocks and transit fees that increased transport costs.

While this liberalization is impressive and certainly deserves A.I.D. support, the GOC may be moving more quickly than is prudent, and announcing more reforms than it can effectively implement. Liquidation and plans for privatization, for example, are proceeding in the absence of detailed analysis of the capabilities of the private sector to pick up the pieces. The roadblocks were decreed abolished, but, as most were illegal to begin with, remain a problem. The central bank decreed that SME's be given priority status and favored interest rates, but many still cannot meet stiff commercial bank loan criteria. The Investment Code was modified to favor Chadian businesses, especially SME's, but it takes six months and a myriad of paperwork to qualify. Thus while the GOC certainly appears willing to make changes necessary to stimulate the economy and investment in agribusiness, it has not to date undertaken

detailed analysis of possible alternatives and administrative follow-up required, nor on the impact on various actors, and the economy overall, of the alternatives chosen.

The Market and Policy Analysis component is designed to provide the GOC with improved information to assess both the administrative requirements to support contemplated reforms and the impact of such policy and regulatory alternatives. As described in Annex H, a number of priority actions--the business and Investment Code registration processes--have been identified which, after analysis of potential impact to GOC revenues and the business community, can be implemented relatively quickly. Other policies, such as import tariffs on key goods, will require more detailed study to inform planners on the most appropriate choice of actions and on the impact--to the GOC, to the nation, to other policies/regulations--of such choices. Certain other broadly identified constraints--the private transport industry, private financial services and capital markets, selected commodity sub-systems, and women's roles--will need initial studies to develop the parameters of what might need changing. The need for this improved information, and its consideration by numerous parties prior to proposed reforms, cannot be overstated.

The project will require the GOC to form a Bilateral Policy Oversight Committee for purposes of managing activities under the component. The process of policy and regulatory reform in Chad is not well understood, but appears to be quite centralized. It is hoped that through the process of selecting, managing, discussing, and disseminating the planned studies, the example of a more informed and broad-based decision structure will find adherents.

The Financial and Economic Analysis summarized in section 5.2 demonstrates that the approach is cost-effective in the short-term as it reduces risk to the GOC and donors as policy and regulatory reform is contemplated. The component will be funded almost wholly by project funds, and select studies undertaken by a combination of contractor, GOC, and private Chadian consultants. As summarized in the Administrative Analysis at section 5.4, this mode was determined most appropriate to ensuring high-quality and unbiased results. Assuming continued GOC commitment to reform, and a continued and credible policy dialogue between USAID/Chad and the GOC, the component is considered technically feasible.

5.2 Financial and Economic Analysis

The paucity of data on Chad has been noted in all project analyses. There has never been a census in Chad, so all data on population totals, distribution, or any per capita calculations are but rough estimates. Data on agricultural production is

based in large part on farmer recall and on post-harvest surveys, with no standardized weights, measures, or grades used. Data on marketing is equally limited; Annex G's analysis of price data collection systems identifies numerous deficiencies in systems used. Even macroeconomic data are flawed, in that they capture but a very small percentage of actual economic activity because they only focus on the formal sector.

The situation should improve dramatically in the near term. With A.I.D. assistance, Chad is beginning its first census in the spring of 1991. By the end of the calendar year, cross-tabulations of population totals and distribution by prefecture, at least, will be available. The MIS to be supported under this project will also begin harmonizing the numerous price data collection activities, so that marketing data will begin to have an historical base. The RA of tomatoes, onions, and garlic commodity sub-systems and the longer-term millet and sorghum study will provide much more depth to the price data, and analyses of production trends and distribution will become possible.

Because of the lack of data at this time, however, classical benefit/cost analysis and rate of return analyses cannot be performed for the project. It is probable one can be accomplished by the time of the mid-term evaluation in early FY 1993, and will be included in the scope of work. At this stage of project development, however, a cost-effectiveness analysis is indicated.

Cost-effectiveness of the overall project must be judged in terms of component parts. The MIS is the only project component expected to have significant impact during the life-of-project, and is thus discussed in detail below. The Market and Policy Analyses, and ASC components will have less defined benefits and are thus discussed in less detail thereafter.

5.2.1 MIS Cost-Effectiveness. While ex-post methods have been developed to evaluate the impact of a MIS, i.e., the net social benefit analysis, the scoring approach, and an econometric model using agent risk preferences, they are not appropriate for ex-ante analysis, and require empirical data that do not currently exist. Therefore, the economic analysis of the MIS component relies on information available at the time of the PP design, discussions with market participants, government and donor agencies, and anticipated benefits and costs of the MIS.

As stated previously, a favorable policy environment currently exists for private market participants. Redefinition of ONC's role, and dismantling of the transportation monopoly, Cooperative de Transporteurs Tchadienne (CTT), have led to increased private sector participation in the marketing system.

Despite these improvements, however, the marketing system is still characterized by numerous constraints. These include seasonal price fluctuations, uneven rainfall distribution, poor road conditions, lack of transportation, and political instability. All of these conditions exacerbate risk and uncertainty present in the marketing system.

The MIS has the potential to have a significant impact on marketing efficiency by reducing some of the constraints cited above. In particular, goal level indicators -- lower marketing costs, reduced seasonal price fluctuations, increased stable supply of products across time and space, and lower consumer prices -- may be addressed by the MIS. These are discussed below in turn.

As illustrated in numerous studies over the past decade, high marketing costs are not due primarily to economic profits. The risk undertaken by market participants must be compensated by higher margins. For example, while market intermediaries were once (and often still are) viewed as abusive and profiteering, it is now recognized that they provide an invaluable service without which the market can not function. Until their risk is reduced, market margins must remain high to cover losses due to spoilage, lack of transportation, or lack of information. The same principles apply to producers.

The MIS component of the AMTT project offers the opportunity to improve production and marketing decisions for over 3 million producers and intermediaries. This will be achieved through provision of timely and accurate information on market prices, food aid distribution, market volume, and price trend analyses. Producers and intermediaries alike will have equal access to information, thereby equalizing market power and ultimately reducing marketing costs.

The second indicator, seasonal price fluctuations, may also be addressed by the MIS. Current seasonal price trends are typical of many developing countries with uniformed production and marketing decisions. While some seasonal price fluctuation is necessary to allocate supply between harvests, studies on the Chadian marketing system indicate extreme and unpredictable price changes throughout the year. By providing market information, the AMTT MIS component will improve production decisions again for over 3 million producers in the medium-term. Additionally, traders will improve storage and marketing decisions through more accurate price forecasts to determine appropriate timing of stock release onto the market. This will not only reduce seasonal price fluctuation, but also lower marketing costs discussed above by reducing the risk born by traders.

As indicated in section 1, Chad has been analyzed as food

self-sufficient in years of adequate rainfall. Although this may be true for the country as a whole, increased spatial arbitrage is necessary to reduce supply/demand imbalances that exist from region to region. The MIS component of the AMTT project will facilitate spatial arbitrage by providing timely and accurate information which reduces the risk involved in moving crops from surplus to deficit regions. Traders can more accurately assess the costs and benefits of moving crops, particularly if the market information includes volume in each area. By year four, the MIS component plans to announce up to 10 cereal variety prices in 50 markets and a minimum of 4 vegetable prices in 15 markets. Complementary analyses will be added to weekly broadcasts as the ability of the MIS is improved. These achievements should provide the impetus to increase spatial arbitrage and thus improve stabilization of supply across regions.

The final goal indicator, reduced consumer prices, should provide the most evident impact of the MIS. While other Sahelian experiences have shown that consumers are the primary beneficiaries of the MIS, approximately 1 million urban consumers should benefit in Chad from reduced prices, improved choices, and increased bargaining power.

The total cost of the MIS over a the four year life-of-project is estimated at $ 5.8 million. Assuming the benefits accrue to 3 million producers and intermediaries, and 1 million urban consumers, the total beneficiary population in conservative terms is 4 million. The cost per beneficiary for the four year period is thus only $ 1.45 per beneficiary, or about 36 cents per person per year.

As demonstrated in the component budget at Annex F, the GOC is already paying the full operating costs of the MIS, and these costs will increase only minimally over the life of the project. The 1990 budget for BSA and personnel costs of collaborating institutions totalled $ 691,900. This may be considered the "pre-project" costs. In FY 1994, the last full year under the project, they will be $ 710,000 (without inflation). This represents less than a 2 percent increase in real terms over the life of the project. At the end of the project, it is reasonable to assume that the GOC will continue to pay the operating, or recurrent, costs.

These annual operating costs are equal to 18 cents per each of the 4 million beneficiaries. As the system proves effective, it is assumed that the number of beneficiaries will grow, and that the unit cost will decrease further. The MIS is thus considered cost-effective in terms of benefits provided, both during the project and thereafter.

5.2.2 Other Components' Cost-Effectiveness. The other two project components' benefit horizon is much longer term, and more difficult to quantify. The ASC will develop business plans for 13 enterprises, assist in the establishment of 4 new agribusiness ventures, and promote the introduction of 4 new products or venues in the market. The business plans to be developed, and the feasibility studies for the new ventures, will carefully define all costs and benefits of the operations. Given the narrowness of the agribusiness sector in Chad, however, benefits are likely to be small relative to the overall economy.

The Market and Policy Analyses component will produce studies which will, in the short-term, benefit only A.I.D., the GOC, and other donors. Some benefits to the private sector may accrue as the business registration and Investment Code processes are revised, but these are likely to be small. Greater benefits may accrue to input suppliers and transporters if customs tariffs are reduced; this will form part of a separate area of investigation under the project. If the transport, financial services and capital markets, and women's studies identify needed policy or regulatory reform that leads to better public and private investment, benefits may be significant. However, none can be quantified at this time.

The costs of the two components are steep, relative to the short-term benefits. The ASC costs are estimated as $ 2.1 million for four years. Because it is considered a pilot effort; if it does not yield results after 18 months, it will be terminated and costs will be significantly less. The costs of the Market and Policy Analyses component total $ 4.3 million, of which $ 4.2 million are A.I.D. These can only be justified in the long-term.

As stated at the beginning of this analysis, there are virtually no data on which to base rational planning in Chad. The ASC and Market and Policy Analyses will provide data, analysis, and experience on specific topics of interest to A.I.D. and the GOC. These topics have been selected because they represent areas which can have significant impact to the Chadian economy in the longer-term. To the extent that A.I.D.'s investment to improve planning reduces A.I.D.'s and the GOC's risk of investment, and possibly increases such investment through a Phase 2 effort, the benefits should clearly outweigh the costs.

5.3 Social Soundness Analysis

5.3.1 Socio-Cultural Context. There are numerous constraints within which the project will operate. These include the immensity of the country, with generally low population densities and scattered small market towns; the general level of

impoverishment; the diversity in forms of socio-economic organization, including sedentary and nomadic, Sudanic, Saharan and Subsaharan ethnic groups; and the mix of languages and cultures numerous even for Africa. Additionally, Chad's unpredictable rainfall and climate, its uncertain internal political and external military situation, the underdeveloped state of its physical infrastructure, and the low level of education and training of its human capital foster a high risk environment for basic survival. Reducing the risk of investment in agricultural marketing will not be easy, given these constraints.

Chadian society has in the past been hesitant to accept innovation unless the potential benefits clearly outweigh the potential risk, which in Chad may mean survival itself. Although a mosaic of ethnic, religious, language and socio-cultural groups with historic differences, the society maintains the interests of the group, as opposed to those of the individual, as paramount. In economic decision-making or cases of conflict, group interests will continue to override those of the individual, as exemplified in legal principal, in land use, in agricultural practices, and in attitudes toward outsiders, including the central government.

Preservation and continuation of the group as a form of socio-economic security strongly influences attitudes toward women. The major goal of marriage continues to be to assure the security that comes from the permanence of the group. A women's foremost asset, therefore, is considered to be her procreative ability. In fact, while women perform this function, they also represent 50 percent of the labor on the land, carry out at least 75 percent of the processing and transformation of food, at least 85 percent of the transport of agricultural products to market, and close to 100 percent of the care, feeding, and education of the family and children.

The market is a vitally important institution in Chadian society. Local market day is a major event, from an economic and social viewpoint, where farmers interact with local buyers, outside traders, transporters, and intermediaries in the market chain. Because of the difficulty of road and vehicular transport, villages and regional markets are somewhat self-contained economic systems. They will become less so, however, as the road maintenance project begins to open up more of the country. Even now, transporters using camels and donkeys make weekly circuits carrying vegetables and maize, and boats cross the Chari and Logone rivers to buy and sell to markets in Cameroon and Nigeria. Besides the village markets there are the consumer markets of the larger cities of N'Djamena, Sarh, Moundou, and Abeche. There are few other urban areas of any significant size, population groupings rapidly giving way to isolated villages.

The socio-cultural and physical environments affect decisions on what products to produce, who will buy and sell from whom, how resources and capital can be accumulated and credit sought and provided, how commercial rules will be interpreted, applied and enforced, and the incentives to respond to project interventions. Rural land, for example, continues to be communally held although individually used. The village chief has the right to distribute land to anyone who expresses an interest in it and demonstrates an ability to work it. There is no exchange of money, but the farmer is expected to pay back a portion of his/her harvest to the chief. Land can not, therefore, be used as a guarantee for loans or credit.

The stability of traditional communities was effected by external and internal military action of the last 10 years and the resultant movement of people. Whole families became immigrants in Cameroon, Nigeria, and Sudan. The massive exodus of southern tribes from the northern prefectures as a result of inter-tribal killings transformed certain regional centers into sprawling refugee centers. War and reconstruction taxes are still being collected. As recently as August 1, 1990, the Council of Ministers announced that troops were massing on the Libyan and Sudanese border. Many Chadians, recognizing the instability of the government, have adopted a "wait and see" attitude before making significant fixed investments.

But rural areas of Chad are changing, with positive and negative results. Individualism is appearing as a result of modern influences. Traditional values are under increasing pressure. Distinctions based on tribal groupings, gender, or age are slowly losing their hold. Growing urbanization and monetization of the economy are causing the disintegration of traditional mutual aid societies and the weakening of community solidarity and support systems. In certain areas of the south collective farming is gradually being dropped in favor of individual plots. Some people are trying to "go it alone" rather than maintaining a sense of group need. The influence of money in current life has resulted in the pauperization of those who are unable to earn it. This has led to rural exodus of many poorer members of society.

Approximately 80 percent of the total workforce is still engaged in agriculture, most of which is at the subsistence level. Cereals, primarily millet and sorghum, with some berber, maize, and rice, continue to be the primary crops. Approximately 50 percent of cereals production in the Sudanian zone and about 20 percent in the Sahelian zone are marketed following years with adequate rain. Vegetable and fruit production is overwhelmingly produced for market. The MIS component of the project will decrease inefficiencies in these systems through provision of

information to both government and private (individual and group) market participants.

5.3.2 Beneficiaries. The Market and Policy Analysis intervention will enable GOC planners and USAID/Chad to identify and address the most significant policy and investment constraints. The principal direct beneficiaries will be GOC planners and A.I.D. and other donor officials who need macro-level analysis to plan long term strategy and specific program and project interventions. As policies are reformed, numerous benefits may accrue to others. However, it is impossible to predict more specific direct benefits until studies demonstrate alternative approaches and some of them are implemented and evaluated. The design team is confident that the AMTT project will help achieve long term, indirect benefits for all participants in the agricultural marketing chain.

The Agribusiness Support Center (ASC) is a pilot effort and will need to gain experience before generating measurable impact. Increased investment in agribusiness is expected to be modest during the life of the project. The principal beneficiaries of this intervention will be those entrepreneurs and owners of capital who seek the assistance of the ASC, prepare bankable business plans, and invest in a productive agribusiness. These beneficiaries will probably not be the largest traders who are already earning substantial profits in short term buying and selling of sugar, rice, and grains, nor will they be the large number of small, informal, businessmen and women in the villages or urban areas with small amounts of capital or little chance of securing credit guarantees. It is the group in between that the ASC will seek out in the short term. As business integration builds a larger economic base, backward and forward linkages should bring indirect benefits to entrepreneurs at both the higher and lower ends of the marketing chain.

The area where the greatest direct benefit will occur is probably the Market Information System. GOC officials, in the immediate term, will be the principle beneficiaries. They will have more information to better understand their country's agricultural marketing systems, and will have strengthened capability to carry out more sophisticated studies and make more effective decisions. Assuming that the majority of the first 30-40 markets chosen for MIS reporting are in the 8 most densely populated Prefectures of Chad, which also hold its 12 largest cities, it can be expected that as many as 3 million rural inhabitants will benefit from more stable, and possibly increased, producer prices.

Approximately 1 million consumers will benefit from a more competitive, efficient, agricultural marketing network, which will lead to lower prices for food. Consumers in the major city

markets will no longer have to pay for inefficiencies in the marketing chain, thereby reducing their costs for food and increasing their options for consumption. Private food processors will benefit as markets improve and supply and demand for agricultural commodities stabilizes, especially for those products to which value can be added through processing. Since women are presently by far the major processors of food, there will be opportunities for women to share in these benefits.

There is an impression that transporters and other intermediaries already have much of the market information for their zones of interest and that they are already taking advantage of this information to improve their economic position. Some transporters feel that they do not make an exorbitant return for the entrepreneurial service they offer and the risk they take. Some feel that improved market information system would be a benefit to them, as well.

5.3.3 Participation. The project identifies a wide range of participants who could be informants for project interventions or would be the populations toward whom project interventions would be directed. These include:

- Operators, defined as participants who actually "put their hands on" and work with agricultural products. Operators in Chad include farmers, cooperative members, food processors and packagers, transporters, wholesalers, assemblers, warehouse and storage operators, and retailers.

- Supporters, defined as service providers who do not actually touch the product. Supporters in Chad include bankers, providers of credit and other financial services, food brokers and commission agents, input suppliers, and government institutions, such as agricultural research, training, and extension.

- Coordinators, defined as integrators of various parts of the food/fiber marketing system. Coordinators in Chad include the Government of Chad, to set the policy and regulatory environment, provide information, international donor agencies, and some private institutions, including the Chamber of Commerce.

- Consumers, at the village market, at a regional market, and at the N'Djamena market.

Most of these actors will participate in the MIS as one or all of the following: informants who provide price information to MIS enumerators; receivers of information provide by the MIS; and/or entrepreneurs who respond to the information to improve the efficiency of their part of the marketing system.

Participants in the ASC will be more limited. The ASC is a pilot effort concerned mainly with the N'Djamena based business community. In the early years of the project, participation will be limited to the work of one expatriate business development advisor and one Chadian counterpart with three private Chadian consulting firms and interested members of the business community.

Participation in the Market and Policy Analyses component will be limited to GOC, A.I.D., and other donor officials who use the information generated to consider policy alternatives.

5.3.4 Project Feasibility. The AMTT project appears to be feasible within the socio-cultural context and environmental constraints found in Chad at the present time. The project will fill information and knowledge gaps identified by GOC officials, private businessmen, and participants in the marketing chain. As described in Annex F, the GOC, with CILSS funding, has already initiated, the development of a national market information system and plans to hold a national MIS seminar in December, 1990, whether or not A.I.D.'s AMTT project is approved.

Chadians, at all levels of the marketing chain, already respond to price incentives. The AMTT project, by providing more accurate, comprehensive, and timely information will enhance and expand the options of all participants in the process. The GOC already has a liberal and open policy toward private sector trading. The AMTT project will not force anyone to respond to the improved information but will support an improved environment for the private sector to operate in a more open, competitive, and efficient manner.

Project feasibility is enhanced by the fact that it will not seek to shift the emphasis or the profit from one group of participants to another. This is not a zero-sum situation where some can win only at the expense of others. The AMTT project, and particularly the MIS component, will help reduce inefficiencies, anomalies, and gaps in the system to make the entire marketing chain more economic; this will enable all participants to be winners in the long-term.

The project will not require people to organize themselves into unfamiliar types of social groups, but will permit them to expand existing groups with which tney are already familiar and comfortable or to create new ones or new local businesses that respond to their own needs. No changes in authority--traditional or civil--are proposed. The project will, instead, build on existing government units in the Ministry of Agriculture and Rural Development, and private market participants to utilize new information to the benefit of the economy.

5.3.5 Issues. Social change is already taking place in Chad. This project may speed up the process. But there are no social issues that may specifically result from the implementation of this project, and there are no known social or political events that this project will deter. From a social soundness point of view there is no reason not to proceed with the project as designed.

5.4 Administrative Analysis

The allocation of specific implementation responsibilities for the overall project and for each of the components is based on a careful assessment of alternative approaches to achieve the project purpose. Given Chad's generally liberal policy and regulatory environment, and the preponderance of private market participants, this assessment has included both the public and private sectors. A summary of the alternatives considered and rationale of choices made for each project component are presented below.

5.4.1 Overall Project Responsibility. Although the Project Grant Agreement will be negotiated with and signed by the Ministry of Plan and Cooperation, responsibility for on-going implementation will rest with the Ministry of Agriculture and Rural Development (MARD), acting through the DG/AGR. Because the project's goal and purpose relates to food crop marketing, the MARD is considered the most appropriate location for such responsibility. The DG/AGR is the direct supervisor of the lead implementing agency for one project component, the MIS, and is committed to the strong private sector focus of a second component, the ASC. Because the third component, Market and Policy Analyses, will address a number of multi-sectoral issues, the DG/AGR will be one of several members of a multi-ministry Policy Oversight Committee. Given consideration of rank, seniority, and technical background, the Mission believes that the MARD, and the DG of Agriculture, are the most appropriate choices for overall project leadership.

5.4.2 Market Information System. The MIS will be implemented by the BSA, in collaboration with member organizations of the MIS Committee. As elaborated in Annex F, this choice was made based on selection criteria developed through other Sahelian country experiences. These criteria include:

- Data collection experience of the institution:
- Proximity to decision-making centers;
- Ability to diffuse information rapidly; and
- Objectivity of data collection and analyses.

BSA currently employs 69 enumerators and 12 field supervisors who ensure the collection of data in 73 markets. The enumerators are trained professionally for the agro-pastoral campaign each year. BSA also has two computers and six university-trained statisticians at the headquarters (all of whom can operate computers).

In terms of alternatives considered, ONC has enumerators covering only 14 markets, and one person with two weeks of computer training who processes and analyzes price data using a hand-held calculator. DSEED has only one person in charge of data collection in two N'Djamena markets. ONDR, while better equipped than DSEED, centralizes data collection in Moundou and thus does not meet the second and third criteria. Because BSA, as its name implies, is the statistical branch of the MARD, it is able to cover both cereals and fruits and vegetables, which ONC could not do.

In spite of the clear advantage of designating BSA as the lead implementing agency for the MIS, and the strong support of its choice by most of those concerned, it is important that A.I.D. approach its selection with sensitivity. The DG/AGR and the MIS Committee want to maintain collaboration of all data collection agencies in implementation of the MIS, and PP analyses demonstrate that this is the most cost-effective and technically appropriate approach. The project will thus provide limited computer hardware and software to collaborating agencies, to encourage their participation, and include their personnel in training sessions. The Mission will also continue to encourage the DG to lobby quietly, so that BSA will be the clear choice of the MIS Committee at the planned December seminar.

5.4.3 Agribusiness Support Center. The ASC will be established as an independent, A.I.D.-financed combination consulting firm and lobbyist for private agribusiness in Chad. One of the key PP development issues was the ASC's organizational identity, and the possibilities for institutionalizing its functions on a sustainable basis.

As elaborated in Annex G, the effective demand for the ASC's services is not known but believed to be relatively limited. Given this assumption, the Mission has rejected the alternative of establishing and/or undertaking institutional development of a major GOC entity to assume its functions at the end of the project. OPIT already has a mandate to carry out many of the ASC's proposed tasks, both for agribusiness and several other sectors. Because OPIT is a government agency and part of the Ministry of Commerce and Industry, which has links to the tax assessment office, it has not received a strong client response to its proferred services. Both the PID and PP teams have assessed OPIT's capabilities and client base, and concluded that

A.I.D. support would be inappropriate.

A second alternative, establishment of a new private sector firm, was considered but determined inappropriate due to the need to avoid unfair competition with Chad's existing private consulting firms. The PP team has carefully assessed the capabilities of the three known firms, and believes that they will form the best base for conducting and institutionalizing an agribusiness support function in Chad. The ASC will thus maintain minimal full-time staff, and will contract with these firms for specific client projects. The Agribusiness Development Specialist and project-funded short-term consultants will undertake co-training and co-consulting with the firms as a means of building skills. Fees charged by the ASC will be based on the market rates established by these firms. Through this approach, at the end of the project at least one of these private firms will have demonstrated capability in agribusiness consulting, as measured through its client list and personnel roster.

5.4.4 Market and Policy Analyses. As described in section 2.2.3 and elaborated in Annex H, the project provides substantial funding for a number of studies and analyses which meet established criteria, key among which is the potential for achieving significant impact. Topics identified for study during the first two years of the project range from the transport industry, to import tariffs, to the role of women. This multi-sectoral research agenda is much broader than the mandate of any one GOC office, and beyond the current capabilities of existing private consulting firms.

The PP team carefully assessed the capabilities of several GOC research and studies offices to determine if any one could be developed to assume these broad responsibilities. The closest in terms of existing mandate and capabilities is BIEP. BIEP is a public office (not a line agency) under the MARD which receives core funding from the GOC and TA from UNDP/FAO; it charges market rates to other donors for all its work. It has 17 professionals, including three agricultural economists, two economists, and two agronomists, and is fully equipped in terms of information processing and logistic equipment to conduct the short-term studies foreseen under the project. It has conducted a number of studies in the agricultural sector, including commodity sub-sector studies on rice and wheat, and a preliminary assessment of fruit and vegetable production in Chad.

BIEP is thus a logical choice for collaboration on many of the studies planned under the project, including the rapid appraisal of tomatoes, onions and garlic, the millet and sorghum commodity sub-sector study, and, possibly, the women's study. Given BIEP's broad mandate and its full agenda for the next two years, however, the Mission is reluctant to designate BIEP as the

lead agency for the Market and Policy Analyses component. Subject to firm availability of key personnel, BIEP will be considered as a leading candidate for collaboration on all studies undertaken on a case-by-case basis. It will not, however, be the only candidate, and may be asked to contribute only one or two specialists to multi-organizational teams.

Other potential public sector collaborators include the studies and planning office of the Ministry of Transport and Civil Aviation, and professional staff of the Direction for the Promotion of Women. Private Chadian firms and consultants will also be considered in each case.

Overall management of the component will rest with the Policy Oversight Committee on broader issues, and with the AMTT COP/Policy Analyst on a day-to-day basis. This combination will assure that topics are relevant to the GOC needs and that findings are considered at senior levels of government. It also assures that no one ministry or office will dominate the agenda, and that the fullest possible range of personnel resources can be tapped for quality work.

5.5 Environmental Analysis

The original PID review for the AMTT project resulted in categorical exclusions for the MIS and Market and Policy Analyses components of the project. The Initial Environmental Examination also provided a categorical exclusion for the ASC feasibility studies and business plans. An environmental review by the REDSO/WCA Environmental Officer will be required for the recommended techniques before they are implemented, and will be carried out on a case-by-case basis. The full text of the IEE cable is found as Annex N.

6. CONDITIONS AND COVENANTS

The following Conditions Precedent and Covenants will be included in the Project Grant Agreement. A more detailed discussion of each, including provisions for project support in meeting them, is found in Annex H, section 4.2.

Conditions Precedent

First Disbursement

1. Prior to any disbursement under the Grant or to the issuance by A.ID. of documentation pursuant to which disbursement will be made, the Grantee will except as parties may otherwise agree in writing, furnish to A.i.D., in form and substance satisfactory to A.I.D.:

A. A statement of the names and title of the persons who will act as representatives of the Grantee as defined in the appropriate section of the Grant Agreement, together with a specimen signature of each person named in such statement.

B. A statement of the names and titles of five senior government officials who will represent the GOC as the Bilateral Policy Oversight Committee for purposes of the Grant.

C. A statement that the Bilateral Oversight Committee (which will include representatives from A.I.D.) will meet not less than once per quarter at the request of A.I.D.

D. A statement that the GOC intends to revise and streamline procedures for registration of all businesses within one year of the date of this agreement. The revised procedures will allow businesses to be registered through a one-step application process, at one GOC office, at a cost lower than current practice.

E. A statement that the GOC intends to revise its procedures for granting access to the benefits of Regime A of the Investment Code within one year of the date of this Agreement.

Subsequent Disbursements:

Prior to disbursements under the Grant after [one year from date of Agreement], or to the issuance by A.I.D. of documentation pursuant to which disbursements will be made, the Grantee will, except as the Parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D.:

A statement verifying that the GOC has:

A. Revised procedures for registration of businesses so that registration can be a accomplished through a one-step application, to one GOC office, at a price lower than current practice.

B. Revised procedures for granting access to the benefits of Regime A of the Investment Code.

Covenants

The Grantee will confirm:

(a) that it will undertake a review and, if indicated,

revise its annual license tax (patente) so that it does not impose proportionally greater taxes on businesses which employ greater numbers of personnel.

(b) that it will undertake a review of its own tariff structure and maintain dialogue within UDEAC regarding the need to decrease tariffs for import of the following commodity categories: agricultural tools, agricultural inputs, transport vehicles (gas-oil), transport vehicles (gasoline), and spare parts for transport vehicles.

(c) that it will intensify its efforts to eliminate all roadblocks and unofficial transport fees which are prevalent in the country.

7. MONITORING AND EVALUATION

Each of the three project components will include an internal system for continuous monitoring and evaluation (M&E). These internal systems will be managed by the contract team, and reported to USAID/Chad as part of formal contractor quarterly reports. The USAID Project Officer will maintain frequent informal contact with the team, and will provide more formal review and comments of the quarterly reports.

A.I.D. will additionally fund two separate external evaluations of the overall project, to assess overall progress toward purpose and goal-level indicators. A Mid-Term Evaluation will be conducted during the second quarter, FY 1993, slightly over two years into the project and approximately 18 months after the TA team's arrival, and the Final Evaluation will be undertaken in the fourth quarter of FY 94.

Although the Social Soundness and Economic Analyses highlight the lack of reliable socio-economic data on Chad, by the time of the Mid-Term Evaluation, and certainly by the Final Evaluation, the situation will have greatly improved. The GOC, with A.I.D. support, is undertaking its first national census beginning in the spring of 1991. By the Mid-Term Evaluation some basic cross-tabulations, by gender, should be available against which to measure, for example, coverage and representativeness of the MIS. Additionally, the World Bank, under its Social Dimensions of Adjustment program, is initiating a major household expenditure survey in N'Djamena. These data will be useful in measuring, for example, the impact on household budgets, by gender of head-of-household, of the reduced consumer costs anticipated by the MIS. USAID will collaborate closely with the Ministry of Plan for the census and the World Bank for the survey to ensure that data sets and analyses are used for project implementation and monitoring as well as these evaluations.

These data sets will also be useful to USAID/Chad as it establishes its new program performance monitoring system under its new strategic framework. It is likely that some of the goal and purpose indicators of the AMTT project will be program performance indicators in the program logframe. Use of the common data sets afforded by the census and the Bank survey will provide an excellent means of adding perspective to project-specific accomplishments.

7.1 Component Internal M&E Plans

Monitoring of MIS activities will be undertaken by the Market News Coordinator, as supervised by the COP/Policy Analysis. Basic monitoring will be at an input and output level, and will consist of assessing the level of coverage, quantity and quality of data received, analyzed, and broadcast on a quarterly basis. Assessments of progress will be included in the contractor's quarterly progress reports to USAID/Chad.

Because the MIS is driven partially by the annual agro-pastoral campaigns, it will also be subject to annual internal evaluations. The internal review will comprise: 1) an annual two-day workshop including management personnel from collaborating organizations; and 2) an up-dated two-week user needs survey to determine the level of effectiveness and necessary changes. The Market News Coordinator will work with his/her counterpart to organize the two-day workshop and develop an appropriate agenda such as achievements during the past year, coordination problems, and plans for the coming year. The user-needs survey will also be organized by the Market News Coordinator, based on the initial user-needs survey with changes as necessary. Special attention will be given to recording women's access to and use of the system. Enumerators from the collaborating organizations will assist with the implementation of the survey. All costs incurred by the two activities will be financed by the project.

Monitoring of the ASC will be undertaken by the Agribusiness Development Specialist, under the supervision of the COP/Policy Analyst. S/he will prepare quarterly and annual summaries, to be included in the contractor's reports to USAID/Chad, on all activities of the ASC. In addition to a general briefing on recent developments in the country's agribusiness sector, covering the private sector, the GOC and donors, the quarterly reports will include summaries of the requests for assistance and information filled or denied, including reasons therefor; an analysis of these requests, by type of enterprise (size, ownership, line of business) and by gender; and the roles played by both short-term expatriate technical assistance and local consulting firms in undertaking ASC activities. In addition, the quarterly report will cover promotional activities undertaken;

status of ASC-assisted loan applications at the commercial banks and VITA/PEP; and number of contacts made and agribusiness related documents reviewed and included in the ASC's inventory of information resources.

Monitoring of the Market and Policy Analysis component will be undertaken by the COP/Policy Analyst and summarized in quarterly and annual reports to USAID/Chad. The quarterly reports will include the agenda, minutes, and attendance lists of the Policy Oversight Committee meetings; progress reports on studies planned and in process; and discussion of any policy or regulatory reforms contemplated or in progress which would have an impact on project objectives. As USAID/Chad will also participate in Policy Oversight Committee meetings, it will be closely involved in this component.

The contractor quarterly reports will be used by USAID/Chad to develop its semi-annual Project Implementation Reviews (PIRs) and annual Assessment of Program Impact (API). They will additionally feed into the contractor's formal annual reports and workplans for all contract activities.

7.2 The Mid-Term Evaluation

A mid-term project evaluation is planned for the second quarter of FY 1993, i.e., after slightly more than 2 years of the project and 18 months of contractor in-country TA. The evaluation will be formative, and will have two distinct objectives:

1) to assess project progress towards meeting planned outputs, and contributions to date or likelihood of meeting purpose- and goal-level indicators; and

2) based on progress and experience of the AMTT project, to provide recommendations for possible additional A.I.D. project or non-project assistance to agricultural marketing in Chad.

In terms of the first objective, the focus will be on inputs, outputs, and indicators enumerated in the LogFrame at Annex B and elaborated in Annexes F, G, and H. It is likely that the MIS will already be able to document a significant impact at the purpose level, through increases in market communication as revealed by market correlation coefficients. It is also likely that it will document positive changes in goal level indicators, including an increase in producer bargaining power and prices for selected commodities, and a reduction in urban consumer prices. The availability of the new census data and possible preliminary findings from the Bank's survey will greatly aid these assessments.

Impact at the purpose level for the ASC will be more modest, but the likelihood of achieving significant impact will be carefully assessed. If, after 18 months of operation, the ASC has not met its modest outputs and does not appear to hold promise for increasing agribusiness investment in Chad, for internal or externally-created reasons, the component will be dropped at the end of the advisors two year contract, and other means of stimulating such investment will be examined.

By the time of the Mid-Term Evaluation, the Market and Policy Analyses component will have completed initial studies on the transport industry, private financial services and capital markets, and women's roles in agricultural marketing, and will be completing the long-term millet and sorghum commodity sub-system study. The evaluation will assess the quality and completeness of these studies, and their utility as measured by concrete GOC actions on the recommendations. Of importance in the evaluation will be an assessment of the role of the Bilateral Policy Oversight Committee in component management.

The information and recommendations included in these studies, coupled with experience gained through the ASC and data generated by the MIS, and the new socio-economic data available from other sources, will provide a wealth of information on potential areas for greater A.I.D. involvement. The evaluation team will review all such information and provide to USAID/Chad a listing of potential Phase 2 project or non-project assistance activities which hold the most promise for sustained, significant impact to Chad's agricultural marketing sector. Should specific recommendations be of interest to A.I.D., they will be pursued in preparation for a fourth-quarter FY 1993 obligation. This will allow adequate time for any TA contracting to take place prior to the departure of the AMTT team.

The evaluation is planned for a four week period. The team will be led by a senior agricultural economist, assisted by a private sector specialist. Participation of the GOC will be determined by the Policy Oversight Committee.

7.3 The Final Evaluation

The final evaluation is planned for the fourth quarter of FY 1994, after 4 years of the project and 3 1/4 years of contractor assistance. The final evaluation will focus on purpose and goal level achievements, with particular emphasis on significant change in goal indicators. To the extent possible, the evaluation will assess change due to project interventions and change due to external conditions, i.e., improved roads.

The evaluation is planned for a four week period. The team

will be led by a senior economist/policy analyst, assisted by an agricultural economist familiar with marketing information systems.

ANNEX A

PID APPROVAL MESSAGES

ACTION: AID-3 INFO: CHARGE DCM

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DATE 12 FEB 1990

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E.O. 12356: N/A

SUBJECT: CEAD - AGRICULTURAL MARKETING AND TRANSFER TECHNOLOGY PID 677-3062

c 2/13/90

SUBJECT PID WAS REVIEWED AND APPROVED BY ECPR ON FEBRUARY 8, 1990. DETAILED PP GUIDANCE TO BE PROVIDED VIA SEPTEL.
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ACTION: AID-3 INFO: CHARGE DCM

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DATE 6 MARS 1990

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E.O. 12356: N/A
TAGS:
SUBJECT: CHAD AGRICULTURAL MARKETING AND TECHNOLOGY TRANSFER, 677-0062

SUMMARY: THE EXECUTIVE COMMITTEE FOR PROJECT REVIEW (ECPR) MET ON FEBRUARY 8, 1990 TO REVIEW SUBJECT PID. OFFICES REPRESENTED INCLUDED GC/AFR, AFR/TR, AFR/DP, AFR/PD, AFR/MDI, AND AFR/SWA. THE PID WAS APPROVED SUBJECT TO THE GUIDANCE INDICATED BELOW. EACH OF THE ISSUES OR CONCERNS DISCUSSED AT THE ECPR WILL BE DESCRIBED, AS WELL AS THE MANNER IN WHICH THEY WERE RESOLVED. THE PID WAS WELL WRITTEN AND COMPREHENSIVE IN ITS IDENTIFICATION OF POTENTIAL MARKETING PROBLEMS. HOWEVER, IN VIEW OF THE NEED TO FURTHER ASSESS MARKET CONSTRAINTS AND, POSSIBLY, REDESIGN THE PROJECT, THE MISSION SHOULD IDENTIFY ONGOING PROJECTS WITHIN THE MISSION'S PORTFOLIO TO ABSORB THE PROJECT.S PLANNED FY 90 OBLIGATION AND PLAN THIS PROJECT AS AN FY 91 START. NOTWITHSTANDING THE FY 91 START, MISSION SHOULD PROCEED WITH PROJECT'S DEVELOPMENT PURSUANT TO THIS GUIDANCE CABLE.

1. ISSUE: DO WE HAVE SUFFICIENT UNDERSTANDING OF THE

AGRICULTURAL MARKETING CONSTRAINTS TO PROCEED WITH A SPECIFIC INTERVENTION AT THIS TIME?

NATURE OF THE ISSUE: A KEY ELEMENT OF THE PROPOSED PROJECT WOULD UNDERTAKE "MARKET AND POLICY ANALYSES TO BETTER UNDERSTAND MARKET REALITIES, INCLUDING OPPORTUNITIES AND CONSTRAINTS." THE PID ARGUES THAT THIS ELEMENT IS NECESSARY SINCE, "THE INFORMATION BASE OF MARKETING SYSTEMS IN CHAD HAS MANY GAPS." HOWEVER, THE SUBJECTS IDENTIFIED FOR ANALYSIS SEEMED SO CENTRAL TO OUR UNDERSTANDING OF CHAD'S MARKETING SYSTEM, THAT THE ECPR QUESTIONED THE DIVISABILITY OF PROCEEDING WITH THE PROJECT UNTIL SUCH ANALYSES HAD BEEN CONDUCTED. SUCH ANALYSES INCLUDED AN EXAMINATION OF HOUSEHOLD CONSUMPTION AND EXPENDITURE DATA; AN EVALUATION OF ADMINISTRATIVE AND POLICY BARRIERS TO EFFICIENT MARKETING; A STUDY OF COMPETITION AT THE WHOLESALE LEVEL; A STUDY OF POST-HARVEST LOSSES; AND AN ANALYSIS OF CREDIT REQUIREMENTS FOR PARTICIPANTS IN THE MARKETING

CHAIN. THE MISSION REPRESENTATIVES EXPLAINED THAT, IN FACT, THEY HAD A BETTER UNDERSTANDING OF MANY OF THESE ISSUES THAN WAS EVIDENT FROM THE PID, BUT THEY FELT THAT ADDITIONAL INFORMATION WOULD BE HELPFUL IN IDENTIFYING SUBSEQUENT TRANCHE CONDITIONALITY AS WELL AS FUTURE INTERVENTIONS IN THE MARKETING SUB-SECTOR.

THE RESOLUTION OF THIS ISSUE IS DISCUSSED UNDER THE RELATED ISSUE NO. 2, BELOW.

2. ISSUE: MARKETING CONSTRAINTS ALREADY IDENTIFIED BUT NOT ADDRESSED UNDER THE PROJECT.

NATURE OF ISSUE: IN 1988, DAI CARRIED OUT "AN ANALYSIS OF THE GRAIN-MARKETING SYSTEM IN CHAD" WHICH IDENTIFIED A NUMBER OF MARKETING PROBLEMS. WHILE SOME OF THESE ARE BEING ADDRESSED UNDER THE PROJECT, OTHERS ARE NOT. FOR EXAMPLE, THE COSTS OF TRANSPORT ARE SUBSTANTIAL IN COMPARISON WITH THE PRICE OF GRAIN. THIS RESULTS IN LARGE PART FROM THE POOR CONDITION OF THE COUNTRY.S ROAD NETWORK IN ADDITION TO HEAVY ROAD USER TAXES IMPOSED AT MULTIPLE CHECKPOINTS BY SEVERAL GOVERNMENT AGENCIES. MOREOVER, A RECENT A.I.D. MARKET SURVEY, ACCORDING TO THE PID, REVEALED THAT MANY OF THESE UNOFFICIAL TARIFFS ARE STILL IN PLACE. OTHER CONSTRAINTS IDENTIFIED BY THE DAI STUDY INCLUDE CREDIT FOR PRIVATE TRADERS AND STORAGE FOR FARMING COMMUNITIES.

THE PID ITSELF ACKNOWLEDGES OTHER FACTORS INHIBITING FOOD MARKETING, SUCH AS "EXIT FEES" CHARGED BY PREFECTURES ON EACH SACK OF GRAIN TO PREVENT REMOVAL OF GRAIN EVEN WHEN IN SURPLUS. REGISTRATION FEES, IMPORT-EXPORT LICENSES AND OTHER ADMINISTRATIVE CONSTRAINTS ALSO INHIBIT THE ESTABLISHMENT OF LEGITIMATE PRIVATE BUSINESS ACTIVITIES. MOREOVER, GOC AGENCIES DOMINATE THE IMPORT AND SUPPLY OF AGRICULTURAL INPUTS AND IMPOSE IMPORT DUTIES ON SUCH ITEMS, ALL OF WHICH RESTRICTS PRIVATE SECTOR ENTRY INTO THE AGRICULTURAL INPUTS MARKETING AREA.

WHILE ACKNOWLEDGING MANY OF THESE MARKETING IMPERFECTIONS, IT IS NOT EVIDENT THAT THE PROJECT WOULD ADDRESS THEM. SOME MEMBERS OF THE COMMITTEE FELT THAT CERTAIN CONSTRAINTS (E.G., POOR ROAD INFRASTRUCTURE AND ROAD USER TAXES) WERE TOO GREAT TO TACKLE WITH A PROJECT OF THIS SIZE BUT THAT TARGETS OF OPPORTUNITY COULD PERHAPS BE FURTHER DEVELOPED AND EXPLOITED, DESPITE THESE OBSTACLES. EXAMPLES CITED INCLUDE GUM ARABIC, SPICES, AND MEAT PROCESSING. OTHER MEMBERS OF THE COMMITTEE REMAINED SKEPTICAL THAT A.I.D. COULD ACHIEVE MUCH IMPACT ON TARGET BENEFICIARIES WITHOUT ADDRESSING BY

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SOME OF THE BASIC MARKETING PROBLEMS WHICH WOULD PRESUMABLY AFFECT ANY MARKETING ENDEAVOR, SUCH AS THE MULTIPLE ROAD CHECKPOINTS AND FEES. POOR CONDITION OF FARM-TO-MARKET ROADS, EXIT FEES ON GRAIN AT THE PREFECTURE LEVEL, AND ADMINISTRATIVE RED-TAPE IN SETTING UP A MARKETING BUSINESS. THE MISSION REPRESENTATIVE ARGUED THAT SOME CONSTRAINTS (E.G. THE CONDITION OF THE PRIMARY ROAD NETWORK AND THE TRUCKERS UNION (CTT) MONOPOLY) WERE BEING ADDRESSED ADEQUATELY, PRIMARILY THROUGH OTHER DONOR ACTIVITIES.

AFTER CONSIDERABLE DISCUSSION OF ISSUES NUMBER 1 AND 2, A CONSENSUS EMERGED THAT, IN FACT, THERE MAY BE SOME OVERRIDING POLICY AND ADMINISTRATIVE BARRIERS WHICH OUGHT TO BE ADDRESSED UNDER THE PROJECT TO HELP MAXIMIZE THE DESIRED IMPACT.

RESOLUTION OF ISSUE NO. 1 AND ISSUE NO. 2: IN VIEW OF THE CURRENT UNCERTAINTY REGARDING THE GRAVITY OF THE MARKETING CONSTRAINTS DISCUSSED ABOVE, THE ECPR VIEWS THE NEXT PHASE OF DESIGN, I.E., POLICY ANALYSIS, AS A CRITICAL WATERSHED IN THE PROJECT'S DEVELOPMENT. THE MISSION SHOULD CARRY OUT THIS PHASE OF PROJECT DESIGN

WITH CONSIDERABLE CARE TO ENSURE A.I.D.'S PROPER UNDERSTANDING OF THE IMPORTANT MARKETING CONSTRAINTS, PARTICULARLY IN THE POLICY AND ADMINISTRATIVE AREAS, WHICH COULD EFFECTIVELY THWART OR UNDERMINE THE DESIRED PROJECT IMPACT ON MARKETING EFFICIENCY. FOLLOWING THE POLICY ANALYSIS DESIGN PHASE AND AN ASSESSMENT OF FINDINGS, THE MISSION SHOULD CABLE SUCH FINDINGS TO AID/W. IN THE EVENT THESE FINDINGS RAISE QUESTIONS ABOUT THE FEASIBILITY OF PROCEEDING WITH EITHER THE MARKETING NEWS OR AGRIBUSINESS SUPPORT CENTER (ASC) COMPONENTS OF THE PROJECT, OR OTHERWISE SIGNIFICANTLY MODIFY THE PROJECT'S DESIGN, AID/W WOULD NEED TO FORMALLY REVIEW SUCH FINDINGS.

WITHOUT PREJUDGING THE OUTCOME OF THIS POLICY ANALYSIS PHASE, VARIOUS ALTERNATIVES FOR FURTHER DEVELOPING A MARKETING INTERVENTION WERE DISCUSSED. IN ADDITION TO THE DESIGN PARAMETERS OUTLINED IN THE PID, THESE ALTERNATIVES WERE AS FOLLOWS:

A. POSTPONE FURTHER PROJECT DEVELOPMENT UNTIL SUCH TIME AS THE REQUISITE ANALYSES HAVE BEEN COMPLETED TO ENABLE A.I.D. TO MORE RATIONALLY DETERMINE HOW BEST TO PROCEED IN THE AGRICULTURAL MARKETING AREA. IF THIS PATH IS CHOSEN, MISSION MAY WISH TO CONSIDER THE SAHEL POLICY ANALYSIS PROJECT (625-0970) AS A FUNDING SOURCE SINCE, INTER ALIA, LONG-TERM TA COULD BE FINANCED UNDER THIS PROJECT TO ASSIST IN THE DEVELOPMENT, EXECUTION AND ANALYSIS OF THE REQUIRED STUDIES.

B. DEVELOP THE PROJECT IN PHASES: PHASE ONE MIGHT FOCUS ON MARKETING ANALYSES AND, POSSIBLY, ONE OF THE

OTHER PROJECT ELEMENTS INDICATED IN THE PID. A SECOND PHASE COULD TARGET CRITICAL MARKETING CONSTRAINTS IDENTIFIED IN PHASE ONE, POSSIBLY AS AN NFA INTERVENTION TO PROPERLY LEVERAGE THE REQUIRED POLICY CHANGES. FOR EXAMPLE, IF THE MISSION WERE TO CONCLUDE THAT THE UNOFFICIAL TARIFFS CHARGED TRUCKERS AT NUMEROUS ROAD BLOCKS CONSTITUTED A SIGNIFICANT BARRIER TO MARKETING EFFICIENCY (AS WELL AS A REGRESSIVE TAX IMPACTING DISPROPORTIONATELY ON THE POOR), AN INJECTION OF AN NFA CASH GRANT TO THE GOC TO OFFSET THE LOST TARIFF REVENUES MIGHT ACHIEVE THE DESIRED POLICY REFORM.

AID/W URGES THE MISSION TO CAREFULLY CONSIDER THESE ALTERNATIVES ALONG WITH THE FINDINGS OF THE POLICY

ANALYSIS DESIGN PHASE IN DEVELOPING THE PP. GIVEN THE SCOPE OF THE ISSUES DISCUSSED ABOVE, AFR/W STRONGLY ENCOURAGES THE MISSION TO DEVOTE ALL THE NECESSARY TIME TO THEIR PROPER ANALYSIS AND RESOLUTION.

3. ISSUE: HAVE THE NATURE, SCOPE AND DEMAND FOR THE SERVICES OF THE AGRIBUSINESS SUPPORT CENTER BEEN ADEQUATELY CONSIDERED?

DISCUSSION: A MAJOR ELEMENT OF THE PROJECT CALLS FOR THE ESTABLISHMENT OF AN AGRIBUSINESS SUPPORT CENTER (ASC) TO ASSIST CLIENT GROUPS (FARMERS, MERCHANTS AND INDIVIDUAL BUSINESSMEN) TO EXPLOIT MARKET OPPORTUNITIES BY ADDRESSING NEEDS FOR FEASIBILITY STUDIES, BUSINESS PLANS, MARKET IDENTIFICATION, FINANCING, AND TRAINING. THE ASC IS ALSO EXPECTED TO WORK WITH THE OFFICE OF INTERMINISTERIAL STUDIES AND PROJECTS (BIEP) IN IDENTIFYING APPROPRIATE POST-HARVEST TECHNOLOGIES. IT WILL ALSO HELP IN DISSEMINATING INFORMATION ON SUCH TECHNOLOGIES. FURTHERMORE, IT IS ALSO EXPECTED TO PROMOTE NEW PLANT MATERIALS AND EXPLORE, INDEPENDENTLY, NEW DRYING, PACKAGING AND FOOD PROCESSING TECHNIQUES. ALL-IN-ALL, A WIDE ARRAY OF TASKS ARE TO BE CARRIED OUT BY THE ASC WITH A "SKELETON STAFF." WHILE THE PID HAS MADE ALLOWANCES FOR CONTRACTING ADDITIONAL ASSISTANCE, BY

LOCAL OR EXPATRIATE, THE COMMITTEE BELIEVES THE PROJECT MAY BE PLACING EXCESSIVE DEMANDS ON A FEW INDIVIDUALS WITH THE RESULT THAT NOTHING IS ACCOMPLISHED WELL AND THE CENTER'S CREDIBILITY IS COMPROMISED FROM THE OUTSET. MOREOVER, THE EFFECTIVE DEMAND FOR THE VARIOUS SERVICES IN QUESTION HAS YET TO BE ESTABLISHED, WHICH RAISES SERIOUS QUESTIONS CONCERNING THE LONG-TERM SUSTAINABILITY OF THIS ENTITY SINCE IT IS EXPECTED TO CHARGE FEES FOR ITS SERVICES. (WHILE ACKNOWLEDGING THAT OPIT RECEIVED NEARLY 100 PROPOSALS FOR ASSISTANCE, IT IS NOT CLEAR THAT BUSINESSES WOULD HAVE PAID FOR THE DESIRED SERVICES. NEVERTHELESS, THESE PROPOSALS DO OFFER A STARTING POINT FOR ASSESSING EFFECTIVE DEMAND.)

IN RECOGNIZING THE VIRTUES OF THE ASC CONCEPT; I.E., A FLEXIBLE ENTITY FOCUSED ON IDENTIFYING MARKETING OPPORTUNITIES AND ASSISTING VARIOUS CHADIAN GROUPS IN CAPITALIZING ON SUCH OPPORTUNITIES, THE ECPR REMAINED SKEPTICAL THAT A "SKELETON STAFF" COULD REASONABLY PERFORM THE WIDE ARRAY OF SERVICES CURRENTLY ENVISIONED.

IMPROVING MARKETING EFFICIENCY IN CHAD. SERIOUS QUESTIONS REMAIN REGARDING THE EFFECTIVE DEMAND FOR THE SERVICES IN QUESTION AS WELL AS THE RELATED STAFFING IMPLICATIONS. THE MISSION SHOULD EXAMINE ALTERNATIVE MECHANISMS AND INSTITUTIONAL ARRANGEMENTS FOR PROVIDING THE REQUIRED SERVICES. ALTERNATIVELY, THE MISSION MAY WANT TO DEVELOP THE ASC CONCEPT WITH MDI BUT AS A SEPARATE ACTIVITY OUTSIDE THE SCOPE OF THE PROPOSED PROJECT.

4. CONCERN: FEASIBILITY OF ESTABLISHING AN EFFICIENT, COST-EFFECTIVE MARKET INFORMATION SERVICE.

NATURE OF CONCERN AND PRESCRIBED COURSE OF ACTION: THE ECPR ACKNOWLEDGED THE DESIRABILITY OF PROVIDING TIMELY AND ACCURATE MARKET DATA TO PRODUCERS AND TRADERS OF AGRICULTURAL COMMODITIES. IT IS NOT CLEAR HOW BEST TO ACCOMPLISH THIS GOAL GIVEN THE POOR TRANSPORT/COMMUNICATION FACILITIES IN CHAD AND THE POTENTIALLY HIGH COST OF SENDING ENUMERATORS TO THE MAJOR MARKETS AND PRODUCING AREAS TO SECURE THE REQUIRED DATA. TWO OPTIONS WERE DISCUSSED: FOCUSING ON ONE ENTITY (E.G., THE OFFICE OF AGRICULTURAL STATISTICS) AND UPGRADING ITS CAPACITY FOR RENDERING THIS SERVICE; OR, ALTERNATIVELY, UPGRADING AND COORDINATING CURRENT DATA COLLECTION EFFORTS BY SEVERAL GOC ENTITIES.

THE MISSION SHOULD ANALYZE BOTH OPTIONS TO DETERMINE WHICH WOULD BE THE MOST COST-EFFECTIVE IN TERMS OF COLLECTING, COLLATING AND DISSEMINATING THE REQUIRED INFORMATION. THE POSSIBILITY OF USING PANAFAX TECHNOLOGY SHOULD ALSO BE EXPLORED. FINALLY, PLEASE BE ADVISED THAT INSAH HAS PRICE POLICY ANALYSTS WITH EXPERIENCE IN COLLECTING SUCH DATA.

5. CONCERN: MARKETING LOCALLY VS. MARKETING FOR EXPORT

DISCUSSION: THE PID ARGUES THAT GIVEN THE LACK OF QUALITY CONTROL THROUGHOUT THE MARKETING CHAIN, "CHADIAN PRODUCERS SHOULD LEARN TO SUPPLY THEIR OWN MARKETS MORE EFFICIENTLY BEFORE UNDERTAKING A SIGNIFICANT EXPORT ACTIVITY." ON THE OTHER HAND, NIGERIA AND CAMEROON MAY BE EASIER TO TRADE WITH THAN CERTAIN MARKETS IN CHAD GIVEN THE POOR ROAD CONDITIONS, LONG DISTANCES BETWEEN GROWING AREAS AND MARKETS WITHIN CHAD, AND THE RELATIVELY THIN CHADIAN RURAL MARKETS FOR TRUCKERS

SEEKING TWO-WAY TRADING OPPORTUNITIES.

IN DISCUSSING THIS TOPIC, IT WAS ACKNOWLEDGED THAT NIGERIA AND CAMEROON MIGHT OFFER SIGNIFICANT MARKETING OPPORTUNITIES FOR BASIC GRAINS. IT WAS ALSO NOTED THAT CASH CROPS DESTINED FOR EXPORT MARKETS MIGHT ENJOY SPECIAL TREATMENT FROM CHADIAN AUTHORITIES, POSSIBLY MINIMIZING OR CIRCUMVENTING MANY OF THE ADMINISTRATIVE OBSTACLES ROUTINELY ENCOUNTERED IN MARKETING CHANNELS SERVICING THE LOCAL MARKET. FURTHERMORE, CASH CROPS FOR EXPORT MIGHT ATTRACT FOREIGN INVESTORS PREPARED TO PROVIDE EQUITY (RATHER THAN DEBT) FINANCING AND THUS ALLEVIATE A POTENTIAL FUNDING CONSTRAINT.

THE ECPR CONCLUDED THAT IN EXAMINING MARKETING PROSPECTS FOR CHADIAN PRODUCTS, THE MISSION SHOULD ASSESS FOREIGN AS WELL AS LOCAL MARKETING OPPORTUNITIES AND CONSTRAINTS.

6. CONCERN: WHAT PROVISIONS WILL BE MADE TO INCLUDE GENDER CONSIDERATIONS IN EACH OF THE 3 PROJECT ELEMENTS: (1) A MARKET INFORMATION SERVICE, (2) SUPPORT SERVICES FOR "AGRIBUSINESSES", AND (3) MARKET AND POLICY ANALYSIS?

THE PID ADDRESSES IN A GENERAL SENSE THE IMPORTANCE OF WOMEN IN AGRICULTURAL PRODUCTION IN CHAD. THERE IS NO SPECIFIC MENTION OF WHAT THAT MEANS FOR EACH OF THE PROJECT COMPONENTS. MARKET INFORMATION MAY FEED THROUGH BY

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DIFFERENT CHANNELS FOR MALE AND FEMALE FARMERS. IT MAY NOT BE EQUALLY AVAILABLE TO MALES AND FEMALES. DIFFERENT SUPPORT SERVICES MAY BE AVAILABLE OR NEEDED FOR FEMALE AND MALE FARMERS AND PERSONS INVOLVED IN AGRIBUSINESS. MARKET AND POLICY ANALYSIS SHOULD NOT ASSUME THAT THE MARKET STRUCTURE AND POLICY IMPLICATIONS ARE THE SAME FOR FEMALES AND MALES, AND THAT POLICY IMPACT DOES NOT DIFFER ACCORDING TO SEX.

IN DISCUSSING THIS QUESTION, IT BECAME OBVIOUS THAT THE MISSION HAD BEEN ATTEMPTING TO SECURE ASSISTANCE FROM PPC/WID TO HELP IDENTIFY AN APPROPRIATELY QUALIFIED SOCIOLOGIST TO HELP THE MISSION ADDRESS THESE CONCERNS. IN PURSUING THIS FURTHER, PPC/WID (ROSALIE NOREM) SUGGESTS THAT MISSION CABLE THEIR REQUEST FOR SERVICES TO PPC/WID. THEY ARE PREPARED TO IDENTIFY A SOCIOLOGIST KNOWLEDGEABLE IN WID CONCERNS AND HELP FINANCE TDY COSTS. ALTERNATIVELY, THEY ARE PREPARED TO PROVIDE WID

TRAINING TO A CHADIAN SOCIOLOGIST AND HELP DEFRAY THE TRAINING COSTS. PLEASE ADVISE IF SUCH ASSISTANCE IS DESIRED IN ADDRESSING THE WID CONCERNS OUTLINED HERE.

7. MISCELLANEOUS CONCERNS:

A. CONTRACTING:

(1) AT THE ISSUES MEETING THE PROJECT COMMITTEE REVIEWED VARIOUS OPTIONS FOR CONTRACTING THE REQUIRED TECHNICAL SERVICES AND CONCLUDED THAT FULL AND OPEN COMPETITION SHOULD BE PURSUED IN SECURING THE TECHNICAL SERVICES FOR THE PROJECT.

(2) STATE 388653 (89), DATED DECEMBER 6, 1989, HIGHLIGHTS SEVERAL PROVISIONS CONTAINED IN SECTION 579 OF THE FY 1990 APPROPRIATIONS ACT (WHICH CONCERNS DISADVANTAGED ENTERPRISES). THESE PROVISIONS HAVE BEEN IMPLEMENTED IN INTERIM REGULATIONS, COPIES OF WHICH HAVE RECENTLY BEEN DISTRIBUTED TO RCOS AND RLAS. AMONG OTHER PROVISIONS CONTAINED IN THE REGULATIONS IS ONE WHICH GENERALLY REQUIRES THAT ANY CONTRACT (EXCEPT THOSE AWARDED TO DISADVANTAGED ENTERPRISES, AS DEFINED IN THE REGULATIONS) OF MORE THAN DOLS 500.000 CONTAIN A PROVISION REQUIRING THAT NO LESS THAN TEN PERCENT OF THE DOLLAR VALUE OF THE CONTRACT BE SUBCONTRACTED TO DISADVANTAGED ENTERPRISES, EXCEPT WHERE THE RCO CERTIFIES THAT THERE IS NO REALISTIC EXPECTATION OF U.S. SUBCONTRACTING OPPORTUNITIES. THE INTERIM REGULATIONS ALSO PROVIDE FOR THE USE, IN SOME CIRCUMSTANCES, OF OTHER THAN FULL AND OPEN COMPETITION TO AWARD CONTRACTS TO SMALL BUSINESS CONCERNS OWNED AND CONTROLLED BY SOCIALLY AND ECONOMICALLY DISADVANTAGED INDIVIDUALS. PLEASE ENSURE THAT THE PROJECT'S PROCUREMENT PLAN AND DOCUMENTS ASSOCIATED WITH THIS PROCUREMENT REFLECTS THESE AND OTHER APPLICABLE PROVISIONS CONTAINED IN THE INTERIM REGULATIONS.

I MONITORING AND EVALUATION: A COMPREHENSIVE MONITORING AND EVALUATION PLAN SHOULD BE DEVELOPED WITH THE OBJECTIVE OF ESTABLISHING A CLEAR SET OF TARGETS AND INDICATORS FOR MEASURING PROGRESS TO ASSURE A CONTINUOUS, ONGOING ASSESSMENT OF THE PROJECT.S IMPLEMENTATION PROGRESS. A WELL CONCEIVED AND EFFECTIVE MONITORING SYSTEM IS PREFERABLE TO FREQUENT EVALUATIONS. ALTHOUGH INDEPENDENT EVALUATIONS TO ASSESS IMPACT,

IMPLEMENTATION PROGRESS. A WELL CONCEIVED AND EFFECTIVE MONITORING SYSTEM IS PREFERABLE TO FREQUENT EVALUATIONS, ALTHOUGH INDEPENDENT EVALUATIONS TO ASSESS IMPACT, PARTICULARLY AT THE PURPOSE AND GOAL LEVELS. REMAIN ESSENTIAL TO A COMPREHENSIVE M AND E PLAN.

C. TRAINING: THE PROJECT'S FINAL DESIGN STAGE SHOULD CAREFULLY ASSESS TRAINING NEEDS IN PRACTICAL MARKETING SKILLS, INCLUDING STORAGE, HANDLING, PROCESSING, ACCOUNTING AND OTHER BUSINESS SKILLS.

D. PROJECT'S SOCIAL AND ECONOMIC IMPACT: IT IS IMPORTANT THAT THE PP IDENTIFY BOTH WINNERS AND LOSERS AND THEIR RESPECTIVE MAGNITUDES SO WE CAN FULLY UNDERSTAND THE PROJECT'S IMPACT ON PEOPLES LIVES. IN DEVELOPING THE SCOPE OF WORK FOR THE SOCIOLOGIST AND OTHER DESIGN TEAM MEMBERS, IT IS NECESSARY TO ADDRESS THIS CONCERN.

E. INITIAL ENVIRONMENTAL EXAMINATION:

THE BUREAU.S ENVIRONMENTAL OFFICER IS REVISING THE IEE AND WILL PROVIDE GUIDANCE IN SEPTEL. BAZER
BT
#4013

NNNN

16

VZCZCCNA *
RR RUEHC
DE RUTAND #1493/01 075 **
ZNR UUUUU ZZH
R 161048Z MAR 90
FM AMEMBASSY NDJAMENA
TO SECSTATE WASHDC 6454
BT
UNCLAS SECTION 01 OF * NDJAMENA 01493

CLASS: UNCLASSIFIED
CHRGE: AID 03/15/90
APPRV: AID/REP:BDWILD
DRFTD: AID/REP:BDWILD
CLEAR: NONE
DISTR: AID3 CDA DCM
CHRON

AIDAC

AID/W FOR DAA L. SAIERS AND AFR/SWA FROM AID/REP WILDER

E.O. 12356: N/A
TAGS:
SUBJECT:

REF: A) STATE 045816 B) STATE 74013
- C) DANIEL/WILDER PHONCON 13 MARCH

NDJ FILE CODE: 677-0062

1. AFR/SWA INQUIRED AS TO WHAT THE MISSION'S REACTION WAS TO THE ECPR REPORTING CABLE ON THE CHAD AGRICULTURE MARKETING PID.

2. OF REAL CONCERN TO THE MISSION IS THE IMPRESSION FROM REF C AND OTHER CONVERSATIONS THAT SOME IN AID/W THINK THE DECISIONS TAKEN BY THE ECPR WERE QUOTE OVERTAKEN BY EVENTS UNQUOTE IN THAT IT WAS DECIDED TO SLIP THE PROJECT TO FY91 FUNDING. THIS SPECIFIC QUESTION WAS RAISED IN THE MEETING OF 15 FEBRUARY BETWEEN AFR/SWA, AFR/PD, AID REP AND DAA. THE DAA STATED UNEQUIVOCALLY THAT THE DECISION TO HAVE A FY91 START SHOULD IN NO WAY CHANGE THE ECPR DECISIONS. I SPECIFICALLY RAISED THE ISSUE OF THE TIMETABLE PROPOSED FOR PROJECT PAPER DEVELOPMENT AND STATED THE MISSION WANTED TO HOLD TO THE ORIGINAL SCHEDULE. THE DAA AGREED, SAYING BY ALL MEANS TRY, AND THAT THE BUREAU ONLY WANTED TO RELIEVE THE MISSION OF THE PRESSURE OF HAVING TO FINISH THE PP IN TIME FOR A FY90 OBLIGATION. IF PROBLEMS AROSE YOU DIDN'T WANT US TO BE UNDER PRESSURE BUT TO ALLOW US TIME TO WORK THEM THROUGH. I ACCEPTED THIS BUT ADDED THAT WE WOULD TRY TO HOLD TO THE SCHEDULE AND TO BE READY FOR ANY FALL OUT FUNDS.
3. THE ABOVE BEING SAID, THE QUESTION REMAINS AS TO WHETHER WE FEEL THE CABLE ACCURATELY REFLECTS THE ECPR DECISION. FOR THE MOST PART IT DOES. HOWEVER, AS EXPRESSED IN THE CABLE, THE IMPLIED EXPECTATIONS CONCERNING THE MAGNITUDE AND ROLE OF THE PRELIMINARY POLICY AND ADMINISTRATIVE CONSTRAINT ANALYSIS IS A LITTLE DIFFERENT FROM THE SPECIFIC STATEMENT OF ITS ROLE IN THE SAME CABLE. THE LATTER IS FULLY CONSISTENT WITH THE ECPR DECISION AS SUMMARIZED BY KEVIN KELLY AT THE END OF THE MEETING.

4. THE MISSION FELT THAT A FULL UNDERSTANDING OF THE

ETING CONSTRAINTS WAS SO IMPORTANT THAT WE MADE IT OF THE OBJECTIVES OF THE PROJECT ITSELF. WE ALSO ELT THAT THERE WERE WORTHWHILE INTERVENTIONS TO IMPROVE MARKETING EFFECTIVENESS AND EFFICIENCY THAT COULD BE UNDERTAKEN WHILE IN DEPTH MARKET CONSTRAINT ANALYSES WERE BEING CONDUCTED.

5. THE PRELIMINARY POLICY AND ADMINISTRATIVE CONSTRAINT ANALYSIS AS PROPOSED BY THE MISSION HAS THREE PURPOSES; 1) FURTHER DEFINE THE SCOPE AND DEPTH OF THE POLICY, ADMINISTRATIVE AND MARKET ANALYSIS TO BE FUNDED UNDER THE PROJECT ITSELF; 2) IDENTIFY AND DEFINE ANY NEEDED C.P.'S CONCERNING POLICY AND ADMINISTRATIVE CONSTRAINTS THAT MUST BE A PART OF THE PROJECT AGREEMENT AND 3) TO ASCERTAIN WHETHER THERE ARE ANY CONSTRAINTS THAT WOULD PREVENT THE TWO SPECIFIC MARKETING INTERVENTIONS PROPOSED IN THE PID FROM REACHING THEIR OBJECTIVES. THE PRELIMINARY STUDY IS NOT DESIGNED TO FILL ALL THE GAPS IN OUR UNDERSTANDING OF MARKETING, NOR INDEED WILL THE FULL PROJECT ITSELF BE ABLE TO DO THIS. MARKET ANALYSIS WILL BE AN ONGOING TASK. THE PRELIMINARY STUDY IS NOT DESIGNED TO SELECT AREAS OF INTERVENTION. WE DID THIS AT THE PID LEVEL. THE PRELIMINARY STUDY IS TO ASCERTAIN WHETHER THE AREAS CHOSEN ARE WORKABLE AND APPROPRIATE GIVEN THE POLICY AND ADMINISTRATIVE FRAMEWORK IN CHAD. IF THE FINDING IS NEGATIVE, WE WILL HAVE A DIFFERENT PROJECT FROM THAT DESCRIBED IN THE PID AND WOULD COME BACK TO AID/W. IF THE FINDING IS POSITIVE, WE CABLE THOSE FINDINGS TO AID/W, PROCEED WITH THE PP AND APPROVE AND AUTHORIZE IT IN THE FIELD. THIS IS MY UNDERSTANDING OF THE SUMMARY OF THE ECPR AS PRESENTED BY KEVIN KELLY AT THE END OF THE MEETING. IT IS ALSO CONSISTENT WITH THE NOTES TAKEN BY BARRY BURNETT, WHICH I DISCUSSED WITH HIM OVER THE PHONE BEFORE LEAVING WASHINGTON. I REALIZE THESE DECISIONS CAN BE CHANGED, BUT THE CABLE DOES NOT REFLECT SUCH A CHANGE.

6. PARA 1 OF THE RESOLUTION OF ISSUE NO. 1 AND ISSUE NO. 2 STATES THE ACTION TO BE TAKEN IF THE INITIAL STUDY FINDS OVERRIDING CONSTRAINTS THAT PREVENT SUCCESS OF THE TWO PROPOSED INTERVENTIONS. IT DOES NOT STATE, BUT SILENTLY ASSERTS BY APPROVING THE PID SUBJECT ONLY TO GUIDANCE CONTAINED IN THE TELEGRAM, THAT IF THERE ARE NO BT

AID/W FOR DAA L. SAIERS AND AFR/SWA FROM AID/REP WILDER

E.O. 12356: N/A
TAGS:
SUBJECT:

OVERRIDING CONSTRAINTS, THE MISSION SHOULD GO AHEAD WITH THE PROJECT DESIGN BASED ON THE PID THAT WAS APPROVED BY AID/W. ALSO BY REMAINING SILENT ON AND BY NOT WITHDRAWING MY AUTHORITY TO APPROVE THE PP IN THE FIELD, I ASSUME THAT I CAN DO SO.

7. THE MAIN DIFFERENCE BETWEEN THE MISSION VIEW AND THE TENOR OF THE CABLE IS ONE OF SEEING THE GLASS HALF FULL OR HALF EMPTY. THE MISSION WAS COMPLEMENTED BY THE ECPR FOR THE QUALITY AND COMPREHENSIVENESS OF THE PID. WE WILL BE EQUALLY DILIGENT IN CARRYING OUT THE PRELIMINARY STUDY AND EQUALLY RESPONSIBLE IN MAKING THE DECISION TO PROCEED OR REGROUP. IT WAS, AFTER ALL, THE MISSION THAT RAISED THE BASIC ISSUES IN THE BODY OF THE PID IN THE FIRST PLACE AND IS IN THE BEST POSITION TO EVALUATE THEIR IMPACT ON PROJECT SUCCESS.

8. FYI. PROJECT AGREEMENTS FOR ALL OUR OYB ARE COMPLETED AND FULLY CLEARED, WAITING ONLY THE NECESSARY FUNDING CITATIONS FROM AID/W. IN THE INTERIM WE WILL PROCEED TO DISCUSS THEM QUOTE IN DRAFT UNQUOTE WITH THE MINISTRY OF PLAN. MISSION SEES NO REASON WHY THEY CAN'T BE SIGNED IN APRIL. END FYI. AYLING
BT
#1493

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UNCLASSIFIED

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UNCLASSIFIED

STATE 110710

677-0062

ACTION: AID-3 INFO: CHARGE DCM

VZCZCTAB488EVA460
RR RUTAND
DE RUEHC #0710 0960458
ZNR UUUUU ZZH
R 060457Z APR 90
FM SECSTATE WASHDC
TO AMEMBASSY NDJAMENA 3246
BT
UNCLAS STATE 110710

LOC: 145 09
06 APR 90 1844
CN: 10911
CHRG: AID
DIST: AID

AIDAC

E.O. 12356: N/A

SUBJECT: CHAD AGRICULTURAL MARKETING AND TECHNOLOGY TRANSFER (677-0062)

REFS: (A) NDJAMENA 1493 (B) STATE 74013

1. APPRECIATE REFTEL OF 16 MARCH 1990. WE REGRET THAT A COMMUNICATIONS GAP ON SUBJECT PROJECT OCCURRED SUBSEQUENT TO YOUR DEPARTURE WITH REGARD TO THE AUTHORIZATION VENUE FOR PP APPROVAL. WITH REFERENCE TO REF (B), PARA 5.A, IT WAS THE ECPR COMMITTEE'S INTENT THAT THE RESULTS OF THE POLICY ANALYSIS STUDIES WITH THE MISSION'S COMMENT BE SENT TO AID/W FOR REVIEW AND COMMENTS/RECOMMENDATIONS BEFORE THE MISSION PROCEEDS WITH THE PP DESIGN. THIS IS NOT AN UNCOMMON FINDING IN AID/W REVIEWS. AS EXPRESSED AT THE ECPR, INSUFFICIENT INFORMATION WAS AVAILABLE UPON WHICH TO REACH AN ASSESSMENT OF THE SEVERITY OF THE OTHER MARKETING CONSTRAINTS IDENTIFIED IN THE PID. A JUDGMENT WAS MADE THAT THESE CONSTRAINTS SHOULD BE EXAMINED IN GREATER DETAIL TO ASSURE OURSELVES THAT THEY WOULD NOT INTERFERE WITH ACCOMPLISHMENT OF PROPOSED PROJECT PURPOSE AND THAT POTENTIAL FOR A SIGNIFICANT IMPACT IS MAINTAINED. THEY

WOULD FORM PART OF THE TECHNICAL STUDIES UPON WHICH THE PROJECT IS BASED. IT MAY BE THAT THE TIME SPENT ON THESE STUDIES WILL REVEAL OTHER OPPORTUNITIES (AS WELL AS PROBLEMS) WHICH COULD BE ADDRESSED IN THE PROPOSED INVESTMENT AND MAXIMIZE OVERALL IMPACT. IF THESE STUDIES CONCLUDE THAT OTHER BLOCKAGES WOULD HAVE TO BE ADDRESSED, MISSION SHOULD CONSIDER WHETHER NPA APPROACHES COULD PLAY A ROLE IN THEIR RESOLUTION, AS DISCUSSED IN EXIT INTERVIEW AND IN PARA 2.B OF REF (B).

2. NOTE, THE DOA TO AUTHORIZE THIS PROJECT IN THE FIELD SUBJECT TO ABOVE REVIEW IS NOT IN QUESTION. OUR RESERVATIONS DO NOT DETRACT FROM THE QUALITY WORK DONE ON THE PID FOR WHICH FULL CREDIT IS GIVEN TO THE MISSION TEAM. HOWEVER, THE COMMITTEE'S REVIEW OF THE MARKET AND POLICY ANALYSIS IS NECESSARY BEFORE PROCEEDING TO THE FINAL DEVELOPMENT OF THE PP. BAKER
BT
#0710

UNCLASSIFIED | DATE APR 06 1990 | STATE 110787

ACTION: AID-3 INFO: CHARGE DCM

677-0062

VZCZCTAB438EVA488
PP RUTAND
DE RUEHC #0787 0960551
ZNR UUUUU ZZH
P 060548Z APR 90
FM SECSTATE WASHDC
TO RUTAND/AMEMBASSY NDJAMENA PRIORITY 3247
INFO RUEHAB/AMEMBASSY ABIDJAN PRIORITY 4927
BT
UNCLAS STATE 110787

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LOC: 144 74
06 APR 90 0708
CN: 10861
CHRG: AID
DIST: AID

AIDAC ADO, ABIDJAN FOR REDSO/WCA (HANCHETT

E.O. 12356: N/A
TAGS: N/A
SUBJECT: IEE FOR AGRICULTURAL MARKETING AND TECHNOLOGY TRANSFER (677-0062)

REF: STATE 074013

1. PER PARA 7E OF REFTEL, A CATEGORICAL EXCLUSION, BASED ON LACK OF SIGNIFICANT ENVIRONMENTAL EFFECT, HAS BEEN APPROVED FOR THE MARKET NEWS AND POLICY, AND MARKET ANALYSES ELEMENTS OF THE SUBJECT IEE.

2. A CATEGORICAL EXCLUSION IS ALSO APPROVED FOR THE FEASIBILITY STUDIES ON TECHNIQUES TO REDUCE POST HARVEST LOSS. HOWEVER, SINCE THE ADOPTION OF ANY SUCH TECHNIQUES WOULD HAVE THE POTENTIAL FOR SIGNIFICANT ENVIRONMENTAL EFFECT, AN ENVIRONMENTAL REVIEW WILL BE REQUIRED FOR THE RECOMMENDED TECHNIQUES BEFORE THEY ARE IMPLEMENTED. THIS DECISION TO DEFER ENVIRONMENTAL REVIEW UNTIL FEASIBILITY STUDY IS COMPLETED APPLIES TO ANY TECHNIQUES TO PRESERVE STORED PRODUCTS AND FOODS--WHETHER OR NOT THEY INCLUDE THE USE OF PESTICIDES--AND TO ANY INTRODUCTION OF NEW CULTIVARS.

3. ACCORDING TO REGULATION 16, SECTION 216.3 (2)(7), A DECISION FOR DEFERRAL MUST BE APPROVED BY THE MISSION DIRECTOR OR THE ASSISTANT ADMINISTRATOR FOR THE ORIGINATING GEOGRAPHIC BUREAU. THE IEE HAS BEEN REVISED TO REFLECT THIS, AND AFR/GC AND THE BUREAU ENVIRONMENTAL COORDINATOR HAVE CLEARED THIS CABLE. A COPY OF THE REVISED IEE WILL BE HAND,CARRIED TO THE MISSION BY STANLEY APRIL 2, 1990. BAKER
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ACTION: AID-3 INFO: CHARGE DCM

677-006.

VZCZCTAB488EVA460
RR RUTAND
DE RUEHC #0710 0960458
ZNR UUUUU ZZH
R 060457Z APR 90
FM SECSTATE WASHDC
TO AMEMBASSY NDJAMENA 3246
BT
UNCLAS STATE 110710

LOC: 145 095
06 APR 90 0844
CN: 10911
CHRG: AID
DIST: AID

AIDAC

E.O. 12356: N/A

SUBJECT: CHAD AGRICULTURAL MARKETING AND TECHNOLOGY TRANSFER (677-0062)

REFS: (A) NDJAMENA 1493 (B) STATE 74013

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2. NOTE, THE DOA TO AUTHORIZE THIS PROJECT IN THE FIELD SUBJECT TO ABOVE REVIEW IS NOT IN QUESTION. OUR RESERVATIONS DO NOT DETRACT FROM THE QUALITY WORK DONE ON THE PID FOR WHICH FULL CREDIT IS GIVEN TO THE MISSION TEAM. HOWEVER, THE COMMITTEE'S REVIEW OF THE MARKET AND POLICY ANALYSIS IS NECESSARY BEFORE PROCEEDING TO THE FINAL DEVELOPMENT OF THE PP. BAKER
BT
#0710

18

ACTION: AID-3 INFO: HARGE DCM DATE APR 06 1990 STATE 110787

677-0062

VZCZCTAE436EVA488
PP RUTAND
DE RUEHC #0787 0962551
ZNR UUUUU ZZH
P 060546Z APR 90
FM SECSTATE WASHDC
TO RUTAND/AMEMBASSY NDJAMENA PRIORITY 3247
INFO RUEHAB/AMEMBASSY ABIDJAN PRIORITY 4927
BT
UNCLAS STATE 110787

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LOC: 144 747
06 APR 90 0708
CN: 10861
CHRG: AID
DIST: AID

AIDAC ADO, ABIDJAN FOR REDSO/WCA (HANCEETT

E.O. 12356: N/A
TAGS: N/A
SUBJECT: IEE FOR AGRICULTURAL MARKETING AND TECHNOLOGY TRANSFER (677-0062)

REF: STATE 074013

1. PER PARA 7E OF REFTEL, A CATEGORICAL EXCLUSION, BASED ON LACK OF SIGNIFICANT ENVIRONMENTAL EFFECT, HAS BEEN APPROVED FOR THE MARKET NEWS AND POLICY, AND MARKET ANALYSES ELEMENTS OF THE SUBJECT IEE.

2. A CATEGORICAL EXCLUSION IS ALSO APPROVED FOR THE FEASIBILITY STUDIES ON TECHNIQUES TO REDUCE POST HARVEST LOSS. HOWEVER, SINCE THE ADOPTION OF ANY SUCH TECHNIQUES WOULD HAVE THE POTENTIAL FOR SIGNIFICANT ENVIRONMENTAL EFFECT, AN ENVIRONMENTAL REVIEW WILL BE REQUIRED FOR THE RECOMMENDED TECHNIQUES BEFORE THEY ARE IMPLEMENTED. THIS DECISION TO DEFER ENVIRONMENTAL REVIEW UNTIL FEASIBILITY STUDY IS COMPLETED APPLIES TO ANY TECHNIQUES TO PRESERVE STORED PRODUCTS AND FOODS--WHETHER OR NOT THEY INCLUDE THE USE OF PESTICIDES--AND TO ANY INTRODUCTION OF NEW CULTIVARS.

3. ACCORDING TO REGULATION 16, SECTION 216.3 (2)(7), A DECISION FOR DEFERRAL MUST BE APPROVED BY THE MISSION DIRECTOR OR THE ASSISTANT ADMINISTRATOR FOR THE ORIGINATING GEOGRAPHIC BUREAU. THE IEE HAS BEEN REVISED TO REFLECT THIS, AND AFR/GC AND THE BUREAU ENVIRONMENTAL COORDINATOR HAVE CLEARED THIS CABLE. A COPY OF THE REVISED IEE WILL BE HAND CARRIED TO THE MISSION BY ASTANLEY APRIL 2, 1990. BAKER
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TAGS:
SUBJECT: AGRICULTURAL MARKETING AND TECHNOLOGY TRANSFER
PID, 677-0062

REFS: (A) STATE 074013 (B) NDJAMENA 1493 (C) STATE 110710 (D) NDJAMENA 03331

1. SUMMARY: A PROJECT COMMITTEE WAS CONVENED JULY 11, 1990 TO REVIEW THE POLICY ANALYSIS (REF D) FOR SUBJECT PROJECT WHICH WAS CARRIED OUT PURSUANT TO THE PID ECPR GUIDANCE CABLE (REF A). THE COMMITTEE CONSISTED OF REPRESENTATIVES FROM AFR/TR, AFR/MDI, AFR/SWA, AFR/PD AND USAID/CHAD (WILDER AND DEESE). THE COMMITTEE FOUND THE POLICY ANALYSIS HELPFUL TO IMPROVING A.I.D.'S UNDERSTANDING OF CHAD'S AGRICULTURAL MARKETING SYSTEM AND SERVING TO GUIDE FUTURE RESEARCH AND ANALYSIS IN THIS SECTOR OF THE ECONOMY.

2. MARKETING STRATEGY FRAMEWORK: THE COMMITTEE NOTED THE STUDY'S CONCLUSION THAT: ". . . NO SERIOUS POLICY CONSTRAINTS EXIST THAT WOULD PREVENT IMPLEMENTATION OF THE AMTT PROJECT." IN REVIEWING THE PROPOSED INTERVENTIONS, THE COMMITTEE CONCURRED WITH THE

ASSESSMENT THAT THE EXISTING POLICY FRAMEWORK WOULD NOT POSE A SIGNIFICANT CONSTRAINT IN TERMS OF REALIZING THE EXPECTED OUTPUTS. IT WAS NOTED, HOWEVER, THAT THE STUDY INCLUDED SEVERAL POLICY ISSUES WHICH MAY NEED TO BE ADDRESSED FOR ACHIEVING THE PROJECT'S PURPOSE OF INCREASED AGRICULTURAL MARKETING EFFICIENCY. IT WAS AGREED THAT THE GOC AND MISSION ARE EMBARKING ON A LONG-TERM EFFORT TO IMPROVE MARKET PERFORMANCE. AS SUCH THE AMTT PROJECT IS REALLY A FIRST PHASE WHICH WILL ENABLE BOTH THE GOC AND USAID/CHAD TO IDENTIFY AND ADDRESS THE MOST SIGNIFICANT POLICY AND INVESTMENT CONSTRAINTS. IT WAS AGREED THAT THE FORTHCOMING PP COULD BE COUCHED IN THOSE TERMS. MISSION DIRECTOR WILDER ADVISED THE COMMITTEE THAT AS PART OF THE PP DESIGN PROCESS, THE MISSION WOULD CONTINUE TO EXAMINE POLICY ISSUES AND DISCUSS THE IMPLICATIONS WITH GOC OFFICIALS. WHEN THERE ARE SUFFICIENT ANALYSES AND GOC COMMITMENT (EITHER AS A RESULT OF PP DESIGN OR THE STUDIES INCLUDED WITHIN THE MARKETING STUDIES COMPONENT)

THE MISSION WILL CONSIDER COMPLEMENTING THE AMIT PROJECT WITH SPECIFIC NFA ACTIVITIES.

IN VIEW OF THESE CONSIDERATIONS, THE COMMITTEE RECOMMENDS THAT THE PROJECT PAPER LAY OUT, TO THE EXTENT POSSIBLE, A PRELIMINARY STRATEGY FOR ADDRESSING SOME OF THE MORE CRITICAL MARKETING PROBLEMS IDENTIFIED BY THE ANALYSIS, INCLUDING IMPORT AND EXPORT REGULATIONS AND DUTIES; THE LACK OF STORAGE FACILITIES, PARTICULARLY FOR PERISHABLES; INEFFICIENT MARKETING PARASTATALS; OFFICIAL AND UNOFFICIAL ROAD BLOCKS; AND ACCESS TO TERM CREDIT. THIS IS NOT INTENDED TO BE AN EXHAUSTIVE TREATISE OF CHAD'S AGRICULTURAL MARKETING SYSTEM BUT RATHER A FRAMEWORK FOR FURTHER STUDY, ANALYSIS AND DIALOGUE IN THIS AREA. ONE APPROACH WOULD BE TO IDENTIFY AND PRIORITIZE POLICY AND OTHER CONSTRAINTS IN TERMS OF THEIR ECONOMIC IMPACT. THIS COULD LEAD TO AN EXAMINATION AND PRIORITIZATION OF SPECIFIC COMMODITY MARKETING SYSTEMS.

3. MARKETING STUDIES COMPONENT: WHILE ACKNOWLEDGING THE POTENTIAL BENEFITS TO BE DERIVED FROM THE MARKETING INFORMATION AND AGRIBUSINESS SUPPORT CENTER COMPONENTS OF THE PROJECT, THE PC BELIEVES THAT THE MARKET AND POLICY ANALYSES COMPONENT IS LIKELY TO PROVE THE MOST SIGNIFICANT COMPONENT AND, FOR THIS REASON, URGES THE MISSION TO PAY PARTICULARLY CLOSE ATTENTION TO THIS

FACET OF THE PROJECT IN THE FINAL DESIGN STAGE. ESTABLISHING A STRATEGY FRAMEWORK, AS DISCUSSED ABOVE, SHOULD BE HELPFUL IN THIS REGARD. THE MARKET AND POLICY ANALYSES ARE EXPECTED TO CONTRIBUTE ADDITIONAL INSIGHT INTO THE MARKETING PROBLEMS (AND SOLUTIONS) IDENTIFIED IN THE ABT STUDY. ARMED WITH THIS INFORMATION, THE MISSION MAY WANT TO PURSUE ADDITIONAL MARKETING REFORMS UNDER THE MULTI-YEAR PL 480 TITLE II 206 PROGRAM AND/OR COMPLEMENTARY NFA PROGRAMS.

4. PROJECT PURPOSE: PROJECT COMMITTEE SUGGESTS THAT PURPOSE STATEMENT MIGHT NEED TO REFLECT THE TWO PHASE NATURE OF THE EFFORT, IN WHICH THE LONGER TERM OBJECTIVE OF IMPROVING MARKET EFFICIENCY IS TO BE ACHIEVED THROUGH SOMEWHAT SHORTER TERM INCREASES IN INSTITUTIONAL CAPACITIES IN BOTH PUBLIC AND PRIVATE SECTORS.

5. DELEGATION OF AUTHORITY: AS NOTED IN REF (C), THE FID ECPR ENVISIONED MISSION PP APPROVAL AND AUTHORIZATION FOLLOWING THE COMPLETION AND AID/W REVIEW OF THE MARKETING ANALYSIS DISCUSSED HEREIN. GIVEN AFR/TR'S AND AFR/MDI'S INVOLVEMENT IN THE PROJECT'S CONCEPTUALIZATION, THE MISSION SHOULD CONSIDER THEIR REPRESENTATION AT THE MISSION'S FINAL REVIEW OF THE PROJECT PAPER. KIMMITT

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ANNEX B

LOGICAL FRAMEWORK MATRIX

Annex B: Logical Framework Matrix

Agricultural Marketing and Technology Transfer Project No. 677-0062

Initial FY: FY 1991
Initial Obligation: $1.95million
LOP Funding: $ 10.15 million

Goal	Indicators that Goal has been Achieved	Means of Verification	Assumptions
To improve the efficiency of the agricultural marketing systems in Chad.	Lower marketing costs. Reduced seasonal price fluctuations. Increased stable supply of products across time and space. Lower consumer prices. Increased value added attributable to agribusiness.	BSA, AID databases. BIEP and project studies.	Political stability Road improvement program proceeds vigorously. Domestic demand for agricultural products does not decrease.
Purpose	**End of Project Status**	**Means of Verification**	**Assumptions**
To increase the capacity of the private sector to engage in agricultural marketing activities and to improve the public sector capacity to facilitate those activities.	Improved market communication as measured by increased market correlation coefficients. Increased private sector investment in agribusiness in absolute and relative terms. GOC using improved information to assess impact of policy alternatives.	BIEP reports, project reports. BSA and BIEP surveys; project evaluations. Project evaluations; bank and VITA records.	GOC will be effective in implementing policy regime. Market participants respond to market signals. Investment in agribusiness is constrained by technical and managerial capabilities.
Outputs	**Objectively Verifiable Indicators**	**Means of Verification**	**Assumptions**
Functionning market information system for cereals and horticultural crops.	Demand-driven weekly market reports on Radio Chad: on 10 cereals in 30 markets by 1992; in 40 markets by 1993; in 50 markets by 1995; on 4 vegetables in 15 markets by 1993.	Radio Chad broadcasts. Project-sponsored User Surveys	GOC agencies can collect relevant data and disseminate it on timely basis. Radio is effective means of national communication. Continued collaboration in data collection by various GOC and donor agencies.
Increased private Chadian capital invested in agribusiness.	At least 4 new agribusinesses or product lines by 1994. At least 4 existing businesses expand sales. Private agribusinesses registered with Ch. of Commerce increased by 50 percent.	ASC records. ASC records. Chamber of Commerce roster.	Private capital is available for investments if profitable. Chamber of Commerce improves responsiveness to private sector needs.

Outputs (continued)	Objectively Verifiable Indicators	Means of Verification	Assumptions
Increased number and volume of loans to male and female owned agribusinesses.	Increase in loans to agribusinesses by BTCD, BIAT by 1994, by gender; Increase in loans to agribusiness by VITA by 1994, by gender.	BTCD, BIAT, VITA records.	Agribusinesses find satisfactory guarantors for loans. BEAC continues to require that commercial banks maintain "priority status" and privileged rates for SMEs.
Private Chadian agribusiness consulting capability established.	At least one firm has demonstrated (increased agribusiness clients) capability by 1994.	Consultant rosters and client list of firm.	Effective demand for consulting services exists.
Improved regulatory environment for agribusiness instituted by GOC.	Business registration process simplified by 1992; Access to Regime A of Investment Code simplified by 1992; Patente revised by 1993.	Review of GOC statutes.	Simplified processes do not result in major GOC revenue losses.
Detailed analyses of behavior, incentive structures, and expectations of private investors/financial institutions completed.	AMIT preliminary study completed by 1992; follow-on initiated in FY 1993.	Project reports.	GOC and private sector will participate actively in studies. USAID and GOC maintain credible policy dialogue.
Strategy for improving private transport industry efficiency developed by GOC and private transporters.	AMIT preliminary study completed by 1992. GOC strategy developed by 1993.	Project reports.	
Strategy for enhancing women's roles in agricultural marketing developed by GOC.	AMIT study completed by 1993. GOC strategy developed by 1994.	Project reports.	

Inputs (U.S. $ 1,000)

Item	A.I.D	GOC
Salaries	2429.1	2585.0
Allow,Frnge	3866.6	774.7
Travel/PD	1529.3	0.0
Training	903.8	16.3
Commodities	739.9	0.0
Other Costs	1347.5	329.5
Totals	10816.2	3705.5

Magnitude of Inputs		Means of Verification	Assumptions
Grand Total	14,521.7	A.I.D. records	A.I.D. and GOC funds available on time in amounts required.
Refer to next page for detail.			

ANNEX C

STATUTORY CHECKLISTS

5C(1) - COUNTRY CHECKLIST

Listed below are statutory criteria applicable to: (A) FAA funds generally; (B)(1) Development Assistance funds only; or (B)(2) the Economic Support Fund only.

A. GENERAL CRITERIA FOR COUNTRY ELIGIBILITY

1. FY 1988 Continuing Resolution Sec. 526. Has the President certified to the Congress that the government of the recipient country is failing to take adequate measures to prevent narcotic drugs or other controlled substances which are cultivated, produced or processed illicitly, in whole or in part, in such country or transported through such country, from being sold illegally within the jurisdiction of such country to United States Government personnel or their dependents or from entering the United States unlawfully? — No

2. FAA Sec. 481(h). (This provision applies to assistance of any kind provided by grant, sale, loan, lease, credit, guaranty, or insurance, except assistance from the Child Survival Fund or relating to international narcotics control, disaster and refugee relief, or the provision of food or medicine.) If the recipient is a "major illicit drug producing country" (defined as a country producing during a fiscal year at least five metric tons of opium or 500 metric tons of coca or marijuana) or a "major drug-transit country" (defined as a country that is a significant direct source of illicit drugs significantly affecting the United States, through which such drugs are transported, or through which significant sums of drug-related profits are laundered with the knowledge or complicity of the government), has the President in the March 1 International Narcotics Control Strategy Report (INSCR) determined and certified to the Congress (without — Not Applicabl

4. FAA Sec. 620(c). If assistance is to a government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) the debt is not denied or contested by such government? — No

5. FAA Sec. 620(c)(1). If assistance is to a government, has it (including any government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities? — No

6. FAA Secs. 620(a), 620(f), 620D; FY 1988 Continuing Resolution Sec. 512. Is recipient country a Communist country? If so, has the President determined that assistance to the country is vital to the security of the United States, that the recipient country is not controlled by the international Communist conspiracy, and that such assistance will further promote the independence of the recipient country from international communism? Will assistance be provided directly to Angola, Cambodia, Cuba, Iraq, Libya, Vietnam, South Yemen, Iran or Syria? Will assistance be provided to Afghanistan without a certification? — No

7. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, damage or destruction by mob action of U.S. property? — No

8. FAA Sec. 620(l). Has the country failed to enter into an investment guaranty agreement with OPIC? — No, agreement signed on May 12, 1965.

13. FAA Sec. 620(q). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the A.I.D. Administrator in determining the current A.I.D. Operational Year Budget? (Reference may be made to the Taking into Consideration memo.) — All arrearages have been taken into account.

14. FAA Sec. 620A. Has the President determined that the recipient country grants sanctuary from prosecution to any individual or group which has committed an act of international terrorism or otherwise supports international terrorism? — No

15. FY 1988 Continuing Resolution Sec. 576. Has the country been placed on the list provided for in Section 6(j) of the Export Administration Act of 1979 (currently Libya, Iran, South Yemen, Syria, Cuba, or North Korea)? — No

16. ISDCA of 1985 Sec. 557(b). Has the Secretary of State determined that the country is a high terrorist threat country after the Secretary of Transportation has determined, pursuant to section 1115(e)(2) of the Federal Aviation Act of 1958, that an airport in the country does not maintain and administer effective security measures? — No

17. FAA Sec. 666(b). Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA? — No

18. FAA Secs. 669, 670. Has the country, after August 3, 1977, delivered to any other country or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards, and without special certification by the President? Has it transferred a nuclear explosive device to a non-nuclear weapon state, or if such a state, either received or detonated a nuclear explosive device? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.) — No

19. FAA Sec. 670. If the country is a non-nuclear weapon state, has it, on or after August 8, 1985, exported (or attempted to export) illegally from the United States any material, equipment, or technology which would contribute significantly to the ability of a country to manufacture a nuclear explosive device? No

20. ISDCA of 1981 Sec. 720. Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 36th General Assembly of the U.N. on Sept. 25 and 28, 1981, and did it fail to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the Taking into Consideration memo.) No

21. FY 1988 Continuing Resolution Sec. 528. Has the recipient country been determined by the President to have engaged in a consistent pattern of opposition to the foreign policy of the United States? No

22. FY 1988 Continuing Resolution Sec. 513. Has the duly elected Head of Government of the country been deposed by military coup or decree? If assistance has been terminated, has the President notified Congress that a democratically elected government has taken office prior to the resumption of assistance? No

23. FY 1988 Continuing Resolution Sec. 543. Does the recipient country fully cooperate with the international refugee assistance organizations, the United States, and other governments in facilitating lasting solutions to refugee situations, including resettlement without respect to race, sex, religion, or national origin? N/A

24. 1991 Appropriations Act, Sec. 586D No

Has the President certified to Congress that the country is not in compliance with the U.N. Security Council sanctions against Iraq?

B. FUNDING SOURCE CRITERIA FOR COUNTRY ELIGIBILITY

1. Development Assistance Country Criteria

FAA Sec. 116. Has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy? — No

FY 1988 Continuing Resolution Sec. 538. Has the President certified that use of DA funds by this country would violate any of the prohibitions against use of funds to pay for the performace of abortions as a method of family planning, to motivate or coerce any person to practice abortions, to pay for the performance of involuntary sterilization as a method of family planning, to coerce or provide any financial incentive to any person to undergo sterilizations, to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning? — No

2. Economic Support Fund Country Criteria

FAA Sec. 502B. Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the President found that the country made such significant improvement in its human rights record that furnishing such assistance is in the U.S. national interest? — No.

FY 1988 Continuing Resolution Sec. 549. Has this country met its drug eradication targets or otherwise taken significant steps to halt illicit drug production or trafficking? — Not Applicable

5C(2) - PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A includes criteria applicable to all projects. Part B applies to projects funded from specific sources only: B(1) applies to all projects funded with Development Assistance; B(2) applies to projects funded with Development Assistance loans; and B(3) applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE?	Yes
HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?	Yes

A. GENERAL CRITERIA FOR PROJECT

1. FY 1990 Appropriations Act Sec. 523; FAA Sec. 634A. If money is to be obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified?	Yes
2. FAA Sec. 611(a). Prior to an obligation in excess of $500,000, will there be: (a) engineering, financial or other plans necessary to carry out the assistance; and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?	a) Yes b) Yes
3. FAA Sec. 611(a)(2). If legislative action is required within recipient country with respect to an obligation in excess of $500,000, what is the basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of the purpose of the assistance?	No Chadian Legislative action is necessary.

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4.	FAA Sec. 611(b); FY 1990 Appropriations Act Sec. 501. If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.)	N/A
5.	FAA Sec. 611(e). If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed $1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively?	Yes
6.	FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.	No Special Covenant will require GOC t make efforts at Regional Customs a Tariffs Reform
7.	FAA Sec. 601(a). Information and conclusions on whether projects will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.	Project supports S activities and regulatory reform facilitate those activities. It is also first phase o larger effort to improve trade cond tions which will lead to greater international trad by Chad
8.	FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).	Private U.S. firm will be engaged to provide technical services. Substan- tial computer procurement from U. private sector is required.

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9. FAA Secs. 612(b), 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.

Host country will pay, in local currency, salaries and benefits for some personnel and utilities for some proje structures.

10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

No

11. FY 1990 Appropriations Act Sec. 521. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?

N/A

12. FY 1990 Appropriations Act Sec. 547. Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel?

No

13. FAA Sec. 119(c)(4)-(6) & (10). Will the assistance: (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other

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wildlife habitats; (c) support efforts to identify and survey ecosystems in recipient countries worthy of protection; or (d) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas?	a-c. Not applicab d. No
14. <u>FAA Sec. 121(d)</u>. If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (either dollars or local currency generated therefrom)?	Host country will not manage funds; Mission and institutional contractor will control project funds.
15. <u>FY 1990 Appropriations Act, Title II, under heading "Agency for International Development."</u> If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government?	N/A
16. <u>FY 1990 Appropriations Act Sec. 537</u>. If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.?	N/A
17. <u>FY 1990 Appropriations Act Sec. 514</u>. If funds are being obligated under an appropriation account to which they were not appropriated, has the President consulted with and provided a written justification to the House and Senate Appropriations Committees and has such obligation been subject to regular notification procedures?	N/A

18. State Authorization Sec. 139 (as interpreted by conference report). Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision).

Will be done upon signature of Agreement.

19. Trade Act Sec. 5164 (as interpreted by conference report), amending Metric Conversion Act of 1975 Sec. 2. Does the project use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate?

Yes

20. FY 1990 Appropriations Act, Title II, under heading "Women in Development." Will assistance be designed so that the percentage of women participants will be demonstrably increased?

Yes

21. FY 1990 Appropriations Act Sec. 592(a). If assistance is furnished to a foreign government under arrangements which result in the generation of local currencies, has A.I.D. (a) required that local currencies be deposited in a separate account established by the recipient government, (b) entered into an agreement with that government providing the amount of local currencies to be generated and the terms and conditions under which the currencies so deposited may be utilized, and (c) established by agreement the responsibilities of A.I.D. and that government to monitor and account for deposits into and disbursements from the separate account?

No local currency will be generated by the project.

Will such local currencies, or an equivalent amount of local currencies, be used only to carry out the purposes of the DA or ESF chapters of the FAA (depending on which chapter is the source of the assistance) or for the administrative requirements of the United States Government?	No local currency generated.
Has A.I.D. taken all appropriate steps to ensure that the equivalent of local currencies disbursed from the separate account are used for the agreed purposes?	
If assistance is terminated to a country, will any unencumbered balances of funds remaining in a separate account be disposed of for purposes agreed to by the recipient government and the United States Government?	

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FY 1990 Appropriations Act Sec. 546 (as interpreted by conference report for original enactment). If assistance is for agricultural development activities (specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities: (1) specifically and principally designed to increase agricultural exports by the host country to a country other than the United States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U.S. exporters of a similar agricultural commodity; or (2) in support of research that is intended primarily to benefit U.S. producers?	1) No 2) No
b. FAA Sec. 107. Is special emphasis placed on use of appropriate technology (defined as relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?	N/A
c. FAA Sec. 281(b). Describe extent to which the activity recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government.	Project was designe based on extensive consultations with chadians market participants; there will be training in information gatheri and dissemination techniques to increase participation and encourage development of agribusiness institutional resources.

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d. FAA Sec. 101(a). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?	Yes
e. FAA Secs. 102(b), 111, 113, 281(a). Describe extent to which activity will: (1) effectively involve the poor in development by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, dispersing investment from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using appropriate U.S. institutions; (2) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward a better life, and otherwise encourage democratic private and local governmental institutions; (3) support the self-help efforts of developing countries; (4) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (5) utilize and encourage regional cooperation by developing countries.	Project will directly promote participation of women in the economy.
f. FAA Secs. 103, 103A, 104, 105, 106, 120-21; FY 1990 Appropriations Act, Title II, under heading "Sub-Saharan Africa, DA." Does the project fit the criteria for the source of funds (functional account) being used?	Yes
g. FY 1990 Appropriations Act, Title II, under heading "Sub-Saharan Africa, DA." Have local currencies generated by the sale of imports or foreign exchange by the government of a country in Sub-Saharan Africa from funds appropriated under Sub-Saharan Africa, DA been deposited in a special account established by that government, and are these local currencies available only for	Not applicable. No local currencies generated.

use, in accordance with an agreement with the United States, for development activities which are consistent with the policy directions of Section 102 of the FAA and for necessary administrative requirements of the U. S. Government?

h. FAA Sec. 107. Is emphasis placed on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)? — Not applicable.

i. FAA Secs. 110, 124(d). Will the recipient country provide at least 25 percent of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)? — Yes, although cost-sharing is not applicable to Chad, a Sahelian RLDC.

j. FAA Sec. 128(b). If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority? — Yes

k. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective participation in governmental processes essential to self-government. — See response 1. (c), above

l. FY 1990 Appropriations Act, under heading "Population, DA," and Sec. 535. Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions? — No

Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations?	No
Are any of the funds to be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization?	No
Will funds be made available only to voluntary family planning projects which offer, either directly or through referral to, or information about access to, a broad range of family planning methods and services?	N/A
In awarding grants for natural family planning, will any applicant be discriminated against because of such applicant's religious or conscientious commitment to offer only natural family planning?	N/A
Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?	No
m. <u>FAA Sec. 601(e)</u>. Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?	Yes
n. <u>FY 1990 Appropriations Act Sec. 579</u>. What portion of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, colleges and universities having a student body in which more than 40 percent of the students are Hispanic Americans, and	Full and open co-petit will be used with a goal of at least te and preferably 20% contracting by disava taged entities.

private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)?

o. FAA Sec. 118(c). Does the assistance comply with the environmental procedures set forth in A.I.D. Regulation 16? Does the assistance place a high priority on conservation and sustainable management of tropical forests? Specifically, does the assistance, to the fullest extent feasible: (1) stress the importance of conserving and sustainably managing forest resources; (2) support activities which offer employment and income alternatives to those who otherwise would cause destruction and loss of forests, and help countries identify and implement alternatives to colonizing forested areas; (3) support training programs, educational efforts, and the establishment or strengthening of institutions to improve forest management; (4) help end destructive slash-and-burn agriculture by supporting stable and productive farming practices; (5) help conserve forests which have not yet been degraded by helping to increase production on lands already cleared or degraded; (6) conserve forested watersheds and rehabilitate those which have been deforested; (7) support training, research, and other actions which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing; (8) support research to expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss, or degradation; (9) conserve biological diversity in forest areas by supporting efforts to identify, establish, and maintain a representative network of protected tropical forest ecosystems on a worldwide basis, by making the establishment of protected areas a

The project complies with Regulation 16.

N/A. There are no tropical forests in Chad.

condition of support for activities involving forest clearance or degradation, and by helping to identify tropical forest ecosystems and species in need of protection and establish and maintain appropriate protected areas; (10) seek to increase the awareness of U.S. Government agencies and other donors of the immediate and long-term value of tropical forests; and (11)/utilize the resources and abilities of all relevant U.S. government agencies?

p. FAA Sec. 118(c)(13). If the assistance will support a program or project significantly affecting tropical forests (including projects involving the planting of exotic plant species), will the program or project: (1) be based upon careful analysis of the alternatives available to achieve the best sustainable use of the land, and (2)/take full account of the environmental impacts of the proposed activities on biological diversity? N/A

q. FAA Sec. 118(c)(14). Will assistance be used for: (1) the procurement or use of logging equipment, unless an environmental assessment indicates that all timber harvesting operations involved will be conducted in an environmentally sound manner and that the proposed activity will produce positive economic benefits and sustainable forest management systems; or (2) actions which will significantly degrade national parks or similar protected areas which contain tropical forests, or introduce exotic plants or animals into such areas? 1) No 2) No

r. FAA Sec. 118(c)(15). Will assistance be used for: (1) activities which would result in the conversion of forest lands to the rearing of livestock; (2) the construction, upgrading, or maintenance of roads (including temporary haul roads for logging or other extractive industries) which pass through relatively undergraded forest lands; (3) the 1) No 2) No

colonization of forest lands; or (4) the construction of dams or other water control structures which flood relatively undergraded forest lands, unless with respect to each such activity an environmental assessment indicates that the activity will contribute significantly and directly to improving the livelihood of the rural poor and will be conducted in an environmentally sound manner which supports sustainable development?

3) No
4) No

s. FY 1990 Appropriations Act Sec. 534(a). If assistance relates to tropical forests, will project assist countries in developing a systematic analysis of the appropriate use of their total tropical forest resources, with the goal of developing a national program for sustainable forestry?

N/A

t. FY 1990 Appropriations Act Sec. 534(b). If assistance relates to energy, will such assistance focus on improved energy efficiency, increased use of renewable energy resources, and national energy plans (such as least-cost energy plans) which include investment in end-use efficiency and renewable energy resources?

N/A

Describe and give conclusions as to how such assistance will: (1) increase the energy expertise of A.I.D. staff, (2) help to develop analyses of energy-sector actions to minimize emissions of greenhouse gases at least cost, (3) develop energy-sector plans that employ end-use analysis and other techniques to identify cost-effective actions to minimize reliance on fossil fuels, (4) help to analyze fully environmental impacts (including impact on global warming), (5) improve efficiency in production, transmission, distribution, and use of energy, (6) assist in exploiting nonconventional renewable energy resources, including wind, solar, small-hydro, geo-thermal, and advanced

biomass systems, (7) expand efforts to meet the energy needs of the rural poor, (8) encourage host countries to sponsor meetings with United States energy efficiency experts to discuss the use of least-cost planning techniques, (9) help to develop a cadre of United States experts capable of providing technical assistance to developing countries on energy issues, and (10) strengthen cooperation on energy issues with the Department of Energy, EPA, World Bank, and Development Assistance Committee of the OECD.

1 - 10) N/A

u. <u>FY 1990 Appropriations Act, Title II, under heading "Sub-Saharan Africa, DA"</u> (as interpreted by conference report upon original enactment). If assistance will come from the Sub-Saharan Africa DA account, is it: (1) to be used to help the poor majority in Sub-Saharan Africa through a process of long-term development and economic growth that is equitable, participatory, environmentally sustainable, and self-reliant; (2) being provided in accordance with the policies contained in section 102 of the FAA; (3) being provided, when consistent with the objectives of such assistance, through African, United States and other PVOs that have demonstrated effectiveness in the promotion of local grassroots activities on behalf of long-term development in Sub-Saharan Africa; (4) being used to help overcome shorter-term constraints to long-term development, to promote reform of sectoral economic policies, to support the critical sector priorities of agricultural production and natural resources, health, voluntary family planning services, education, and income generating opportunities, to bring about appropriate sectoral restructuring of the Sub-Saharan African economies, to support reform in public administration and finances and to establish a favorable environment for individual enterprise and self-sustaining development, and to take

1) Yes
2) Yes
3) Grant will encourage collaboration with on-going PVO activities
4) Grant promotes sectorial reform in policies and regulations relating to private enterprise in agribusiness.

into account, in assisted policy reforms, the need to protect vulnerable groups; (5) being used to increase agricultural production in ways that protect and restore the natural resource base, especially food production, to maintain and improve basic transportation and communication networks, to maintain and restore the renewable natural resource base in ways that increase agricultural production, to improve health conditions with special emphasis on meeting the health needs of mothers and children, including the establishment of self-sustaining primary health care systems that give priority to preventive care, to provide increased access to voluntary family planning services, to improve basic literacy and mathematics especially to those outside the formal educational system and to improve primary education, and to develop income-generating opportunities for the unemployed and underemployed in urban and rural areas?

5) Grant seeks to enhance environment for food crop production and distribution.

v. <u>International Development Act Sec. 711, F&A Sec. 463.</u> If project will finance a debt-for-nature exchange, describe how the exchange will support protection of: (1) the world's oceans and atmosphere, (2) animal and plant species, and (3) parks and reserves; or describe how the exchange will promote: (4) natural resource management, (5) local conservation programs, (6) conservation training programs, (7) public commitment to conservation, (8) land and ecosystem management, and (9) regenerative approaches in farming, forestry, fishing, and watershed management.

N/A

w. <u>FY 1990 Appropriations Act Sec. 515</u>. If deob/reob authority is sought to be exercised in the provision of DA assistance, are the funds being obligated for the same general purpose, and for countries within the same region as originally obligated, and have the House and Senate Appropriations Committees been properly notified?

N/A

2. Development Assistance Project Criteria (Loans Only)

N/A - the assistance is a grant, not a loan.

a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest.

b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20 percent of the enterprise's annual production during the life of the loan, or has the requirement to enter into such an agreement been waived by the President because of a national security interest?

c. FAA Sec. 122(b). Does the activity give reasonable promise of assisting long-range plans and programs designed to develop economic resources and increase productive capacities?

3. Economic Support Fund Project Criteria

N/A - only DFA funds are contemplated.

a. FAA Sec. 531(a). Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA?

b. FAA Sec. 531(e). Will this assistance be used for military or paramilitary purposes?

c. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?

ANNEX D

B/G REQUEST FOR ASSISTANCE

REPUBLIQUE DU TCHAD

MINISTERE DU PLAN
ET DE LA COOPERATION

SECRETARIAT D'ETAT

DIRECTION GENERALE

DATE R 29 1991

Unité - Travail - Progrès

N'Djaména, le 27 AVR. 1991

N° 134 /MPC/SE/DG

LE DIRECTEUR GENERAL DU MINISTERE DU PLAN ET DE LA COOPERATION

à

Monsieur le Représentant USAID
N'Djaména

ACTION: AA/Rep: Palma
DATE. 4/29 DUE 5/9
INFO Deane, Johnson, Fuller
ACTION TAKEN:

Par la présente, j'ai l'honneur de vous informer que le Gouvernement de la République du Tchad confirme officiellement sa requête pour un financement du projet Commercialisation des produits Agricoles et Transfert de Technologie (No.677-0062).

Le Gouvernement de la République du Tchad se félicite de constater que la contribution de l'AID à ce projet s'élèvera au total à 10.816.200 dollars .Ceci soutiendra les trois composantes du projet : système d'information Commerciale,Centre d'Appui Agro-industriel et Analyse des marchés et de leur Réglementation. La contribution tchadienne qui consistera principalement en versement des salaires des agents de l'Etat, sera au total près de 3.705.500 dollars. Je désire par ailleurs confirmer que le projet ne bénéficiera d'aucune contribution d'un autre donateur.

Veuillez croire, Monsieur le Répresentant, à l'assurance de ma considération distinguée.

LE DIRECTEUR GENERAL DU MINISTERE DU PLAN
ET DE LA COOPERATION

MINISTERE DU PLAN ET DE LA COOPERATION
SECRETARIAT D'ETAT
DIRECTION GENERALE
REPUBLIQUE DU TCHAD

GABLINA NGUETOYE

ANNEX E

SECTION 611(e) CERTIFICATION

REPUBLIC OF CHAD
AGRICULTURAL MARKETING AND TECHNOLOGY TRANSFER PROJECT
667-0062

A.I.D. REPRESENTATIVE'S 611 (e) CERTIFICATION

I, Bernard D. Wilder, the principal officer of the United States Agency International Development in Chad, hereby certify that, in my opinion, Chad has the financial and human resource capability to maintain and utilize effectively the materials and services to be provided under the Chad Agricultural Marketing and Technology Transfer Project, No. 667-0062. The project will increase the capacity of the private sector to engage in agricultural marketing activities and improve the public sector capacity to facilitate those activities. The project will accomplish this purpose through: 1) improving market communication, as measured by increased market correlation coefficients; 2) increasing private sector investment in agribusiness in absolute and relative terms; and 3) providing the Government of Chad with improved information to assess the impact of policy alternatives which affect agricultural marketing. Long- and short-term technical assistance, short-term and in-country training, and limited commodity support are included in the project. The ministries and private sector entities with which the project will work are staffed and have the capability to utilize the assistance that this project will provide. This judgment is based on extensive consultations with relevant Government of Chad officials and private entrepreneurs during preparation of this project and the good record of implementation of other A.I.D. projects in Chad.

Signed: Bernard D. Wilder
Bernard D. Wilder
A.I.D. Representative

Date: 29 April '91

ANNEX F

TECHNICAL ANALYSIS
MARKET INFORMATION SYSTEM COMPONENT

TECHNICAL ANALYSIS
MARKET INFORMATION SYSTEM COMPONENT

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TECHNICAL ANALYSIS
MARKET INFORMATION SYSTEM COMPONENT

1. INTRODUCTION

Agricultural markets in Chad are characterized by a high degree of risk. Seasonal price fluctuations, uneven rainfall distribution, poor road conditions, lack of transportation, and political instability contribute to the uncertainty present in the markets. Recognition of these characteristics has directed GOC policies towards a market-oriented agricultural sector.

Market liberalization, which includes dissemination of information, is one step towards reduction of risk in the marketing system.[1] Reforms towards market liberalization, particularly in the cereals market, include a redefinition of the national grain board, ONC, and removal of the transportation monopoly, CTT. Additionally, government organizations, supported by the CILSS-funded DIAPER II project, have initiated activities leading towards a national cereals market information system.

While informal information networks exist, a market information system with equal access to all participants helps to improve market efficiency through increased competition, reduction of risk, and stabilization of demand. Given the public-good nature of information, the private sector may not be able or willing to supply the optimal amount of information to all market participants. In this case, the public sector has a role in the private marketing system to provide information.

This annex presents the market information system component of the AMTT project. It begins with the rationale for a market information system in Chad in section two followed by an inventory of current price information systems in section three. Section four describes recent GOC efforts to establish a MIS, including activities planned for the coming year. Key issues are then identified for the development of a market information system in section five. Finally, section six describes the AMTT implementation plan to strengthen national market information system efforts in Chad.

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[1]Market liberalization does not imply complete government withdrawal from the marketing system, but rather a system in which price signals operate to allocate resources while maintaining a role for the State. That role as a facilitator, i.e. providing market information or the legal infrastructure to reduce transaction costs, is necessary to maintain and improve market performance.

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2. RATIONALE FOR A MARKET INFORMATION SYSTEM

The goal of the AMTT project is to improve the efficiency of the agricultural marketing system in Chad. The project purpose is to increase the capacity of the private sector to engage in agricultural marketing activities and to improve the public sector capacity to facilitate those activities. Three indicators for measuring goal achievement include: lower marketing costs, reduced seasonal price fluctuations, and a stable supply of agricultural products across time and space. All three indicators can be affected by the market information system component.

First, high marketing margins are not necessarily due to "abusive intermediaries," but rather reflect market inefficiency. Inefficiencies can include: poor road conditions, lack of transportation, uneven distribution of rainfall, postharvest losses, and notably lack of market information. Increasing market information, as stated above, helps to reduce risk and associated inefficiencies. The second indicator, seasonal price fluctuations, may also be reduced through market information. Timely and accurate market information improves production, storage, and marketing decisions for producers and traders alike. Finally, the third indicator, stabilization of supply across time and space, may be achieved through a market information system. As traders become informed of regional prices differentials, spatial and temporal arbitrage may occur to reduce supply and demand imbalances.

The principal objectives of a market information system, as defined at a recent CILSS-sponsored seminar in Bamako and as temporarily adopted by the Chadian government, are as follows:

* To improve market participant access to information in order to support market liberalization, increase producer bargaining power, improve market flows, and increase consumer choice.

* To improve market intelligence in order to facilitate policy formation by government decision makers and donor agencies (CILSS, Club du Sahel, 1990).

While these are general objectives accumulated from Sahelian experiences, Chadian market information system objectives will be more specifically defined at a national seminar planned in December. At this point, interviews during the PP design and recent government documents indicate the following more specific objectives leading towards the general objectives above: (1) the harmonization of numerous data collection efforts in Chad, (2) the centralization of data processing and analysis, and (3) the

timely dissemination of accurate market information based on user needs.

Beneficiaries of a market information system can be categorized as follows: (1) private market participants including producers, wholesalers, intermediaries, retailers, and consumers, (2) government organizations, and (3) donor agencies. The needs and benefits, which will differ for each group, are described below.

Producers. Producers gain several benefits from a market information system. First, producers in surplus areas receive higher prices due to increased demand from traders willing to undertake spatial arbitrage (buying produce in surplus areas for sale in deficit areas). Second, producer bargaining power is increased through knowledge of prices in nearby markets and urban areas. Finally, information on seasonal price changes improves production planning and allocation decisions among production, consumption, and storage. For example, it is only profitable to store crops during years when prices rise enough to cover the costs of storage. A market information system can provide the information to forecast price changes throughout the year and plan accordingly.

Wholesalers and Intermediaries. Wholesalers and intermediaries benefit from a market information system through reduction of risk and improved storage and marketing decisions. As stated above, high margins do not necessarily indicate excess profits, but may reflect high transportation costs, spoilage, or unanticipated saturated markets. Through increased knowledge of regional prices, wholesalers and intermediaries can calculate the costs of transportation and plan in advance for crop movement. Also, just as for producers, storage versus marketing decisions are improved.

Retailers. Retailers benefit from a market information system through increased bargaining power with wholesalers and improved knowledge of profitable market locations. For example, many retailers travel from market to market within a specific region to sell their produce and gain the highest profits; or, they may travel to nearby markets for purchase of small quantities such as one or two bags of cereals. Knowledge of prices reduces their risk and improves their market location decisions.

Consumers. Consumers benefit primarily through reduced prices. This occurs as traders undertake spatial arbitrage, reducing prices as supply increases in the deficit areas. Additionally, consumers bargaining power and choices are increased through knowledge of prices.

Government Organizations. For government organizations, a market information system facilitates improved policy formation through provision of empirical data and a mechanism to monitor markets. For example, high prices may signal a poor harvest and the need for emergency food aid. Thus the market information system can be used as one tool to monitor food security. Additionally, as new market regulations are introduced or removed, the impact on the market can be monitored through price, volume, or market flow changes. In general, knowledge of price movement in the market can be used to determine the level of efficiency and formulate policy accordingly.

Donor Agencies. Donor agencies also benefit from a market information system through improved project implementation plans based on sound assumptions.

Despite the numerous benefits of a market information system, it should be noted that there are many factors which may prohibit participants from using information. These include physical factors such as difficult communications, transportation, or lack of storage capacity. Additionally, other elements common to agricultural sectors may prohibit use of a MIS such as asset specificity, the nature of the commodity, or lack of alternative employment opportunities (Rinaldi, 1985). While most authors acknowledge these factors in their studies, there seems to be a general consensus that market information will improve the marketing system in Chad.

3. INVENTORY OF CURRENT PRICE INFORMATION SYSTEMS IN CHAD

Numerous organizations, both government and donor agencies, currently collect information on cereals, fruits and vegetables in Chad. A recent bulletin on price data collection by four government organizations and one donor organization (BSA, ONC, ONDR, DSEED, and SAP) revealed cereals price data collection in 174 markets. Rather than create a new data collection system, implementation of a sustainable MIS should attempt to use the existing infrastructure. While coordination of efforts is the ultimate goal, the first step requires a complete inventory of data collection efforts including the location, intervals, collection methods, and frequency and means of distribution. The following sections describes the data collection efforts for cereals, fruits and vegetables in Chad including an assessment of existing institutional capacity.

3.1 Cereals Price Information

3.1.1 Bureau de la Statistique Agricole (BSA).

BSA, a statistical service under the Ministry of Agriculture, currently collects cereals price data in five prefectures of the Sudanian zone -- Logone Occidental, Logone Oriental, Mayo Kebbi, Moyen Chari, and Tandjile. Within these prefectures, prices are collected on a weekly basis in 73 markets. Crop coverage includes sorghum, millet, maize, and rice. In addition to year-round prices, BSA collects data on rainfall, production, and food aid distribution from May to December. Information is disseminated in a monthly bulletin which is distributed within two to four weeks following the end of the month.

Choice of markets for price data collection depends on villages selected for the annual agro-pastoral campaign. This is done by numbering all villages in a prefecture followed by a random selection of three villages per canton. Market participants are selected "randomly" by the field enumerator.[2] There is no sampling frame nor systematic procedure for participant selection. Prices are obtained for the coro which is then weighed and converted to kilograms.[3] Information is transmitted from the field to BSA via Air Tchad.

BSA field staff includes 12 supervisors and 69 enumerators. The 12 supervisors and 49 of the enumerators are permanent government positions while the remaining 20 enumerators are "contractual" positions supported by DIAPER II.[4] Both supervisors and enumerators receive an "incentive salary" of F CFA 8,500 per month from DIAPER II on top of their government salaries which average F CFA 83,400 and F CFA 35,000 per month for supervisors and enumerators respectively.

Headquarter staff comprises 10 government positions as follows: five statisticians, one agronomist, two data processors,

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[2]The term "random" appears to be used very loosely by all organizations collecting data. Not a single organization uses a sampling frame for collection of market prices. Given this situation, random implies "whoever the enumerator decides to talk to that day."

[3]The coro is a local unit of measure which can vary from 2 to 3 kilograms. Further discussion of measurement problems regarding the coro is included in section 5 on harmonization of data collection methods.

[4]DIAPER II is a multinational project of CILSS, financed by FED and Italian Foreign Aid.

one personnel administrator, and one secretary. In addition, BSA receives technical assistance from the CILSS representative whose contract expires in 1992. Currently five headquarter staff are trained in data entry, processing, and limited data analysis. Data processing and analysis are done on two computers and occasionally on a calculator during the height of the data collection season.

3.1.2 Office Nationale des Cereales (ONC).

ONC, under the Ministry of Food Security, currently collects weekly cereal price data in 14 markets covering 13 prefectures in all three climatic zones -- Saharan, Sahelian, and Sudanian. Crop coverage includes: millet, white and red sorghum, long-grain rice, broken rice, maize, and wheat. In addition, data on ONC public stock is updated on a monthly basis; it is not, however, distributed. Public stock data are disaggregated between commercial and security stock. Security stock is further disaggregated according to source of funding. Information on prices is disseminated in a monthly price table, however distribution is sporadic and may take anywhere from two weeks to four months following the end of the month.

Market selection for price data collection depends on ONC agent location. Prices are collected by the coro and sack. The coros are weighed and converted into kilograms, however, the sacks are not weighed.[5] Price per kilogram are presented in the monthly price table, however, the level of transaction (i.e. wholesaler, retailer) is not specified. Prices are transmitted to N'Djamena immediately by radio or through the SAP project followed by data sheets via the postal system.

Field staff for ONC's commercial division includes 17 enumerators. Headquarter staff for the "cellule d'information de prix suivi et de suivi de stock" consists of one person. He is responsible for data processing and analysis which is done on a hand calculator. Although he has had computer training along with the chief of the commercial division, only one computer is available at ONC which is reserved for accounting purposes.

3.1.3 Systeme d'Alerte Precoce (SAP)

SAP, a donor funded project (FED), is located within the Ministry of Food Security. It currently collects cereals price data in seven Sahelian prefectures -- Chari-Baguirmi, Kanem, Lac, Batha, Guera, Ouaddai, and Biltine. In October it plans to increase data collection to include the B.E.T. area. Weekly

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[5]A sack can weigh from 75 to 100 kilograms depending on the crop and the amount placed inside. This is discussed further under harmonization of data collection in section 5.

price data are collected in 34 markets for millet, sorghum, and other crops as the need arises. Other data collected include general information on rainfall, production activities, population movements, on-farm storage, consumption, and public cereal stock and distribution. Additionally, SAP surveys one or more cantons for general economic conditions including sources of income, agricultural production, availability of water, and medical and nutritional status. Information is disseminated in a monthly bulletin which is usually delayed for several weeks.

Markets are selected according to accessibility, comparability, and significance as defined by SAP.[6] Market participants are chosen randomly, again without a sampling frame. Information is transmitted to N'Djamena via three mobile radios or "any other means available."

SAP field staff include 34 enumerators comprised of government and contractual employees. All employees are paid an "incentive salary" by SAP. Senior headquarter staff consists of two expatriates and one Chadian from the Ministry of Food Security. Analysis is done on three computers at the headquarters. Current funding is budgeted until 1992, however continuation of SAP is anticipated.

3.1.4 Office National de Developpement Rural (ONDR)

ONDR currently collects price data in five prefectures of the Sudanian zone -- Logone Occidental, Logone Oriental, Mayo-Kebbi, Moyen-Chari, and Tandjile. Cereal prices are collected on the 15th and 30th of each month in 89 markets. Crop coverage includes: sorghum, millet, rice, and maize. In addition to cereal price data, ONDR reports on cotton production, rainfall, and extension agent and village level training. Information is disseminated through monthly bulletins at the sub-prefecture level within one to two weeks following the end of the month.

Market selection is based on the importance of the market and its proximity to ONDR agent locations. Choice of market participants is random without any sampling frame. Price data are collected by the coro and appear to be converted to sack prices through use of an average coro weight (2.5 kilograms). Information is transmitted to sub-prefecture headquarters through the radio or post. National headquarters receive information via Air Tchad.

ONDR field staff (for price data collection) include 91 enumerators. Data processing is conducted by staff in N'Djamena

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[6]Formal definitions were not available.

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and at Moundou. Two personnel in Moundou are trained to use one computer available for data centralization.

3.1.5 Direction de la Statistique des Etudes Economiques et Demographiques (DSEED)

DSEED, under the Ministry of Plan and Cooperation, is responsible for the monthly consumer price index (CPI). The market basket of goods selected for the CPI, among other goods, includes millet, maize, rice, and sorghum. Prices are collected in two N'Djamena markets - Marche du Mil and Marche Centrale - on the first and fifteenth of every month. Information is disseminated in a monthly bulletin approximately two weeks following the end of the month. In addition to raw price data, the monthly bulletin includes a discussion of price changes according to the type of product, i.e. food crops, manufactured goods, imported goods, etc., and price variations for selected crops.

Crop prices are collected from one trader in each market based on a random selection by the enumerator. A coro of each crop is purchased and weighed for conversion to price per kilogram.

Field staff for price data collection includes four enumerators. One person at the headquarters is in charge of price statistics and is responsible for the monthly bulletin.

3.1.6 Food for Peace (FFP)

FFP, a food aid and disaster relief division within the USAID mission, collects cereals price data in four N'Djamena markets -- Marche Centrale, Marche du mil, Marche Dembe, and Marche Cholera. Prices are collected on a bi-weekly basis and include information on pearl millet, white sorghum, red sorghum, maize, rice, and wheat. In addition to cereals price data, FFP combines ONC and SAP data to produce two monthly reports -- food aid distributions and the public stock situation. The food aid distribution report includes total monthly distribution by agency and distribution by prefecture. The public stock situation report includes the amount of stock on hand disaggregated according to prefecture, product (type of cereal, milk, fish, oil, etc.), and the controlling agency.

Prices have been collected for both the sack and the coro since 1984 on a regular basis. Two traders are selected per commodity and per level of transaction. Choice of traders changes each week and is done on an informal basis.

FFP staff responsible for food aid distribution, stock monitoring, and price collection includes one expatriate and one

Chadian based at the USAID office. Historical price data are entered on one computer for use in the monthly reports.

3.1.7 Summary of Cereal Price Data Collection in Chad

Cereal price data collection efforts are summarized in Attachment F-1 according to prefecture, sub-prefecture, canton, market, and data collection organization. (This information was assembled by the Chadian MIS committee, which is discussed further in section 4). FFP and DSEED are not included in the summary. FFP relies primarily on SAP and ONC price data as discussed above while collecting wholesale prices in the N'Djamena markets. DSEED collects information in the N'Djamena markets only.

A review of price data collection systems indicates a strong data collection infrastructure covering over 175 markets in Chad. However, many improvements are necessary, namely standardization of measuring units, sample selection procedures, and the speed of information transmission and dissemination. These issues are discussed further in section 5 on harmonization of data collection systems and market selection for the MIS.

3.2 Fruit and Vegetable Price Information

There is significantly less information on fruits and vegetables than cereals in Chad. While price data collection occurs, it is primarily concentrated in the N'Djamena area for government organizations, or in a few selected villages where NGO's maintain projects. Additionally, price data are much more difficult to compare given the nature of horticultural products. For example, a wider variety of retail and wholesale measuring units are used depending on the crop. These include piles, heads (lettuce), bunches (carrots), coros, baskets, and sacks. While weighing produce for conversion to kilograms offers one solution, other problems arise, i.e. price per kilo is not useful to retailers, or as produce begins to dry (particularly in the case of pepper) weights will vary while volume can remain the same. A brief overview of government and NGO horticultural price data collection efforts follows.

3.2.1 Office National de Developpement de l'Horticulture (ONDADEH)

ONADEH, created in 1985, is the official horticultural authority under the Ministry of Agriculture. There are three major divisions within the organization -- commercial, agro-technology, and administrative and financial divisions. The commercial division is responsible for monthly price data collection in four N'Djamena markets -- Marche Centrale, Marche Cholera, Marche du Mil, and Marche Farcha. Data collection

occurs over a three-day period each month and is tabulated in a monthly report for internal records.

Market participants for price data collection are selected randomly by the enumerators. According to the chief of the commercial division, enumerators try to maintain a representative sample by choosing "men, women, and people who come from small villages." The number of traders varies from 10 to 15 wholesalers and retailers depending upon the enumerators' schedule. Prices are collected for both the retail and wholesale units. Retail units are weighed by the enumerator, however, wholesale unit weights are assumed. The price in the monthly report, a single number per crop, is calculated by averaging retail and wholesale prices for all four markets. Given this method of calculation, the number may be skewed towards the wholesale or retail level depending on the number of traders selected in each category. The value of this data base may only be retrieved in the original records and even then is negligible.

ONADEH is staffed by 47 civil servants, 25 support staff (secretaries, laborers, guards, etc.), and 9 contractual employees (enumerators). Support staff and contractual employees are financed by horticultural produce purchases and sales under the commercial division. Two enumerators are responsible for the price data collection with data processing and analysis done on a hand calculator by the chief of the commercial division.

In general, ONADEH activities have declined both in number and quality since their inception in 1985. Part of this is due to the withdrawal of donor support. Given the current state of affairs, donor and government agencies alike have little faith in ONADEH activities.

3.2.2 Direction de la Statistique des Etudes Economiques et Demographiques (DSEED)

As stated in section 3.1, DSEED is responsible for the monthly consumer price index published by the Ministry of Plan and Cooperation. In addition to cereals and other consumer goods, the market basket of goods contains 14 vegetables and 5 fruits. Produce is purchased in local retail units, weighed, and converted to price per kilogram for presentation in the monthly bulletin. Further information on market selection, number of traders, and resource assessment is contained in section 3.1.

3.2.3 Cooperative for American Relief Everywhere (CARE)

CARE, a USAID supported NGO, currently operates two projects which involve fruit and vegetable data collection in the Kanem and Kim areas. In the Kanem area, fruit and vegetable prices are collected in the villages of Moussoro, Massakory, Mao, Cheddra, and Nckou. This has been done for the past two years on a bi-

weekly basis. Information is documented through written reports over a two to four month period internally, however an historical data base has not been maintained. Plans are currently underway to compile all information into a central data bank. The Kim area project also plans to collect and broadcast prices to project participants in the area beginning sometime later this year.

Market selection for price data collection is based on market outlets used by project participants. Three to four traders are sampled per market for price collection at the retail level. Both projects plan to use village bulletin boards, broadcasting, and small group discussion to disseminate information. Additionally, a market information stand may be installed at one of the local markets.

In addition to formal price collection, CARE is currently conducting a two-week survey of informal market information networks in the Kanem area. This will include traditional methods and use of data collection.

3.2.4 Agricultural Cooperative Development International (ACDI)

A second USAID funded NGO project, ACDI Pilot Project for Fruit and Vegetable Marketing, will also be involved in price data collection for fruits and vegetables. This thirty-month project, beginning in September 1990, plans to establish a market information network in Karal during the first year, and Dagar Massa during the second year. Prices will be collected at the wholesale, retail, and farm gate level in Karal and N'Djamena markets. Two full-time market surveyors will be hired by the project to collect information in the N'Djamena area. Additionally, a market intelligence officer will be placed at BSA to oversee the market information operation.

Plans for the market information system include the establishment of market intelligence unit at BSA which will maintain a database system and generate a monthly bulletin. Primary data will be collected on market reaction to deliveries, consumer preferences and purchasing power. Secondary data will be used to analyze production trends, price variations, volume and patterns of shipment arrivals, market behavior, consumer preferences, and export opportunities. The market intelligence unit of the project will also monitor official and unofficial trade and transport practices.

Given the length of the project and the limited staff of both BSA and the ACDI project, the data collection and analysis seem quite ambitious. If ACDI is able to deliver the items suggested by the project paper, it will provide an excellent source of information for the national market information system.

3.2.5 Summary of Fruit and Vegetable Price Data Collection

Table F-1 summarizes fruit and vegetable price data collection in Chad by prefecture, sub-prefecture, and data collection organization. As compared to cereal price data collection, a weak data collection infrastructure is in place covering only nine markets in two prefectures. Additionally, the methods of data collection are in even greater need of improvement. Again, these will be discussed further in section 5 on harmonization of price data collection methods.[7]

TABLE F-1
FRUIT AND VEGETABLE PRICE DATA COLLECTION

Prefecture	Sub-Prefecture	Organization		
		ONADEH	DSEED	CARE
Chari-Baguirmi	N'Djamena	Centrale Mil Cholera Farcha	Centrale Mil	
	Massakory			Massakory
Kanem	Mao Moussoro			Mao Moussoro Cheddra
	Nokou			Nokou

3.3 Informal Market Information Systems

Discussions with private market participants and organizations collecting information reveal an established traditional information network. Transporters appear to be the principal source of information, however, information does not circulate very widely or in a timely fashion. The state of the roads hampers information, particularly during the rainy season. Traders also guard their information or may even spread false information as indicated in one report (Arditi, 1989).

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[7]In addition to the organizations listed in Table F-1, numerous NGO's collect selected fruit and vegetable prices at project location sites as the need arises. While these may be useful for individual projects, organization of short-term data collection efforts for a national MIS would not be cost-effective.

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A public market information system should be seen as a complement to the private information network. By providing national coverage, the public MIS disseminates more information than any individual traders' private source. Traders may begin by checking their own information against the public information and take advantage of a national MIS as confidence in the public system develops.

4. RECENT STEPS TOWARDS A NATIONAL MIS IN CHAD

As stated in the introduction, the Government of Chad has developed a strong interest in a national cereals market information system. This is evident in several activities undertaken over the past nine months. These include: (1) an inventory of GOC price data collection, (2) creation of the MIS committee, (3) participation in a CILSS-funded seminar on market information systems in West Africa, (4) initiation of two test surveys on prices and market typologies, (5) plans for a national seminar in December, and (6) plans for market price reporting in January 1991. CILSS has been the lead funding source for current activities to date with the local representative playing a major role. Each activity is described in detail below concluding with CILSS future commitment.

4.1 Inventory of GOC Cereal Price Data Collection

In December 1989, BSA, with support from the DIAPER II project compiled an inventory of government and donor cereal price data collection efforts. Published in a FLASH bulletin, the stated objectives of the inventory were to draw attention to four items: (1) the numerous but dispersed data collection efforts in the country, (2) the difficulties of data comparison across organizat.ons due to differences in data collection methodologies, (3) the under-utilization of existing data sets, and (4) the necessity to coordinate data collection activities. The bulletin included information on data collection coverage, methodology, supervision, and dissemination.

4.2 Formation of a MIS Committee

The FLASH was followed by the formation of a "groupe de travail sur les prix" comprising six organizations: ONC, DSEED, ONDR, BSA, SAP, and DIAPER II. This MIS committee held their first meeting in January 1990 to discuss implementation of a national MIS and potential topics for a national seminar to be held in December 1990. As stated in the minutes of the meeting, this group was organized to "reflect" upon MIS issues in preparation for a permanent MIS to be implemented at a later date. Circulation of three documents followed the first meeting: (1) proposed topics for a national seminar in December 1990, (2) a list of organizations categorized by type of data collection,

and (3) issues to be considered for harmonization of data collection. (See Attachment F-2 for the December 1990 seminar topics).

4.3 Participation in a Regional MIS Seminar

Following the first MIS committee meeting, six representatives from Chad were sent to a regional CILSS-funded seminar on market information systems in West Africa. Organizations represented included: DIAPER II, SAP, ONC, FEWS, and BSA. Country experiences from Benin, Burkina Faso, Mali, Niger, Senegal, and Togo were compiled in a report prior to the conference. Chadian participants were invited as observers.

4.4 Initiation of Two Test Surveys

Based on knowledge gained from seminar, the MIS committee organized two test surveys -- a price survey and a market typology survey -- as the first phase in a national MIS implementation plan. Enumerator training took place in July followed by initiation of the surveys on August 1st. The surveys will continue through October followed by data processing and analysis in November.

The price survey is being conducted in ten villages covering six of the fourteen prefectures. Responsibilities are distributed according to field agent location of each organization as illustrated in Table F-2.

TABLE F-2
PILOT PRICE COLLECTION SURVEY
LOCATION AND ADMINISTRATION

Prefecture	Village	Organization
Biltine/Ouaddai	Biltine	SAP
Kanem	Mao	ONC
	Noukou	SAP
Chari Baguirmi	N'Djamena	ONC
	Beinamar	ONDR
	Bokoro	ONDR
Mayo Kebbi	Gounou-Gaya	BSA
Moyen Chari	Koumra	ONDR
Logone Occidental	Moundou	ONC
	Gore	BSA

The objectives of this survey are to test: (1) data collection methods, (2) speed of transmission from the field to headquarters, and (3) data processing and presentation of results for use in a permanent MIS. Information collected in the survey is categorized according to the following subjects: (1) retail prices, (2) wholesale prices, (3) principal local measurement units, (4) transporter origin and destination, and (5) general market observations.

The market typology survey is being conducted in 175 markets covering 13 prefectures (Salamat is excluded). The objectives of this survey are (1) to develop a typology of cereals markets, and (2) to identify the major cereals marketing channels. Specific information collected in the survey is categorized as follows: (1) general situation, activity, and physical appearance, (2) types of produce, local measurement units, and traders, and (3) origin and destination of produce.

Although all operations have begun, several problems were identified by the PP team on a field trip to Moundou. First, there appears to be a lack of communication between organizations involved in the surveys. ONDR at Moundou was asked by BSA in N'Djamena to submit two agents names from nearby villages for training on the price survey. Names were submitted, but ONDR never received any further word from BSA and assumed the training had not taken place. A meeting with the ONC agent stationed at Moundou revealed that the training had taken place and that the two agents from ONDR were in N'Djamena during the month of July. Additionally, the BSA supervisor stationed at Moundou was contacted about the typology survey but never received any information about the price survey. Therefore, the BSA supervisor in Moundou also was not aware that two ONDR agents had left for training at BSA headquarters in N'Djamena. Finally, while the BSA controller was asked to cover 17 markets over a three month period for the market typology survey, nine of those markets fall on a Sunday. Although this could be covered in only nine of the twelve allotted weeks, money for gasoline had not been provided and therefore the survey had not begun as of August 11th.

In addition to lack of communication, concern was also expressed over data processing in November. This is one month before the end of the annual agro-pastoral campaign when data processing personnel are fully occupied.

4.5 Plans for a National MIS Seminar in December 1990

Currently plans are underway for a national seminar in December to present the results of the two test surveys. The seminar will also address the following the issues: (1) definition of objectives for a MIS in Chad, (2) location of the MIS, (3) definition of user needs, and (4) determination of

financial and human resources available for the MIS. These are addressed in more detail in section 5.

4.6 Plans for Price Reporting in January 1991

Following the seminar in December, CILSS plans to support price data collection in 30 markets for 11 varieties of cereals. These include: millet, white sorghum, red sorghum, unhulled rice, pre-cooked rice, whole grain rice, broken rice, wheat flour, wheat, corn, and fonio.[8] Funds have been allocated until April 30, 1991 as illustrated in Table F-3. While continued funding is anticipated, information is not available on the level or extent of CILSS commitment to the MIS.

TABLE F-3
CILSS FUNDING FOR A NATIONAL MIS
THROUGH APRIL 30, 1991

Activity	Amount (U.S. Dollars)
Training	2,890
Data Collection	3,490
Data Processing	375
Publication	375
Total	7,120

5. KEY ISSUES FOR A MARKET INFORMATION SYSTEM IN CHAD

There are four key issues for the development of a MIS in Chad. They are: (1) the institutional location of the MIS, (2) selection of markets, (3) harmonization of data collection methods, and (4) lack of basic information on Chadian agricultural markets. Each of these are discussed in turn below.

5.1 Institutional Location of the MIS

As stated in section four, six organizations (four government and two donor) are currently involved in the formation of a national MIS. Centralization of data collection efforts, a national objective discussed in section two, requires selection of an institutional location for operation of the MIS. Several

[8]The list of cereal choices was not substantiated by any user-need expression and therefore may change. This will be addressed at the December seminar and hopefully reconsidered.

selection criteria have been developed through other Sahelian country experiences as follows:

* Data collection experience of the institution
* Proximity to decision-making centers
* Ability to diffuse information rapidly
* Objectivity of data collection and analyses (Dembele, 1989)

Based on these criteria and interviews during the PP design, BSA is the logical choice for the MIS. First, BSA enumerators currently collect price information in 73 markets. Second, the enumerators are trained professionally for the agro-pastoral campaign each year. Third, a data transmission infrastructure is already in place for campaign reporting (although it needs improvements). And finally, BSA, as its name implies, is the statistical branch within the Ministry of Agriculture, allowing it to expand into fruits and vegetables. Although this last point may seem obvious, ONC plans to make a strong appeal at the December seminar to operate the MIS.

The design team strongly advises against ONC operation of the MIS. Reservations were expressed in numerous interviews that price reporting by ONC would be mistaken for fixed government prices, despite the extent of a public awareness campaign. Additionally, the institutional capacity cannot handle any additional price data at this point. As described in section three, one man at ONC is responsible for the entire price data processing and analysis, all done on a hand calculator. When he is absent, prices are not reported. Market price coverage is also limited including only 14 markets at the prefecture capitals. Alternatively, BSA has two computers, six university-trained statisticians at the headquarters (all of whom can operate computers), and 12 supervisors for 69 field enumerators covering 73 markets.

The remaining two government organizations on the MIS committee, DSEED and ONDR, are also not suitable for MIS operation. DSEED has only one person, the Director of the Statistical Service, in charge of the price data collection in two N'Djamena markets. Furthermore, discussions during the PP design reveal that the director considers DSEED an observer of MIS activities. Finally, ONDR, while better equipped than DSEED, centralizes data collection in Moundou and thus does not meet the second or third criteria -- proximity to decision-making centers or ability to diffuse information rapidly.

While three of the four government organization may not be suitable institutional locations for the MIS, the MIS committee hopes to maintain operation through use of all data collection agencies. The CILSS representative and the director of BSA

indicated that full cooperation of all organizations can only be guaranteed through a joint decision on the location of the MIS. This will be a focal point of the December seminar.

5.2 Selection of Markets

As stated in section three, price data are currently collected in over 175 markets. Review of local data collection efforts indicates a concentration of data collection points in the Sudanian Zone (see Attachment F-3). While this may reflect population concentration and number of markets to some extent, there is still a lack of data collection in certain areas with an over-abundance in other areas. Table F-4 and Figure F-1 illustrate this point.

TABLE F-4
PRICE DATA COLLECTION POINTS
AND POPULATION PER PREFECTURE

Zone	Number of Data Collection Points	Population
Sudanian Zone		
Logone Occidental	16	338,200
Logone Oriental	25	313,400
Mayo-Kebbi	40	650,200
Moyen-Chari	37	620,000
Tandjile	21	315,400
Sahelian Zone		
Batha	6	265,800
Guera	4	242,000
Chari-Baguirmi	7	1,146,200
Kanem	5	316,800
Lac	2	243,200
Ouaddai	5	405,800
Biltine	5	168,700
Salamat	1	132,600
Saharan Zone		
B.E.T.	2	105,000

Table F-4 shows the high number of data collection points in the Sudanian zone. As stated above, this reflects population to some extent, however Figure F-1 calculates the number of markets

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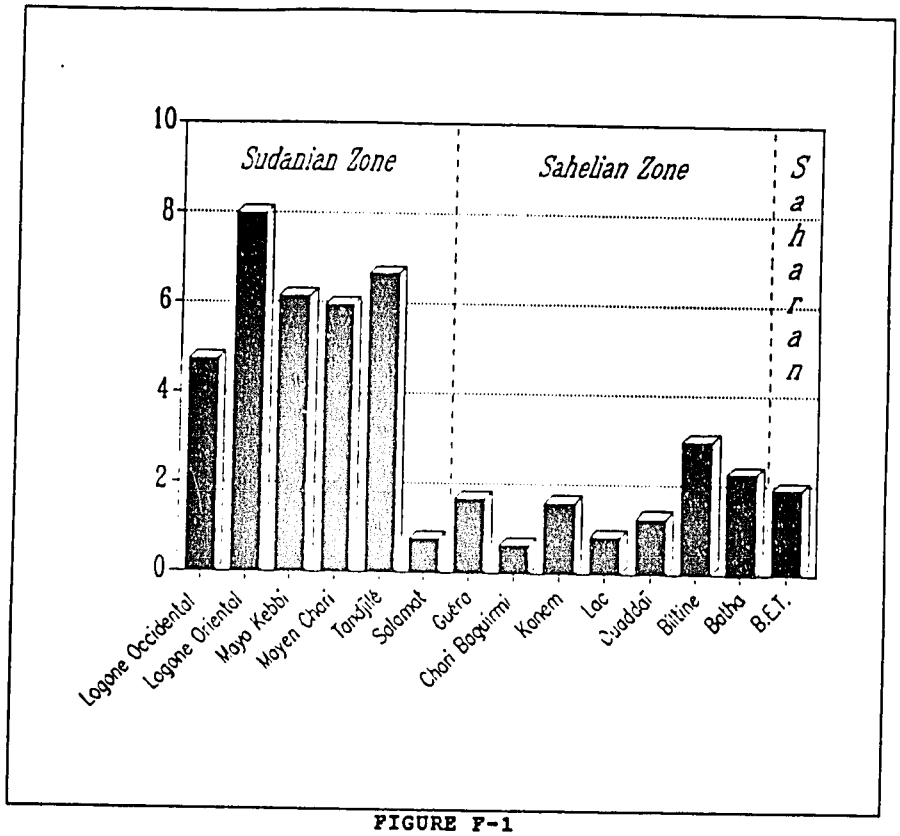

FIGURE F-1
MARKET DATA COLLECTION POINTS
PER 100,000 POPULATION

selected per 100,000 population by prefecture. If selection of data collection points corresponded to the population of each region, the bars on Figure F-1 would be uniform. Again, data concentration is evident in the first five prefectures, or the Sudanian zone.

A review of the statistics above indicate that data collection points need to be reconsidered. In some villages, as many as three organizations are collecting the same data. Additionally, it is not necessary to cover all markets within the same market area. For example, in those areas where markets are

communicating (price differences reflect transportation and handling costs only), information may not be necessary, particularly within short distances.

Discussions during the PP design indicate that BSA/DIAPER II plan to use two criteria for selection of the first 30 markets to be covered: (1) representation, i.e. variation in price must reflect variation in prices of nearby markets, and (2) accessibility, i.e. data must be able to be transmitted quickly to a central point. These criteria will be evaluated against the results of the price and market typology surveys currently underway. Unfortunately, however, the market typology survey is being conducted during a two-month period before the cereal harvest and thus will not be representative of major market flows. Additionally, markets selected for the typology will be enumerated only once during in a period of several hours.

In addition to the inappropriate timing of the market typology survey and its limitations, several other factors may impede the success of the price reporting service scheduled for January 1991. For example, plans have not been made for a user-needs survey, a publicity campaign, or computer programming for the MIS. Furthermore, discussions with BSA indicate that their definition of user-needs consists only of government and donor agency requirements. While they acknowledge the difference in private market participant needs, no plans have been made to assess these prior to initiation of weekly price reporting.

Unfortunately, the AMTT TA team will arrive too late to have any influence on these decisions. Therefore, USAID/Chad will provide one short-term consultant with experience in agricultural marketing and market information systems to attend the December 1990 seminar. This person will act as an observer at the seminar, however s/he will offer advice when appropriate and report to USAID following the seminar (See Attachment F-4 for the consultant's scope of work). This will provide a strong link between the MIS committee and the USAID mission. Additionally, efforts will be made by the ADD at USAID to invite third-country participants, i.e. regional SIM Coordinators, to the December seminar along with adequate USAID representation.

In addition to participation in the December seminar, the Market News Coordinator will take the following steps upon arrival assuming price reporting begins as planned: (1) undertake a 2-day workshop to assess the first six months of MIS activities, (2) initiate a user-needs survey (and user assessment of effectiveness to date), (3) arrange an assessment of the MIS computer system, and (4) organize a publicity campaign. These activities are discussed in more detail in section six as part of the AMTT implementation plan.

5.3 Harmonization of Existing Data Collection Systems

As acknowledged by the Chadian MIS committee, coordination of existing data collection systems is essential to a functioning, sustainable MIS. Section 3 revealed a large data collection infrastructure in Chad with a wide diversity of data collection methods and varying degrees of quality. Harmonization of these efforts must address numerous issues including: level of transaction, unit of measure, grades and standards and method of sample selection. Each of these are addressed in turn below.

5.3.1 Level of Transaction

Data collection systems for cereal and horticultural crops currently collect "retail" and "wholesale" level prices, however neither of these terms have been well defined. Wholesale, semi-wholesale, and retail often tend to be confused and in some cases are combined together to produce a monthly average (as done by ONADEH). BSA/DIAPER II documents, circulated in February 1990, recommend price collection from both the buyer and seller immediately following a transaction; however, buyer and seller (i.e., wholesaler to semi-wholesaler, semi-wholesaler to retailer, retailer to consumer, etc.), are not specified.

The design team recommends initial broadcasts at the wholesale level. Although this will be clarified during a diagnostic phase discussed in section six, the choice of transaction level for price reporting must be based upon user-needs. Obviously, each group of users will require different price information. The MIS cannot satisfy every group initially and therefore must decide which levels are most appropriate given time and resource constraints. Interviews with wholesalers and retailers during the PP design indicate that economies of scale allow wholesalers to respond more easily to market information than small-scale retailers. If the MIS plans to facilitate market flows, the wholesaler group is most likely to take advantage of the information to move crops from surplus to deficit regions.

5.3.2 Unit of Measure

For the cereal markets, and for some vegetables, the principal wholesale unit of measure is the sack. Sacks can vary from 75 to 100 kilograms depending upon the crop and the amount. Ideally, the enumerator should weigh each unit for price observation; however, until the system becomes more standardized, this problem may not be able to be addressed (particularly at the wholesale level where weighing units requires large scales). To resolve this problem, the Market News Coordinator should work with the national counterpart to determine average wholesale weights on a crop basis to be used by all data collection agencies.

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For the retail unit, data collection problems are even more pronounced. For the cereal markets, and for some vegetables, the principal retail unit of measure is the coro.[9] Coros vary by size and by weight depending on which crop is measured. For example, weights of the coro gendarme, coro tovota, coro kashasha and coro abuchinif can range anywhere from 2.3 to 3 kilograms. Additionally, comparison of weights for different crops in the same coro can vary from 400 to 450 grams.

Although data collection services acknowledge the differences in coro weights, many of them collect the price of a coro and assume a weight of 2.5 kilograms. This may be appropriate on a regional reporting basis if the same coro is used throughout the area, however, conversion to kilograms for monthly and quarterly bulletins must be more accurate. BSA/DIAPER II documents currently recommend a small, medium, and large classification for the coro. Although this will be discussed at the December seminar, the design team recommends a more refined classification system which can be explored during the diagnostic phase discussed below.

5.3.3 Grades and Standards

Quality of produce, particularly fruits and vegetables, is completely ignored in Chadian price reporting services. Even classification of different cereal varieties is often unreported. A uniform system of grades and standards is an essential component of an efficient marketing system. Although a sophisticated system of grades and standards may be a long-range goal for Chad at this point, small changes in reporting services should be addressed. At the very least, cereal varieties should be included. The Market News Coordinator will work to improve the system with the BSA and other collaborating institutions.

5.3.4 Method of Sample Selection

As noted in section 3, Chadian price reporting services have not established a systematic procedure for trader sample selection. Many enumerators record one observation per crop per market. Although the ideal situation would be a census of all buyers present when prices are recorded, this is not feasible given the size of urban markets, and the limited time of enumerators in other markets.

The design team recommends a minimum of five observations per crop based on sample selection procedures to be developed by

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[9]The word coro originated in the Kanuri language and is currently used in both French and Arabic.

the Market News Coordinator in collaboration with participating agencies. Preferably these observations would be taken at intervals throughout the market day, i.e. in the morning and late afternoon. Recording the range of prices on a market day will allow some estimation of changes in market conditions.

5.4 Lack of Information on Chadian Agricultural Markets

An effective, sustainable MIS must be built on a working knowledge of production and market systems in order to meet the needs of the ultimate users. Despite government and donor efforts to initiate a MIS over the last nine months, there is still a lack of basic information on the marketing system to operate and maintain an effective MIS and monitor its impact. Examples of MIS information needs are as follows:

Production Information. (1) Knowledge of production and storage data facilitates calculation of surplus and deficit zones. (2) Classification of local varieties and quality levels improve price reporting services as discussed above. (3) Costs of production and thus profits can be calculated through production and complementary information.

Market Organization. (1) Knowledge of marketing channels improves market selection for the MIS. (2) Subsector accounts to calculate marketing margins can be developed through knowledge of marketing channels and thus monitor MIS impact. (3) Classification of market participants helps to identify user-needs and target groups for user-needs surveys. (4) Identification of marketing constraints or concentration of power may reveal reasons for a low MIS impact with appropriate measures to ameliorate the situation.

Demand. (1) Knowledge of urban consumption improves crop selection for the MIS. (2) The impact of the MIS may be more accurately monitored through knowledge of consumer demand and preferences.

Prices. (1) Analysis of historical price data sets helps determine trends and improves the forecasting ability of the MIS. (2) Correlation coefficients of current price data provides a base to measure future impact of the MIS.

Although numerous studies on the cereals markets (and a limited number of studies on fruits and vegetables) have been conducted in the last three years, the basic information on production and marketing listed above is not available. Indeed, most studies (conducted over a two to six week period with heavy reference to studies completed in the 1960's and 70's), acknowledge the lack of information as noted below.

* Calculation of cereal deficits is extrapolated from consumption studies conducted in the 1960's for the entire Sahelian region (BIEP, 1989).

* Population data are based on a 1964 sample survey with current figures calculated using estimated population growth rates (BIEP, 1988).[10]

* Private cereal stock, needed to estimate cereal deficits, is completely unknown (BIEP, 1988).

* Market flows from surplus to deficit regions, cited in four major studies since 1988, are based on a United Nations study conducted in 1974.[11]

These are only some examples of the lack of basic knowledge on production and marketing systems in Chad. Arditi also points out ONC's inability to answer the most basic questions with precision. These include: (1) What cereals are consumed in the largest quantities and where do they come from? (2) What intermediaries are there between the producer and consumer for the principal marketing channels? (3) What is the level of cereal consumption in the urban area (Arditi, 1989, p. 52)?

To address this lack of information, the policy component of the AMTT project will carry out a subsector study of the grain marketing system (focussing on sorghum and millet) and rapid appraisals for key horticultural crops during the first year of operation. Because numerous short-term cereal studies have identified marketing constraints, a 6-week rapid appraisal for millet and sorghum does not seem appropriate. Instead, the AMTT policy component will conduct the subsector study over a 12-month period. For vegetables, only one national study and a few area-specific studies were identified during the PP design. For this reason, a rapid appraisal of selected vegetables should identify major constraints and areas for further investigation. The subsector and rapid appraisal studies are discussed in more detail in Annex H.

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[10]The first full census of Chad will begin in the spring of 1991.

[11]The four studies are: DAI, 1988; BIEP, 1988; Arditi 1989; and BIEP 1990.

6. AMTT IMPLEMENTATION PLAN TO STRENGTHEN MIS ACTIVITIES

The AMTT MIS component will support and strengthen recent GOC activities leading towards a national MIS. Given the activities described in section four, a strong national interest (both public and private), and the large data collection infrastructure in place, the AMTT project, rather than create a new system, will support government efforts to create a sustainable MIS. The project will provide a long-term expatriate Market News Coordinator (3.5 person years), 14 person months of short-term assistance, in-country and third country short-term training, and equipment and supplies to support these ongoing efforts. The Market News Coordinator will be based at the BSA and will work with BSA counterparts on a daily basis. S/he will receive logistical and some administrative support from the AMTT office.

USAID funding will support the following principal activities over the life of the project:

* A diagnostic phase including: (1) a subsector study of grain marketing focusing on sorghum and millet, (2) rapid reconnaissance of selected vegetable marketing systems, (3) a two-day workshop to review MIS activities; (4) an initial survey of user needs, and (5) an assessment of the MIS computer system;

* Reliable and timely collection, processing, analysis and dissemination of price and market information for key cereal and horticultural crops;

* Development of institutional capacity through training, internal evaluation, and phasing of improvements;

* Annual evaluation of MIS performance.

Each of these activities are discussed below.

6.1 Diagnostic Phase

The diagnostic phase will consist of the five components summarized above. Because they meet needs beyond those of the MIS, the subsector and rapid reconnaissance studies, discussed previously in section 5, are described in detail in Annex H as part of the AMTT Market and Policy Analyses component. The two-day workshop, survey of user needs, and assessment of MIS computer systems are described below.

6.1.1 Two-Day Workshop to Assess MIS Activities

AMTT implementation will depend heavily on activities which occur before the arrival of the contract team. These activities include the December 1990 seminar and weekly price reporting on 30 markets described in section four. Because the GOC, with DIAPER II support, is launching the price reporting service without a user-needs survey, publicity campaign, or computer programming for the MIS, the Market News Coordinator will organize a two-day workshop within 90 days of arrival to assess the first six-months of MIS activities as part of the preparation for the first annual workplan. This workshop will act as an internal review mechanism to facilitate discussion on operational problems and necessary improvements. Additionally, the workshop will serve to identify specific needs of the users present.

6.1.2 Survey of User Needs

An effective MIS must be demand driven. Despite the numerous data collection efforts described in Section 3, most information is not used on a regular basis, particularly by the private sector. Additionally, distribution of bulletins is limited and sporadic.

The Market News Coordinator will initiate a three-week user-needs survey to be completed during the first six months of the TA team arrival. This survey will include the needs of three primary groups: (1) private market participants, disaggregated by gender, (2) government organizations, and (3) donor agencies. Topics to be covered in the survey include: commodity coverage, number, level, and geographic distribution of markets, information needs on market conditions, transaction level for reporting prices, periodicity of dissemination, and presentation of information.

Because the Chadian MIS committee plans to begin broadcasting prices in January 1991, survey questionnaires will address user perception of the MIS at that point and any necessary changes. Based upon the results of the survey, improvements to the MIS will be targeted to specific user groups. The potential special needs of women will receive particular attention.

The Market News Coordinator will collaborate with the MIS committee to carry out this survey. Contractual employees will be necessary since this will occur during the height of the agro-pastoral campaign.[12] Additionally, one four-week expatriate

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[12]The AMTT implementation plan assumes that the TA team will arrive in the third quarter of calendar year 1991 (CY91).

consultancy is programmed to assist with the design, training, and analysis necessary for the survey.

6.1.3 Assessment of MIS Computer System

Operation of an effective MIS requires appropriate computer hardware and software. BSA is currently equipped with two monochrome IBM compatible computers -- one 40 megabyte 80286 and one 20 megabyte 8088 -- two printers, and one UPS. Software packages include dBase, SP6, Framework III, and Lotus.

Discussions during the PP design indicate that the available equipment will not be adequate for MIS operations, particularly as they expand. Therefore, the AMTT project, in addition to equipment discussed below, will provide one short-term computer specialist (two months) to review the MIS computer system and conduct computer training based upon recommendations during the first four months of the project. The review of the computer system will assess and make recommendations on the following topics: (1) storage capacity for data archives (currently 35 megabytes are available), (2) software package choice with possibilities to upgrade the system to a statistical software package such as the Statistical Package for Social Sciences (SPSS), (3) generation of periodical reports through automated commands (i.e. Lotus macros, Paradox scripts, or SPSS programs), (4) improvements to data entry, verification, processing, and analysis techniques, (5) possible improvements to data transmission speed (i.e. laptops at regional centers with modem capabilities), (6) initiation of a MIS computer operation manual which will develop over time, and (7) other topics as deemed necessary by the computer specialist.

6.2 MIS Operation

Daily operation of the MIS will be monitored by the Market News Coordinator and his/her counterpart. An example of the schedule and activities for a four-month period is illustrated in Table F-5 followed by an explanation of each activity.

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TABLE F-5
AN EXAMPLE OF THE MARKET INFORMATION SYSTEM OPERATION

DAY	ACTIVITY	DESCRIPTION
1	Data Collection	Enumerator records observations in selected market
2-4	Transmission	Enumerator transmits information via radio to BSA radio operator at assigned half hour time slot (assumes 1/2 hour per transmission for total of 15 hours covering 30 markets; OR 5 hours/day of transmission for 3-day period
	Processing	Radio operator records and gives data to supervisor for review
		Supervisor gives data to technicians for entry onto spreadsheet according to market and time of day
5	Radio Report Preparation	Statistician prepares report for Radio Tchad which includes price range per market, high and low market prices, and complementary information as MIS expands, which is then reviewed again by the supervisor
6	Dissemination	Information submitted to Radio Tchad for announcement
31-40	Analysis	Statistician conducts analyses including: price trends, price level for month compared to same month in the previous year, explanation of price movement
41	Monthly	Monthly bulletin distributed to government organizations, donor agencies, and possibly traders as identified in user-needs survey
91-115	Analysis	Statistician conducts analyses for quarter including: price trends, explanation of price movement, market correlation coefficients, food aid distribution, market volume, ONC purchases and sales, changes in government policy.
120	Quarterly Report	Quarterly report distributed to government organizations and donor agencies.

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6.2.1 Data Collection

Data will be collected by BSA, ONDR, and SAP enumerators as decided in the December, 1990 seminar. The enumerators will use SSB radios (existing and/or provided by the project) to report in price information on a weekly basis. The seminar will also begin to address the harmonization issues that are key to a successful MIS; the project will provide advice and training as discussed below. The Market News Coordinator will work with his/her counterpart on a regular basis to improve the data collection methods as problems or opportunities are identified. Enumerator data collection training is discussed in section 6.3 below.

6.2.2 Data Transmission and Processing

An effective MIS must respect changing market conditions. Data that are two weeks old may be useless to the trader trying to move his or her produce. Table F-5 illustrates data transmission from the field to N'Djamena within two to four days following collection. The AMTT project will support this effort through provision of a single side band, high frequency radio network. Details of the radio network will be addressed prior to implementation of the AMTT project by the ADD at USAID. This will require a review of existing radio networks.

The implementation plan assumes one-half hour per transmission from the field to report data to BSA headquarters. Enumerators will be assigned half hour time slots over a three-day period requiring an estimated 15 hours of transmission time (30 markets times 30 minutes). While this is a suggested plan, complications due to timing of the weekly markets and official working hours will have to be addressed once the markets are selected. Additionally, if regional radio networks are installed rather than direct contact with N'Djamena, the same type of scheduling suggested above will have to be programmed for transmission. The Market News Coordinator should work with his/her counterpart, the BSA data manager, and the radio operator (provided by BSA) to devise an efficient system.

Data processing will begin with observation recording onto a data sheet by the enumerator in the field. This information will then be transmitted via a two-way radio to the radio operator (either at the regional network or directly to N'Djamena) where it will again be recorded onto the same sheet. This information will be given to the supervisor for review before it is entered into the computer and again afterwards before submission to Radio Tchad.

Initially, BSA will use dBase 3 for data entry of MIS information. All data processing personnel are currently trained in this package and BSA plans to use it for data processing of MIS information beginning in January 1991. The AMTT project will

review the appropriateness of the MIS computer operations and make recommendations during the diagnostic phase as discussed in the previous section. Additionally, the AMTT project will support data processing through computer training (described below) and provision of eight computers over the life of the project. Four computers will be installed immediately at BSA headquarters (one 80386 and three 80286). Two of the BSA computers will be operated by the Market News Coordinator and his or her counterpart in the main building of the BSA. The remaining two will be installed in the data technicians' building. Although one computer room exists now, an additional room in the data technician's building will be prepared by the AMTT project to support the extra computers. This will involve air-conditioning and electrical support. Complementary provisions, such as printers, UPS, software, disks and other general office supplies will also be provided. These are described in detail in the attached budget.

The remaining four computers will be allocated during the second year of the AMTT project to regional MIS operations as determined by the computer assessment consultancy, radio network investigation, and internal MIS review.

6.2.3 Dissemination

Table F-5 illustrates three forms of dissemination: weekly price broadcasting, monthly bulletins, and quarterly reports. While the final decisions on content, format, and periodicity should be based on the results of the user-needs survey, these three types of reports are the basis for suggested dissemination procedures below.

Publicity Campaign. As stated in section four, the MIS committee plans to begin broadcasting prices in January without any publicity campaign. This may lead to misunderstanding of prices i.e., market participants may think they are official government prices. Although the TA team will not arrive prior to the MIS initiation, a publicity campaign should still be undertaken when the TA team arrives. The campaign could explain MIS objectives, plans, and potential benefits. The "micro-programmes" model, currently disseminated by Radio Rurale, could be used to build public awareness. These programs are two minute radio broadcasts on topics such as health, sanitation, and environmental issues. Additionally, regional tours are conducted periodically to play the "joue public." Villagers are quizzed and given prizes for correct answers about the micro-programmes. The games are then broadcasted on national radio on Sunday evenings. Given the high success rate of these programs, a similar awareness campaign is recommended for the MIS. Discussions with Radio Chad and Radio Moundou during the PP design indicate that local communication specialists are available to help develop appealing messages.

Weekly Broadcasting. Table F-5 indicates radio report preparation on day 5 of the given week. Initially this will include only prices in selected markets; however, BSA may consider reporting price range per market and the high and low market prices for the week. Additionally, as the system improves and expands, the Market News Coordinator will work with his/her counterpart to add complementary information identified in the user-needs survey. This may include food aid distribution, market volumes, government regulatory information, or credit availability. Appropriate local languages and specialized needs, i.e., use of women's voices in announcements to particularly appeal to women market participants, will also be identified in the user-needs survey.

Periodic Bulletins. In addition to weekly broadcasts, periodic bulletins, both monthly and quarterly, will be prepared. Analysis in the bulletins may include: (1) price trends, (2) price levels for the month compared to the same month in the previous year, (3) complementary information explaining price movement, (4) analysis of market correlation coefficients, (5) changes in government marketing policy, or (6) world market prices. Timing of bulletin distribution is suggested in Table F-5.

The AMTT project will support this effort through computer training (discussed below) and continuous collaboration between the Market News Coordinator and his or her counterpart.

6.3 Development of Institutional Capacity

6.3.1 Training and Supervision

Development of institutional capacity is essential to sustain the MIS at the end of the AMTT project. While a data collection infrastructure and some management capabilities exist, both must be upgraded for long-term success. The AMTT project, while heavily contributing equipment and technical assistance during the initial stage of the MIS, will also provide training as an integral MIS component throughout the life of the project. This will include field level training, computer training, and management-level training.

The AMTT project will provide one short-term consultant (three weeks) to conduct enumerator training during the first six months following the TA team arrival. The consultant will work closely with the Market News Coordinator and collaborating agencies to develop a three-day training workshop for 30 enumerators and a two-day workshop for approximately 25 field

supervisors.[13] Additional supervisor training will take place every six months for two days at BSA headquarters. The AMTT project will fund the additional supervisor training, however the actual training will be done by BSA personnel in collaboration with the Market News Coordinator.

Additional enumerator training (3-day workshops) will take place in N'Djamena each January at the end of the agro-pastoral campaign when activities are reduced for both data managers and field enumerators. One short-term consultant (two-weeks) will be provided by the AMTT project to conduct this training.

Computer training, as discussed in section 6.1.3, will be provided initially by the short-term consultant following the assessment of the MIS computer system. In addition, one short-term consultant will be provided at the end of years two and three for a period of three weeks to review the data processing system and conduct training as necessary. This will include training at BSA headquarters and regional training for the laptop or desktop computers discussed above. The FEWS representative will also provide three hours of training a week for BSA data processing staff until December 1992.

Management level training will consist of technical collaboration with AMTT project personnel and short-term consultants discussed above throughout the life of the project. Additionally, the AMTT project will finance travel to regional conferences for the Market News Coordinator, his or her counterpart, and the head statistician at BSA.

6.3.2 Improvements and Expansion

Experiences in other Sahelian countries have indicated that a successful MIS must begin with a simple, manageable design. Overly ambitious programs with numerous markets, crops, and sophisticated analyses may cause the system to collapse in its initial stages. For this reason, the design team, as stated earlier, recommends immediate review of MIS operations upon arrival of the TA team. If the MIS committee demonstrates effective reporting and operation of 30 markets and 11 cereal varieties, then the AMTT project will continue to support this effort for the first year expanding only into vegetable prices in N'Djamena following the rapid reconnaissance studies. Further increases in the number of markets and crops will be based on MIS evaluations, however, estimated increases for budgeting purposes

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[13] Supervisor training will include the 12 BSA supervisors and selected supervisors (depending upon location and market selection) from collaborating institutions.

include 40 markets by the end of third project year and 50 markets by the end of year four.

Other improvements and expansions over the life of the project include regional computer placement and training as discussed above.

6.4 Evaluation of the MIS

Evaluation of the MIS will consist of both internal and external reviews. The internal review will comprise: (1) an annual two-day workshop including management personnel from collaborating organizations, and (2) an up-dated two-week user needs survey to determine the level of effectiveness and necessary changes. The Market News Coordinator will work with his/her counterpart to organize the two-day workshop and develop an appropriate agenda such as achievements during the past year, coordination problems, and plans for the coming year. The user-needs survey will also be organized by the Market News Coordinator based on the initial user-needs survey with changes as necessary. Enumerators from the collaborating organizations will assist with the implementation of the survey. All costs incurred by the two activities will be financed by the AMTT project.

As described in section 7 of the main PP, external evaluations will be undertaken as part of the overall project Mid-Term and Final evaluations during second quarter FY 92 and fourth quarter FY 94, respectively. Key criteria to evaluate the effectiveness of the MIS are as follows:

* The reliability and timeliness of data collection, processing and analysis as judged by AMTT project personnel, collaborating organizations, and MIS operation staff;

* The quality, comprehensiveness, and clarity of weekly broadcasting and periodic bulletins;

* The accessibility, effectiveness, and clarity of market information disseminated as judged by public users of printed materials and private users of radio broadcasts;

* The increases in market communication as revealed by market correlation coefficients;

* The increase in producer bargaining power and prices;

* The reduction in urban consumer prices.

The methodology to evaluate the above criteria include: (1) informal interviews with AMTT project personnel, collaborating organizations, and MIS operation staff; (2) review of project outputs including: number and quality of weekly broadcasts and periodic bulletins, (3) comparison of planned market and crop coverage against actual coverage; (4) examination of user-needs survey results; (5) review of market correlation coefficients and price changes as analyzed in the quarterly bulletins, and (6) assessment of internal review results.

6.5 Summary of Project Inputs and Outputs

Based on the implementation planned presented above, three major categories of inputs are identified: technical assistance, equipment, and training. A timetable of expected outputs and required inputs is presented in Table F-6. The MIS component budget is found at Annex J.

TABLE F-6: MIS IMPLEMENTATION PLAN

Year	1991		1992				1993				1994				1995		
Quarter	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
Achievements																	
Rapid Appraisal vegetables		*															
Grain Marketing Subsector Study/Millet and Sorghum		*	*	*	*												
Two-Day Workshop to Assess Initial MIS Activities	*																
Initial Three-week User Needs Survey		*															
Assessment of MIS Computer System		*				*				*				*			
Publicity Campaign		*															
Training																	
Computer Training Based Upon MIS Computer System Assessment		*				*				*				*			
Three-day Enumerator Training Workshop		*					*				*				*		
Two-day Supervisor Training Worshop		*		*		*		*		*		*		*			
Three Hours/Week FEWS Computer Training	*	*	*	*	*	*											
Regioinal Computer Training						*				*				*			

TABLE F-6 (cont.)

Year	1991		1992				1993				1994				1995		
Quarter	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
Evaluation																	
MIS Roundtable					•				•				•				•
User-Needs Surveys					•				•				•				•
External						•						•					•
Market and Crop Coverage																	
30 Markets	•	•	•	•	•	•	•	•	•	•	•						
Cereal Varieties	•	•	•	•	•	•	•	•	•	•	•						
Vegetables			•	•	•	•	•	•	•	•	•						
40 Markets												•	•	•	•		
Cereals												•	•	•	•		
Vegetables												•	•	•	•		
50 Markets																•	•
Cereal Varieties																•	•
Vegetables																•	•
Weekly Radio Reports																	
Prices	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Market Volume					•	•	•	•	•	•	•	•	•	•	•	•	•
Food Aid					•	•	•	•	•	•	•	•	•	•	•	•	•
Complementary Analyses							•	•	•	•	•	•	•	•	•	•	•
Publications																	
Monthly Bulletins		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Quarterly Bulletins			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

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Cereal Price Data Collection Points

Attachment F-1

PREFECTURE	SOUS/PREFECTURE	CANTON	MARCHES		
			BSA	ONC	ORDR
LOGONE OCCIDENTAL	Bélénzar	Bélénzar			1 Bélénzar
		Périssa	1 Périssa		
		Tapol	2 Tapol		2 Tapol
		Lackassy	3 Lackassy		3 Lackassy
	Benoye	Benoye	4 Benoye		4 Benoye
		Bekiri			5 Bekiri(Coré)
		Bourou	5 Doher		
		Sar-Gouin	6 Sar-Gouin		
	Moundou	Kédé I			6 Kédé(Ngoudemi)
		Bah			7 Bah
		Bao	7 Bao		8 Bao
		Deli			9 Deli
		Krim-Krim			10 Krim-Krim
		Moutou	8 Moutou		11 Moutou
		Mbalkabra	9 Mbalkabra		12 Mbalkabra
		Mballa	10 Mballa		
		Moundou rural		1 Moundou	
LOGONE ORIENTAL	Bébédja	Bébédja	11 Bébédja		13 Bébédja
		Béboni	12 Béboni		14 Béboni
		Béboni	13 Mbanguirati		
		Béboni	14 Doungambo		
	Doba	Béboto			15 Béboto
	Doba	Béti	15 Bégada		
		Béti	15 Béti		
		Bodo	16 Bodo		16 Bodo
		Doba	17 Doba	2 Doba	17 Doba
		Dobiti Bédoto	18 Dobiti		
		Dobiti Béboto	19 Bekoura		
		Mbdana			18 Mbdana
		Sam	20 Mbéri I		
	?	Koutoutou			19 Koutoutou
	Coré	Béro	21 Béro		
		Donia			20 Donia
		Coré			21 Coré
		Kaba Mbaab	22 Koy-Bessao		
		Kaba Roangar			22 Kaba-Roangar
		Mbalkoro	23 Mbalkoro		23 Mbalkoro
	Mbalbokoum	Bessao			24 Bessao
		Cadjibian	24 Kian		25 Cadjibian
		Larmanaye			26 Larmanaye
		Mbalbokoum			27 Mbalbokoum
		Pandjangué			28 Pandjangué
MAYO-KEBBI	Bongor	Koumi	25 Koumi		
		Magao	26 Kelang		
		Mitou	27 Guelendeng		
		Telédé	28 Bariam		
		Toura	29 Moulkou		
	Fianga	Fianga			29 Fianga
		Carres-Hollombes			30 Hollombes
		Carres-Hollombes	30 Kaourang		
		Tickem	31 Tickem		
		Youé	32 Deoua		
	[illegible]	Torrom			31 Torrom
		Pérem	33 Pont Karoual		32 Pont Karoual
		Djarro	34 Borobaye		
		Djédognassa			33 Djédognassa
		Gaya			34 Gaya
		Goumou			35 Goumou
		Léo-Massa			36 Léo-Massa
		Léo-Massa	35 Moro		
		Tagal			37 Tagal(Djo.)
		Bagayé			38 Bagayé
		Danbali			39 Danbali
		Kguellé			40 Kguellé
	Léré	Léré I	36 Léré		41 Léré
		Léré II	37 Bissi-Mafou		
		Tagobo Foulbé	38 El-Hou		
		Binder			42 Binder
		Cudlo			43 Cudlo
		Lagon			44 Lagon
		Zaguéré			45 Zaguéré
	Pala	Badjé			46 Badjé
		Doué			47 Doué
		Erdé I			48 Erdé
		Erdé I	39 Pala	3 Pala	
		Erdé II	40 Sorga		49 Sorga
		Cagal			50 Cagal
		Gouin	41 Gouin		
		Goumadji			51 Goumadji
		Goyégoudoum			52 Goyégoudoum
		Goyégoudoum	42 Zamagouin		
		Kamé			
		Torrock			53 Torrock

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Attachment F-1 con't.

[illegible]	[illegible]	[illegible]	MARCHES		
			BSA	OHC	ONDR
[illegible]	Fourra	Koumra			54 Koumra
		Fourra	44 Foko		
		Bedaya	45 Bedaya		55 Bedaya
		Beboyen	46 Beboyen		56 Beboyen
		Bekamba	47 Bekamba		57 Bekamba
		Bedjonde			58 Bedjonde
		Goundi			59 Goundi
		Ngangara	48 Ngangara		
		Peni			60 Peni
		Yoni	49 Yoni		
	Kyabé	Balé			61 Balé
		Koskobo			62 Koskobo
		Kotongoro			63 Kotongoro
		Kyabé	50 Kyabé		64 Kyabé
	Ibro	Danamadji	51 Danamadji		65 Danamadji
	Ibro				66 Ibro
	Moissala	Beboro	52 Beboro		67 Beboro
		Begara	53 Begara		
		Bergoro	54 Bergoro		
		Bara			68 Bara 2
		Bekourou			69 Bekourou
		Dembo			70 Dembo
		Dilingala			71 Dilingala
		Moissala			72 Moissala
	Sarh	Balimba	55 Bemouli	u sarh	
		Banda I	56 Bandara		
		Banda II	57 Banda Sonasut		
		Djoli	58 Djoli		73 Djoli
		Nekaga	59 Maïrom		
		Koumogo			74 Koumogo
		Koumogo	60 Manda II		
		Moussafoyo	61 Moussafoyo		75 Moussafoyo
		Sarh			76 Sarh
		Sako Gougo			77 Sako Gougo
TANDJILE	Béré	Béré	62 Béré		78 Béré
	Kélo	Tandjo	63 Tandjo		
		Kélo	64 Kélo		79 Kélo
		Kolon			80 Kolon
		Léré II	65 Bologo		81 Bologo
		Marba			82 Marba
		Marba II	66 Calama		
		Maané II	67 Dogou		
	Lai	Darbé	68 Darbé		
		Dormon	69 Dormon-Baguidja		
		Goulaye	70 Manga-Goudou		83 Dormon-Manga
		Kizré	71 Kizré		84 Kizré
		Koro	72 Gaman		
		Koro	73 Koussori		
		Guidari			85 Guidari
		Ngamongo			86 Ngamongo
		Bitkerim			87 Bitkerim
		Berté			88 Berté
		Dogou			89 Dogou

B. S. A. = Bureau de la Statistique Agricole

O. H. C. = Office National des Céréales

O. N. D. R. = Office National pour le Developpement Rural

[illegible]

[illegible] PAR LES DIFFERENTES [illegible]

[illegible] ET EXPLOITANTS

[illegible]	[illegible]/[illegible]	MARCHES			
		S A P	C N C	STATISTIQUE	O N D R
[illegible]	Ati	1 Ati	1 Ati		
		2 N'Djamena Bilala			
		3 [illegible]			
	Djedda	4 Djedda			
	Oum-Hadjer	5 Oum-Hadjer			
		6 E. Djorbo			
[illegible]	[illegible]	7 Mongo	2 Mongo		
	Bilkine	8 Bilkine			
	[illegible]	9 Mangalmé			
	[illegible]	10 Melfi			
[illegible]	N'Djamena	11 N'Djamena	3 N'Djamena	1 N'Djamena	
		12 Massagrat			
	Bokoro	13 Bokoro			
	Massenya	14 Massenya			
		15 Doumbali			
	Bousso	16 Bousso			
	Massakory	17 Massakory			
K A N E M	Mao	18 Mao	4 Mao		
	Nokou	19 Nokou			
		20 Big Big			
	Moussoro	21 Moussoro	5 Moussoro		
		22 Michemiro			
L A C	N'Gouri	23 N'Gouri (Dibimitchi)	6 N O L		
[illegible]	Abéché	24 Abéché	7 Abéché		
		25 Abbéché			
	Iréré	26 Iréré			
	Am-Dam	27 Mogrume			
	Ouara-Daida	28 Ouara-Daida			
[illegible]	Biltine	29 Biltine	8 Biltine		
	Am-Door	30 Am-Door			
	Guereda	31 Guereda			
	Iriba	32 Iriba			
	Arada	33 Arada			
E. E. T.	Tibesti Borkou	34 Zalaï	9 Faya-Largeau		
[illegible]	Am-Timan		10 Am-Timan		

O. A. P. = Système d'Alerte Précoce

O. N. C. = Office National des Céréales

O. N. D. R. = Office National pour le Développement Rural

Topics for a National MIS Seminar in December

SEMINAIRE SUR LA MISE EN PLACE D'UN S I M

Objectif

Le séminaire a pour objectif, la mise en place d'un SIM au Tchad.

Proposition de démarche

Le séminaire, en s'intéressant au cas du Tchad et en s'inspirant de l'expérience des Etats-membres du CILSS qui ont déjà mis en place un SIM devra apporter des réponses à un certain nombre de questions, telles que celles ci-après, qui se posent :

1 Pourquoi mettre en place un SIM ?

- définir le SIM ;

- dégager l'importance du SIM dans la recherche de l'autosuffisance alimentaire ;

- convaincre les participants de la nécessité de sa mise en place au Tchad.

2 Quelle doit être la composition du SIM et quelle doit être sa place institutionnelle ?

arrêter la composition du SIM ;

créer des groupes spécialisés de travail avec des chefs de groupes et définir les obligations et les droits individuels et collectifs des membres du SIM et des groupes spécialisés de travail ;

- choisir une institution de coordination et de tutelle.

3 Quels besoins doivent être satisfaits par le SIM et comment les satisfaire ?

- faire l'inventaire des différents utilisateurs et cibler leurs besoins ;

- définir les variables à suivre et les classer par priorité afin de permettre d'aller progressivement mais surement ;

- réaliser une harmonisation des méthodologies de collecte en ce qui concerne le suivi des prix des céréales (une des premières priorités) et définir une politique de publication et de diffusion (voir note volet prix).

- définir, en ce qui concerne les variables pour lesquelles cela est nécessaire, les enquêtes et études à mener et les programmer dans le temps et dans l'espace.

4 - Quels sont les moyens à mettre en oeuvre dans le cadre du SIM, quelles peuvent être les sources de financement ?

- dégager les besoins humains, matériels et financiers nécessaires à la mise en place du SIM ;

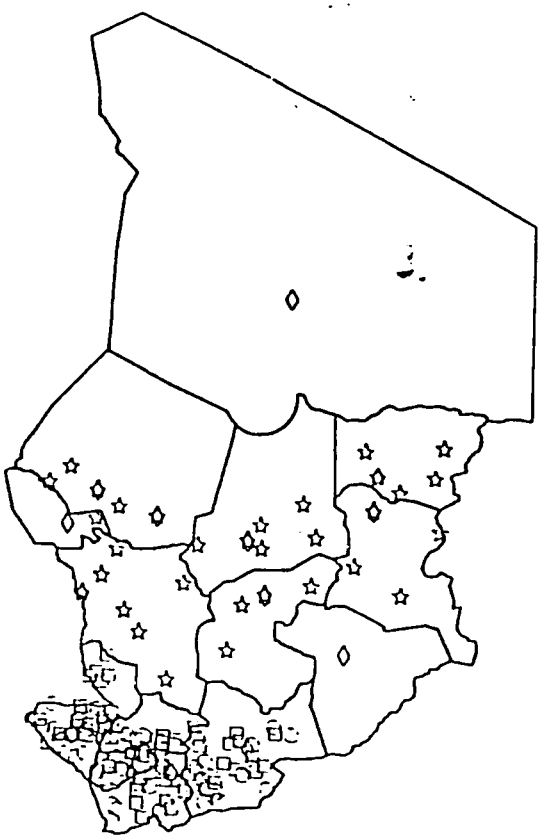
- faire l'inventaire du disponible et dégager les besoins à pourvoir ;

- inventorier les sources de financement en distinguant les financements acquis et les financements à rechercher.

L'analyse des besoins devra bien cerner les besoins au démarrage et les besoins pour la poursuite et le développement normal du système en tenant compte de la nécessité d'une progressive prise en main au niveau national, ce qui nécessitera une formation conséquente en personnel.

Current Market Price Collection

Coverage by BSA, SAP, ONC, and ONDR



BSA

ONC

SAP

ONDR

Source: FEWS

Attachment F-3
Map of Cereal Data Collection Points by Four Organizations

ATTACHMENT F-4: SCOPE OF WORK FOR SHORT-TERM CONSULTANT PARTICIPANT IN NATIONAL MIS SEMINAR, DECEMBER 1990

Objective of Consultancy: The AMTT project plans to support and strengthen current GOC activities leading towards a national MIS. The timing of the AMTT TA team arrival, however, will not allow participation in several key activities such as the December 1990 seminar and initiation of price broadcasting for 11 cereal varieties in 30 markets beginning in January 1991. Therefore, USAID/Chad will provide one short-term consultant with experience in agricultural marketing and market information systems to attend the December 1990 seminar. This person will act as an observer at the seminar, however s/he will offer advice when appropriate and report to USAID following the seminar, thus providing a stronger link between the MIS committee and the USAID mission.

Roles and Relationships: The consultant will report to the ADD, USAID/Chad. S/he will work closely with the Director of the Bureau de la Statistique Agricole (BSA) and the CILSS representative prior to and following the seminar to keep them informed of USAID plans.

Brief State of Work: The consultant will assist the BSA director and the CILSS representative with preparatory plans including development of an appropriate agenda and identification of key issues. During the seminar, the consultant will act primarily as an observer, however, s/he will give advice as appropriate and report on USAID plans to support MIS activities. Following the seminar the consultant will prepare a complete report of issues discussed, decisions taken, and GOC plans for the MIS in the medium and long-term.

Duration of Consultancy: 3 weeks in N'Djamena, Chad.

Qualifications of Consultant: The consultant will have a Ph.D. in agricultural economics and at least 5 years experience in agricultural marketing in Africa. Prior experience with market information systems is absolutely required. A minimum of FSI 3/3 French is absolutely required.

Illustrative Budget: Based on IQC Multiplier of 2.4

Salary $295/day x 22 days x 2.4	$15,576	
Per Diem $199/day x 26 days	5,174	
Travel (tickets, visas, medical)		4,000
Report Production and Miscellaneous		250
Total	$25,000	

ATTACHMENT F-5: SCOPE OF WORK FOR MARKET NEWS COORDINATOR

TITLE: MARKET NEWS COORDINATOR

POSITION DESCRIPTION:

The Market News Coordinator will report to the Chief of Party/Policy Analyst. S/he will maintain a day to day relationship with the primary counterpart, the Director of the Bureau de la Statistique Agricole (BSA). In addition, s/he will work closely with MIS collaborating institutions including ONC, SAP, ONDR, and DSEED.
As Market News Coordinator, s/he will be responsible for the following tasks:

- Develop an annual workplan for the MIS component within 90 days of arrival and additional workplans each year thereafter;
- Organize a two-day workshop within the first six months to assess MIS effectiveness and each year thereafter;
- Develop a publicity campaign within 4 months of arrival;
- Work closely with short-term consultants to design and execute a user-needs survey during the first six months and each year thereafter;
- Work closely with counterpart to establish guidelines and procedures for harmonization of data collection including definitions for transaction levels, sample selection methods, data recording sheets, local measuring units, and grades and standards;
- Monitor daily MIS operations including review of data entry system, radio transmission schedules, analyses, and radio reports;
- Analyze MIS impact through statistical analyses such as correlation coefficients, seasonal price analyses, and others as appropriate;
- Conduct daily on-the-job training with counterpart and data managers through advice on management, data collection procedures, publication of reports, and analysis techniques;
-Develop guidelines for expansion and improvements to MIS as necessary, i.e. complementary information on radio broadcasts and periodic bulletins;
- Assist short-term consultants with development of training materials for enumerators and supervisors as appropriate;
- Participate in regional MIS seminars as appropriate;
- Actively participate in internal and external evaluation of the MIS component.

REQUIRED QUALIFICATIONS:

The Market News Coordinator will have a minimum of a Ph.D. in Agricultural Economics with 5 years of experience in Francophone Africa, or a Master's Degree in Agricultural Economics with 10 years of experience in agricultural marketing in Francophone Africa. A minimum of FSI 3/3 French is required. Preferably the Market News Coordinator will have prior experience in market information system design and management and extensive experience in agricultural marketing.

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ANNEX G

AGRIBUSINESS SUPPORT CENTER COMPONENT

ANNEX G

AGRIBUSINESS SUPPORT CENTER COMPONENT

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ANNEX G
AGRIBUSINESS SUPPORT CENTER

1. INTRODUCTION

Establishing an Agribusiness Support Center (ASC) under the Agricultural Marketing and Technology Transfer Project (AMTT) constitutes a pilot effort to provide technical assistance and information services directly to the Chadian private sector. The ASC will serve the entire agribusiness sector, which is broadly defined to include: operators, or firms that actually handle agricultural commodities as they move from producer to consumer; supporters, firms that provide goods and services to the operators; and coordinators, the government agencies and private sector trade associations that integrate various stages of the agribusiness sector. The ASC will work with and though local consulting firms in a supporting role to identify, analyze and promote investment in profitable agribusiness ventures in Chad.

1.1 Defining The Agribusiness Sector

Agribusiness is a simple concept that is sometimes difficult to explain. Economists often look at the overall economy of a country by sector, referring to the agricultural sector, the industrial sector, the mining sector, and the service sector. The agribusiness sector cuts across these traditional definitions. The "Preliminary Project Identification Assessment" for the AMTT Project established the operational definition for "agribusiness" as it is used in this project as "...the sequence of functions from farm input production and delivery through to ultimate product consumption" (Mock, p. 4). The agribusiness sector encompasses "those individuals and institutions engaged in the production, processing, transport, storage, financing, marketing and regulation of the world's food and fiber products" (Austin, 1981). Austin develops his framework for understanding and analyzing agribusiness further, explaining that:

> The agribusiness system is composed of operators, supporters, and coordinators. The operating organizations are the farmers, transporters, warehousers, processors, and distributors who handle the physical commodity as it flows from the farm to the marketplace. The supporting institutions are the farm suppliers, financial entities, and research centers that contribute to the system's operators. The coordinators are governments, contractors, futures markets, and industrial associations that integrate the various stages of the food-and-fiber system.

Austin's typology is not complete without the addition of one more crucial element: consumers. Without the demand of

consumers for food, there would be no need to engage in agribusiness activities. Figure 1 presents a schematic outline of the agribusiness sector.

Figure 1 provides a framework for analyzing the agribusiness sector in Chad and identifying the most critical constraints on its development. The overall effectiveness of the sector is a function of the ability of its various components to operate in a coordinated manner.

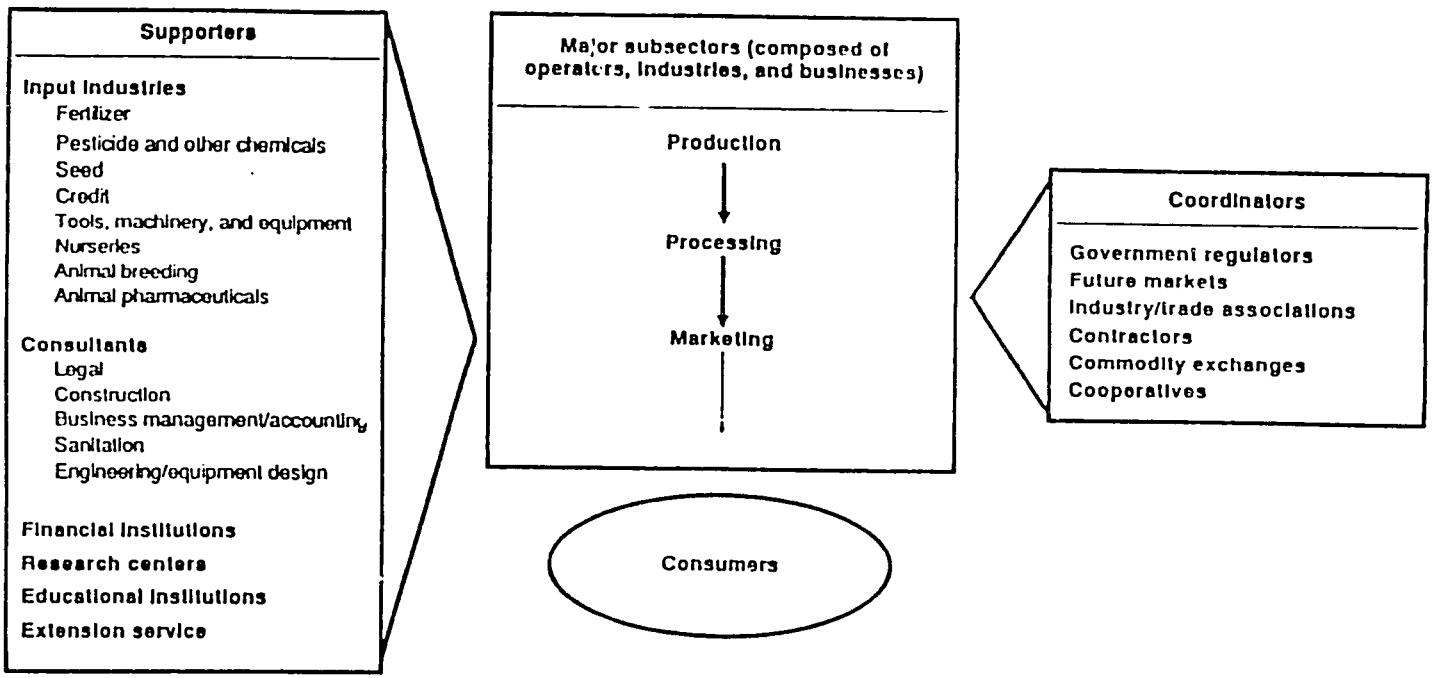
> The multiple functions within an agribusiness . . . system are highly interrelated; each may affect the performance of other functions and ultimately the performance of the entire system. An apparent weakness or failure in one particular component may in fact be caused by weakness or failure in another distinct, yet interdependent component. Therefore in examining agricultural marketing systems in a particular context, it is imperative to understand the operations, interrelationship, and impact of each of the other components or functions which affect marketing activities. Further, programs aimed at the development of marketing systems must necessarily include measures to strengthen other distinct components whose operations directly or indirectly affect the performance of marketing systems. (Mock, p. 4)

In a French-speaking country, it is important to emphasize that the agribusiness sector encompasses much more than agro-industry. Agro-industries engage in the processing of crops and livestock on an industrial scale. Francophones treat agro-industry as a component of the industrial sector. This is clearly the case in Chad. The Design Team reviewed several documents reputed to cover "agribusiness" in Chad only to find the same 5, 7, or 12 predominantly state-owned firms discussed yet again (frequently in almost exactly the same language).

1.2 Organization of the Analysis

This analysis uses the framework presented in Figure 1 to provide an overview of the agribusiness sector in Chad and analyze opportunities for agribusiness development. It is organized into three sections. Since it is important to put the sector in perspective, it first provides a brief overview of the structure of the Chadian economy. Against this background, section three describes and analyzes the agribusiness sector. The final section explains how the ASC will contribute to efforts to promote and develop the agribusiness sector in Chad, and describes the staffing and financial resources it will require to carry out its role.

Figure 1. Principal Functions in an Agribusiness System



2. THE STRUCTURE OF THE CHADIAN ECONOMY

The structure of the Chadian economy is typical of many developing countries in general and certainly of the countries of the Sahel. Structure, in this context, refers to the number, size and ownership of the enterprises that cover the economic landscape. The large number of smaller, informal enterprises far exceed the large, formal businesses. In Chad there are a few, large-scale enterprises, a slightly larger number of small- and medium-scale enterprises (SME), and a very large number of very small or micro-enterprises.

2.1 Formal vs. Informal Sector

The literature on the Chadian economy, from the Government's own Plan d'Orientation, to donor-financed reports and project plans, to private studies, is full of references to the "formal" and the "informal" sector. But there is no one clear set of definitions covering both terms. The Plan d'Orientation notes that the informal sector is very poorly understood, and that with a few notable exceptions its situation, its structures, and its mode of operation have not been adequately studied. (page 131). It does not offer a precise definition of the informal sector, however.

The recent A.I.D.-financed Private Sector Training Needs Assessment (PSTNA) considered those enterprises that were registered, i.e. had completed the GOC's registration and licensing procedures, as "formal", and those that were not registered as "informal". Another distinction, made several times by business owners and operators and academics interviewed by the PP Team, is whether or not the enterprise paid its applicable taxes based on written and audited financial records. It is not uncommon for an entrepreneur to register a business which he or she will manage without the benefit of a formal accounting system. The taxes these firms pay are the result of negotiations with the tax service. The PSTNA draft report noted that approximately 10 percent of the 67 formal enterprises covered in its survey "act like the informal sector. Although some were registered at Commerce, they don't pay taxes, customs, etc." (PSTNA, page 25)

For the purposes of this analysis, references to the formal sector include only firms that are both properly registered and licensed with the appropriate authorities and that keep formal, written accounts and financial records for tax purposes. Since the commercial banks will not lend to firms that are not registered or keep written accounts, this definition of the formal sector incorporates only those enterprises that would qualify for commercial bank loans. All other enterprises are by definition informal.

2.2 Scale of Enterprise

In addition to distinguishing enterprises by formal and informal sector, the literature also classifies businesses operating in Chad by their size. In Chad there are a few, large scale enterprises, a slightly larger number of so called SMEs, and a very large number of very small micro-enterprises. Again, there is not a generally accepted set of definitions that covers the three categories.

By inference the Plan d'Orientation defines a large-scale enterprise in Chad is one with more than 125 employees. There are only seven enterprises in the industrial sector that meet this criterion. Not surprisingly the seven are either state-owned enterprises or ventures which combine state and foreign, private sector interests. Data on the number of firms, particularly locally owned and managed ones, in other sectors of the economy that employ more than 125 people and therefore would qualify as large is lacking.

The Plan d'Orientation defines as "SME" those firms which employ between 15 and 125. It states that there are twenty seven industrial firms that meet this criterion. However, it does not quantify the number of firms operating in other sectors of the economy that meet this criterion.

The Investment Code provides a more elaborate set of criteria for defining an SME. According to the code SMEs include:

> ...all industrial enterprises or those which support development of the industrial sector, in which business consists of manufacture of finished or semi-finished products or is undertaken in the service domain, and which meet the following criteria:
>
> a) Chadian nationals must constitute and hold the majority capital and direction;
>
> b) owners' equity must be less than or equal to FCFA 100 million; and
>
> c) short-term borrowing must be less than or equal to FCFA 100 million.
>
> (Code des Investissements Ordonnance Decret, Ministere du Commerce et de l'Industries, Ordonnance No. 025/PR/87 of 8 december 1987, Title II, Chapter 3, Article 18)

As of August 1990, FCFA 100 million was equal to approximately U.S.$ 400,000.

At the lower end of the scale are literally thousands of very small and micro-enterprises. A recent survey by the University of Chad of the micro-enterprises operating in N'Djamena highlights some of the more important characteristics of this sector. The 966 enterprises surveyed had an average turnover of approximately FCFA 1.2 million (approximately $4,600) and produced an average of FCFA 700,000 (approximately $2,690) in value added. A 1988 study by British researchers associated with OXFAM estimated that there are between 53,000 and 67,000 micro-enterprises in N'Djamena alone. This gives some idea of just how pervasive the micro-enterprise sector of the economy is.

The data on the number, type, and size of enterprises operating in Chad are often conflicting and confusing. In May, 1990, a source at the Ministry of Commerce and Industry assured a USAID/Chad consultant that there were 11 cooperatives and 1,932 Chadian business registered as of April 1990 (Yumiseva, 1990). The Ministry of Commerce breakdown of these businesses by activity, however, does not equal the total: 428 in import-export, two in agribusiness, and 606 in diverse commercial activities, for a total of 1036. In August, 1990, the PP Team received a list of 182 cooperatives that had registered with the same Ministry's Directorate of Industry and Cooperatives since 1982. Approximately 40 percent of these were in agriculture.

A census undertaken as part of a recent study by the Ministry of Industry, with UNIDO assistance, provides yet another set of numbers. The census counted 280 registered enterprises in Chad (INTER G, July 1990). Six of these firms worked in the agricultural sector, seventy in the industrial sector, and 204 in the services sector. Of the 70 industrial firms, the census classified 43 as manufacturers. The 280 firms employed almost 12,000, an average of almost 43 per enterprise. Table G-1 summarizes the findings of this business census.

It is conceivable that the figure of 1,932 accurately reflects the number of business registered, and that the 280 enterprises in the UNIDO study are the formal sector firms that pay taxes based on written and audited accounting systems. Given that the PP Team saw data suggesting that 121 firms in N'Djamena met this definition of formal sector in 1985 and 108 firms in 1986, this is a reasonable hypothesis. The vast majority of businesses in Chad, however, are the informal, micro-enterprises.

Table G-1

Summary of Registered Businesses in Chad

Sector	Number of Firms	Total Employment	Average Employment per Firm
Agriculture	6	775	129
Industry	70	7,778	111
* manufacturing	43	4,682	109
Services	204	3,425	17

Source: INTER G, Cadre de base d'un schema directeur de planification de developpement industriel et artisanal, juillet 1990

3. THE AGRIBUSINESS SECTOR IN CHAD

The structure of the agribusiness sector mirrors that of the overall economy. The agribusiness sector is characterized by a few large firms, a slightly larger number of SMEs, and a vast number of very small and micro-enterprises. This may in large part be attributable to the fact that agriculture plays such an important role in the economy.

A few statistics help to put the importance of agriculture within the Chadian economy into perspective. Approximately 80 percent of the work force is engaged in agriculture or related activities. In 1989, the agricultural sector accounted for 42.8 percent of GDP, with food crops accounting for 28.3 percent, livestock 11.9 percent, and cotton 2.7 percent. This output of crop and livestock products provides the basis upon which the agribusiness sector operates. The value added processing of the output of the country's farmers and herders accounts for a significant portion of the country's total processing.

In 1988, industrial and "semi-industrial" processing produced added value of FCFA 48 billion or 16 percent of the country's GDP. Agribusiness firms played the dominant role in this production. Four of the five largest firms, which accounted for over 80 percent of this value added, are agribusinesses. The

group includes the integrated cotton operation, COTONTCHAD, the sugar cane grower and sugar processor SONASUT, the textile company Societe de Textiles du Tchad (STT), and the brewery, Brasserie du Logone (BDL). The sole exception to this top group is the state-owned electric company. In addition, two other agribusiness firms round out the list of seven industrial firms that meet the GOC's criterion for large-scale: the refrigerated slaughterhouse, Abattoir de Farcha (AFF) and the cigarette maker, Manufacture de Cigarettes du Tchad (MCT).

The Plan d'Orientation's list of principal national production enterprises includes an additional thirteen firms, that qualify as SMEs. Six of these are agribusinesses. This group includes: the soft drink maker and Coca-Cola licensee, Boissons & Glacieres du Tchad (BGT); the Societe National de Productions Animales (SONAPA), which produces animal feed, poultry, and dairy products; the agricultural equipment manufacturer and importer, Societe Industrielle de Materiel Agricole du Tchad (SIMAT); Societe Tchadienne d'Exploitation des Resources Animales (SOTERA), an exporter of meat and animal by-products; the soft drink manufacturer Boissons Gazeuses du Moyen Chari (BGMC) and SCCL/STEGA which is believed to be the largest exporter of natural gum arabic (Acacia Senegalasis). For reasons that are not clear this list did not include the N'Djamena-based Boulangerie de Charles deGaulle which would rank in the third quartile of the above group based on revenues.

In addition to these industrial firms, a list of SME scale agribusiness in Chad would be incomplete were it not to include several GOC-run enterprises. Included in this group are the Office de Mise en Valeur Sategui-Deressia (OMVSD), which dominates the rice sub-sector; the Office National de Developpement de l'Horticulture (ONADEH), which has a mandate to develop and promote the fruit and vegetable sub-sector; the Office National des Cereals (ONC), and the Office National du Development Rural (ONDR).

As is to be expected, micro-enterprises play an important role in the agribusiness sector. Table G-2 summarizes the enterprises covered by the University of Chad's recent survey of micro-enterprises in N'Djamena. An agribusiness, the brewing of millet beer, "bilibili", is the single most important activity listed, accounting for almost a third of the survey sample. Although the survey was not gender-disaggregated, other studies suggest that brewers are almost exclusively women. As is to be expected, these are labor intensive enterprises.

Table G-2

N'Djamena Micro-Enterprises

Line of Business	Number in Survey	% Total
Millet beer brewing	305	31.6%
Woodworking	172	17.8
Restaurant	86	8.6
Clothing manufacture	80	8.3
Tool making	80	8.3
Pottery	59	6.1
Metal working	49	5.1
Jewelry	38	3.9
Shoe making	28	2.9
Mattresses	14	1.5
Bonneterie	9	0.9
Decoration	7	0.7
Kitchen utensil manufacture	7	0.7
Sculpture	6	0.6
Total	966	100.0%

Source: Universite du Tchad, Recensement des unites PME industrielles et artisanales a N'Djamena.

Table G-3 provides an overview of the agribusiness sector in Chad. It shows these enterprises by their type -- formal or informal -- and their size: large, SME, or micro-enterprise. The paragraphs that follow provide brief descriptions of these enterprises by commodity sub-sector.

Table G - 3

OVERVIEW OF AGRIBUSINESS IN CHAD

	FORMAL SECTOR						INFORMAL SECTOR	
	Large-Scale			Small- & Medium-Scale			SME	Micro
	Public	Mixed	Private	Public	Mixed	Private	Private	Private
SUPPORTERS								
Input Supplies		COTONTCHAD	MCT	ONADEH, ONDR				
Seed/Stock Fertilizer Chem/Phar. T, M & E (1)				LDF	SIMAT			
Consultants				OPIT	BEC	BEPROCA TBC		
Financial Institutions	BEAC		BIAT, BCTD		VITA/PEP		Informal credit	
Research								
Extension								
OPERATORS								
Producers				OMVSD		CCVB		Small farmers Fishers Herders
Transporters			CTT			SOCOTRAF		
Warehousers				ONC				
Processors	AFF SONAPA	COTONTCHAD STT SONASUT	BDL GMT MCT			BGT BGMT	Bakeries	"Biliteries" Grain mills Other Slaughter houses
Wholesalers						AL-AM-ACH		
Retailers						CCVB		Small retaile
Exporters		SOTERA				SCCL/STEGA CCVB SOACIT		
COORDINATORS								
GOC	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			XXXXXXXXXXXXXXXXXXXXXX	
Chambre Consulaire		XXXXXXXXXXXXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX				

3.1 The Grain Sub-Sector

The grain sub-sector encompasses the farmers and enterprises that engage in the production, storage, transportation, processing, wholesaling, and retailing of grain. In Chad these activities take place in a mostly free market environment.

Millet and sorghum are the staple crops and account for nearly 90 percent of grain production. Rice accounts for another 10 percent; the production of other grains, principally wheat is limited. A recently study estimates that "about 80 percent of the cereals produced internally is consumed on the farm." (DAI, page ix) The marketing of grain is not controlled but takes place in a free market. According to the DAI study, "speculation in grain is limited. Most merchants do not have the working capital to tie up funds in large stocks for extended periods of time." Transportation is the single most important constraint on the cereals sub-sector, as it is for most agribusinesses.

Below are brief summaries of representative agribusiness firms that operate in this important sub-sector.

3.1.1 Office National des Cereals (ONC)

The primary responsibility of the Office National des Cereals (ONC) is to manage the country's reserve stock and food aid sales programs. Current policy allows ONC to purchase up to one percent of annual grain production for the reserve stock and sales in deficit areas. This percentage generally equates to somewhere between zero and 5 percent of all grain marketed, depending on what one assumes the marketed surplus is. ONC sells the grain it purchases based on market prices. Although its activities might theoretically be considered government interference in pricing, in fact, most observers conclude it has little effect on prices.

3.1.2 Office de Mise en Valeur de Sategui-Deressia (OMVSD)

The Office de Mise en Valeur de Sategui-Deressia (OMVSD) is a more integrated participant in the rice sub-sector. It fulfills both a public service function and a commercial one. As a public service it supplies inputs and training to farmers. As a commercial entity, it produces, processes and markets rice.

However, OMVSD is neither well managed nor well run, and as a result it is in poor financial condition. A recent report (Berger, 1990) estimates that its non-milling operations are running an annual deficit approaching FCFA 200 million. It also estimates that a well run milling operation at OMVSD could expect to make a profit of FCFA 37 million. The Berger report concludes with some strong recommendations, including the privatization of

OMVSD's paddy processing operations, mechanized services and garage, and a complete reorganization of its public service functions.

OMVSD is a good example of a fully integrated operation under government control that does not work.

3.1.3 Wholesalers

The AL-MA-ACH Cooperative de Consommation represents the wholesale segment of the grain sub-sector. It was organized in 1986 by about 25 cereals wholesalers based in N'Djamena. It appears to be based on family/ethnic ties, and operates in a relatively informal manner. Although some early studies (DAI, 1988) suggest that it controls prices in the N'Djamena market, the PP Team could not verify this. The wholesalers formed the cooperative in response to visits by representatives of various donor agencies (they cited FAO, World Bank, UNDP, and previous USAID teams) to question them about the market, in the hope that having an organized cooperative would enable them to receive donor cereals or money. They do not work with the formal banking system at all.

There are a number of other cereals wholesalers who do not belong to the Cooperative and who do not appear to come from the same ethnic group. It is difficult to determine the size and scale of their operations. Unlike the Cooperative, however, those interviewed had all diversified into other products, including dried tomatoes and okra, peanuts, karite, sesame,and other products. Diversifying the product line is a common practice in the wholesale trade.

3.1.4 Mills and Bakeries

The Grands Moulins du Tchad (GMT), a wholesale mill with a 24,000 MT capacity, has been closed for a number of years. Chad imports wheat flour commercially and through concessional programs. Milling of locally produced wheat, as well as sorghum, millet, maize, and berber, is carried out with small, 15 horsepower mills with a 5 MT/day capacity.

Negotiations are now underway, however, between a successful private Chadian businessman and the European owners of GMT. The Chadian wants to buy, repair, and reopen the mill to support the growing business in the 4 major N'Djamena bakeries he owns. He is asking, however, that the Europeans maintain a 30 to 40 percent interest and that they provide technical and business management for the first few years. The Chadian is fairly confident that the sale can be closed in the next six months, with the mill back in operation in the next 18 months.

GMT's new ownership should be able to offer the major bakeries that rely on imported flour slightly lower costs for flour milled locally from imported wheat.

3.1.5 Informal Sector Milling

The reopening of GMT should have little affect on the operation of the numerous smaller mills that operate in the neighborhoods of N'Djamena and throughout towns and villages in the country. These mills process locally produced grain, principally millet and sorghum, and some vegetable crops. There are an estimated 100 such mills in N'Djamena, with an unknown number of others in secondary cities, towns, and villages throughout the country.

The typical informal sector mill uses a small, 15 horsepower engine to turn the grinding wheel. While the major line of business of these mills is to process small batches of flour that their clients will use to prepare up to several days' worth of meals, some mills have specialized in pulverizing dried tomatoes into powder.

The installation and management of a grain mill is one of the early and more remunerative activities for many pre-cooperatives in rural areas. The financial returns in the typical operation are substantial. An initial investment of between FCFA 2 and 5 million, depending on type of mill purchased, can generate returns averaging FCFA 1 to 1.5 million per year.

3.1.6 Bakeries

There are 12-15 "modern" bakeries in N'Djamena and the secondary cities of Moundou, Sarh, and Abeche, all of which have predominantly Chadian ownership and 4 of which are owned by the entrepreneur who is trying to buy GMT. The recent UNIDO study assessed one of the better known, the Boulangerie Charles de Gaulle (BCG) in N'Djamena, which is 100 percent owned by Chadian private interests and has a top capacity of about 1,000 metric tons per year. The bakery employs 50 persons. It estimates that it has about a 30 percent share of the N'Djamena market.

The bakery is one of the rare large, private, Chadian agribusinesses, with gross receipts in 1988 of FCFA 243 million. Although not an integrated operation, i.e one producing its own grain for milling into flour for use in its baking operations, the bakery operates in a system where the parts are well integrated. A couple of importers keep the N'Djamena market in regular supply with imported wheat flour which comes in mostly by truck from Douala. As long as the world's major wheat producers continue to subsidize their producers and exporters, there will

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continue to be a ready supply of cheap wheat and wheat flour on the world market.

3.1.7 Brasserie du Logone (BDL)

This analysis treats the brewery as part of the grain sub-sector because grain is its principal raw material. BDL is a privately held company owned by UNILEVER (80 percent), Heineken (10 percent) and CFAO (10 percent). It has one operational plant in Moundou, which employs 177 full-time and 50 part-time workers, and which has a capacity of 16.2 million liters per year. A second plant near N'Djamena is closed. Its 1988 revenues are not available, but considered well into the billions of FCFA.

In 1988, BDL's financial position was the strongest of any of the large industries in Chad, with a very small debt ratio. With the exception of electricity and water, however, all of BDL's inputs are imported. The brewery, therefore, does not participate actively in the grain sub-sector. Unfortunately, the possibilities for productive linkages within the agricultural sector seem limited at best.

3.1.8 Millet Beer Brewing

As mentioned above, millet beer brewing is a pervasive economic activity. It is also one that is almost entirely controlled by women. This type of brewing takes place on a very small scale. The typical operation only has "bilibili" to sell one day per week. However, consumers in neighborhoods and villages remain constantly supplied, moving from one "biliterie" to the next over the course of the week. Millet beer brewing is a good example of the many informal, micro-enterprises that will maintain their traditional characteristics for the foreseeable future.

3.2 The Fruits and Vegetables Sub-Sector

Although it has a mandate to promote horticulture development in Chad, the Office National De Developpement de l'Horticulture (ONADEH) does not appear to have done so very effectively. As a result, most operations in the horticulture sub-sector take place on a small scale. Most producers grow on a small scale and sell both to wholesalers and to consumers. If a recent study by the BIEP is accurate, per capita consumption of fruits and vegetables is low. Vegetable production for the 1988/89 crop year was estimated at 65,124 MT, and for fruits at 37,866 MT. Assuming a population of 5 million, these translate into per capita figures of 13 kilograms of vegetables and just over 7.6 kilograms of fruit, though neither figure factors in imports or exports. By means of comparison, a recent IFPRI study

reported that between 1983 and 1985 Americans consumed an average of 160 kilograms of fruit and 120 kilograms of vegetables.

A recent study (BIEP, 1989) suggests that there are six different and major production zones in the country, listing them as follows:

N'Djamena (sub-prefecture and region of Guelengdeng): irrigated vegetable gardens and fruit tress along the Chari and Logone River valleys;

Sudanian: Pala, Moundou, Doba and Sarh - fruit trees;

Western Sahel: Kanem, Lake Chad area - vegetable gardening and fruit trees in ouadis and polders.

Eastern Sahel: Ouaddai, Biltine, Salamat - vegetable gardening and fruit trees in ouadis and "bas fonds."

Central Sahel: Guera - mangoes.

Saharan: BET - date palms in oases.

The report summarizes the major trade flows in the fruits and vegetable sub-sector as follows:

important trade in vegetables in N'Djamena, Ouaddai, and Kanem in the cool, dry season;

onions and garlic from Ouaddai and Kanem in both the cool and hot dry seasons;

dried vegetables from Ouaddai and Salamat from January; and

mangoes in the hot season and other fruits during the rainy season and later from Biltine and Kanem.

The BIEP study states that losses along the marketing chain from producer to consumer may be as high as 50 percent. It notes that the marketing system is rudimentary, lacking both hard infrastructure, notably refrigerated trucks and cold storage facilities, and soft infrastructure, any system of inspection, grading and standards, or price information.

In a survey, vegetable growers in the N'Djamena area cited market and transportation problems as their major concerns. About half the respondents also mentioned lack of processing facilities, and a quarter referred to the lack of packaging materials. The market problem may be best characterized by too

many growers producing and trying to sell too much of the same crop at the same time. Table G-4 helps show this graphically. It makes it clear that most crops are only produced, and by implication marketed, during relatively short periods during the year. As a result, too many producers are trying to sell the same crop in the same market at the same time at the same low price. The lack of transport is as much of a problem of availability as its cost. The BIEP study estimates that in the N'Djamena area, the farmer's price is equivalent to fifty percent of the N'Djamena retail price less transport.

Processing fruits and vegetables might be one way to alleviate part of the seasonal glut and ease transportation problems. Dried tomatoes and dried okra are two examples. Powdered tomato, the processing of which is now almost entirely done on an informal, micro-enterprise level, is another. Fruit juice production, which at least one local entrepreneur is looking into, is a third possibility.

The horticulture sub-sector may offer some of the best opportunities for agribusiness investment. There are likely to be profitable opportunities in the fresh segment of the market producing and selling earlier and later maturing varieties. However, transportation will remain a major constraint. Exports also may offer some possibilities. Opportunities in processing, which is normally a high volume, low margin business, will require careful analysis to determine how feasible they are.

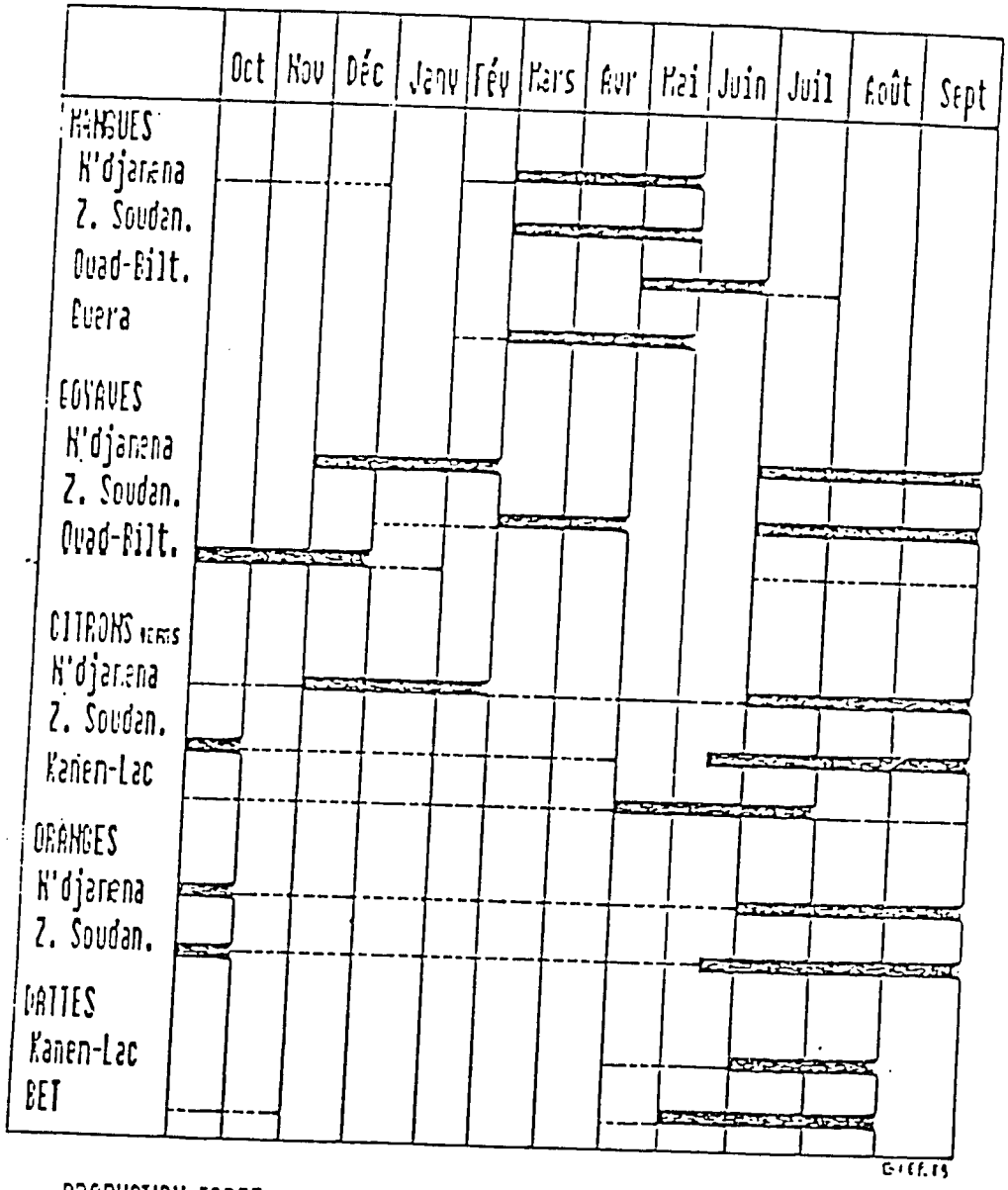
3.3 The Livestock Sub-Sector

The livestock sector includes cattle and dairy products, small ruminants, and poultry. Also, for the purposes of this report, fish are treated here, rather than as a separate sub-sector.

3.3.1 Abattoir de Farcha (APF)

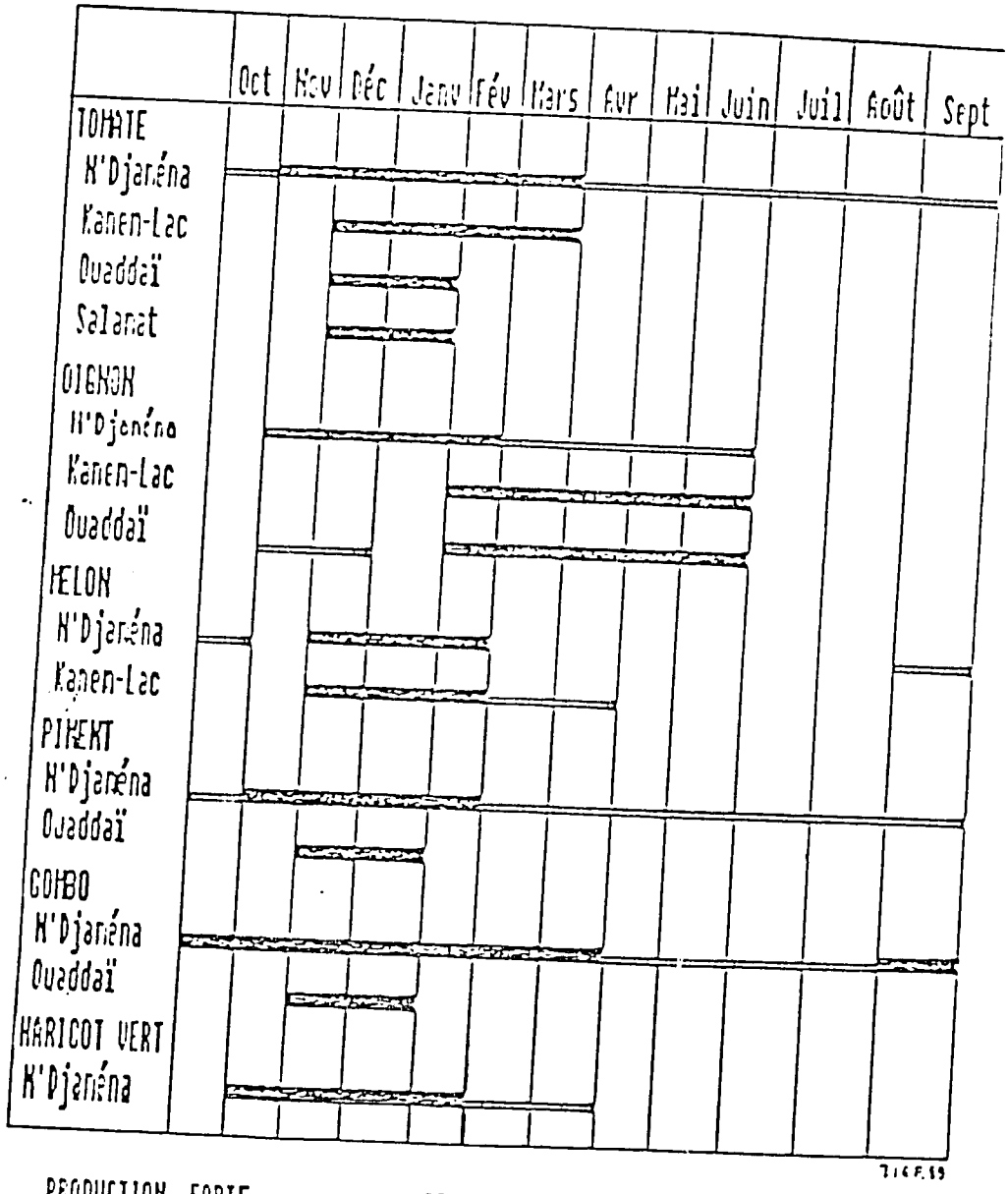
The State owns outright two enterprises that play major roles in the livestock sector. Both operate from facilities in the N'Djamena "suburb" of Farcha. The Laboratoires de Farcha is a major supplier of inputs to the livestock sub-sector and is covered below.

PERIODES DE PRODUCTION DES FRUITS



PRODUCTION FORTE ▬▬▬ PRODUCTION REDUITE - - - - -

PERIODES DE PRODUCTION DES LEGUMES



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The Abattoir Frigorifique de Farcha (AFF), is Chad's most modern slaughterhouse. It also produces ice as a sideline. AFF has a monopoly for the slaughter of livestock for N'Djamena, but running at ten to twenty percent less than its potential capacity, it is unable to enforce it. (There are at least 13 other slaughtering operations in N'Djamena, but none with cold store facilities.) In 1988, AFF employed 183 and recorded gross revenues of FCFA 325 million. In 1989, the slaughter house reported a net loss of FCFA 4.1 million, while taking in FCFA 306.1 million in slaughter fees and FCFA 12 million from ice sales.

A recent study (Berger, 1990) singles out a poor accounting system and lack of proper financial controls as the abattoir's major management problems. The slaughterhouse charges it customers a fee per kilogram of carcass weight. Customers pay in cash, and so the AFF operates in an environment where it is easy for revenue not to make it into the company's bank account. The high cost of electricity also causes financial strain. However, with improvements to increase AFF's capacity to 15 to 16 thousand metric tons per year, the Berger report concludes that the operation should become financially viable in the medium- to long-term.

3.3.2 Societe Tchadienne d'Exploitation des Resources Animales (SOTERA)

SOTERA is in the process of being liquidated. It was a mixed company that had an official, but unenforceable, monopoly on the exports of livestock. It also exported fresh and dried meat products, hides and skins.

There is some disagreement about the private sector's ability to respond to the opportunities SOTERA's liquidation presents. In the opinion of the liquidator, individual operators do not have the expertise. He cited the example of one exporter who made several shipments to a customer in Bangui. Allegedly, the exporter did not require the buyer to open a letter of credit or provide other means to assure payment. The first shipments went through smoothly, but it took the exporter six weeks in Bangui to secure payment for his third shipment. It is hard to believe that any exporter of a perishable commodity would ship without some legally binding and enforceable assurance of payment.

3.3.3 Cooperative de Commercialisation de la Viande et de Betail (CCVB)

The Cooperative de Commercialisation de la Viande et de la Betail (CCVB) is an example of a positive, private sector response to the liquidation of SOTERA. Several of its key

members and employees used to work for SOTERA. The cooperative currently has 25 members who individually own 200 to 300 head of cattle which they herd collectively. CCVB has paid in capital of FCFA 5 million. Members' contributions range from the minimum required, FCFA 50,000, to FCFA 2 million.

If CCVB runs in the manner it claims to, it should be a smooth export operation. It currently has 11 clients in Brazzaville, including SCORE, the large West African retailer. CCVB says it requires payment of 50 percent prior to shipment and the remainder upon delivery. All but one of its clients use irrevocable letters of credit to make these payments. The remaining client pays in cash at the Chadian embassy in Brazzaville, and the ambassador sees to it that the funds are deposited in CCVB's bank account. The embassy confirms receipt of payment by telex.

CCVB has two major problems. First, it does not have sufficient working capital to meet its perceived demand. It has been unsuccessful getting short-term loans from the commercial banks, but has received an FCFA 2.5 million loan from VITA. VITA says it has had trouble making payments, and that it claims lack of payments from Brazzaville suppliers. It was unclear to the PP team which was the case. CCVB's operations require cash for slaughter fees and transportation, as well as for the purchase of livestock ready for slaughter to supplement that of its members.

Second, there is a lack of adequate cold storage facilities. Air freight service from N'Djamena to Brazzaville is only available three times per week, and the cold store facilities at AFF that might be available to hold stock pending shipment are not reliable. The cold storage facility at the N'Djamena airport has been inoperative for some time. Without cold storage facilities, CCVB is unable to run efficiently and build up stocks for these flights. Also, and maybe more importantly, lack of cold storage makes the cooperative vulnerable to delays in flights.

3.3.4 Societe Nationale des Productions Animales (SONAPA)

SONAPA is a public, i.e. state owned, company that engages in numerous activities including the production of poultry and eggs, milk and dairy products (yogurt and cheese), and animal feed. A recent study undertaken at the request of the Ministry of Plan and Cooperation has recommended that SONAPA be privatized (Louis Berger, 1990). The report suggests that SONAPA's poultry and animal feed operations might best be sold off to the employees and two producer groups. The report was less optimistic about the prospects for the dairy operation, concluding that it would require subsidies.

3.3.5 Fish

Fishing is essentially an artisanal enterprise in Chad. According to one study (World Bank, 1988), fishermen delivered around 800 metric tons of fish to the N'Djamena market, through a network of 260 retailers, in 1986. The study estimates that throughout the country there are 4,500 people catching fish by casting nets from their pirogues.

Dried fish is this sub-sector's most common processed product. However, the marketing networks for dried fish do not appear to be extensive. Again, according to the World Bank study, dried fish is generally available only in markets that are close by fishing areas. The sole, major exception to this general rule is dried fish from Lake Iro. The marketing system for this product extends to the Sudanian zone.

Fish may be an important, or potentially important, export product. The CCVB, (see section 3.3.3, above), occasionally "tops off" an export shipment of meat with capitaine, one of Chad's better known fish.

3.4 The Fats and Oils Sub-Sector

There is little information about firms in the fats and oils sub-sector. COTONTCHAD produces and sells cotton seed oil as a by-product of its cotton ginning operations. It apparently also tried to produce "buerre de karite" (sheanut butter) at a plant in Sarh for a few years in the seventies, but terminated the operation as unprofitable. Other than that the PP Team did not come across any information about other formal sector firms engaged in the production, processing and marketing of fats and oils. The tentative conclusion is that these activities are undertaken by micro-enterprises in the informal sector.

3.5 The Cotton Sub-Sector

An analysis of the cotton sub-sector in Chad is an analysis of two companies: COTONTCHAD and STT. Cotton is the single most important sub-sector not only in the agribusiness sector, but in the overall economy. Prior to the collapse of cotton prices on the world market in 1985/86, the cotton sub-sector generated about 20 percent of the GOC's budgetary revenues and 60 percent of total export earnings. The sub-sector provided cash income and employment for an estimated 650,000 contract farmers and industrial workers, the latter involved in a number of value-adding operations, including ginning, and the manufacture of cottonseed oil and textiles.

3.5.1 Societe Cotonniere du TCHAD (COTONTCHAD)

The Societe Cotonniere de Tchad (COTONTCHAD is the largest company in the single most important industry in Chad. Its operations are highly integrated and include input supply and credit to contract growers, ginning, and oil processing and soap manufacture. It has joint public and private sector ownership between the GOC and European interests. As the largest enterprise in the most important sub-sector, and the largest industrial firm in the country, COTONTCHAD has a sizeable impact on the rest of the agribusiness sector and the economy at large. For example, it is the largest user of short-term credit provided through the commercial banks. Increased credit demands of COTONTCHAD may tend to squeeze lesser borrowers out of the formal credit markets.

The last five years have been difficult ones for the company, the sub-sector and the overall economy. Before cotton prices fell on the world market, COTONTCHAD's sales from the output of twelve gins and several processing plants represented two-thirds of the country's industrial turnover. In 1984/85 and 1985/86, COTONTCHAD sustained operating losses of US$ 41 million and US$ 67 million respectively. As a result, it was unable to service its considerable short-term debt. The complete collapse of the sub-sector would have been disastrous for the country as a whole. However, with donor support led by the World Bank, the GOC and COTONTCHAD instituted an Emergency Program which has, by and large, been implemented successfully. Between 1985/86 and 1987/88, COTONTCHAD had reduced unit costs for fiber production from FCFA 913/kg to FCFA 495/kg. GOC subsidies to the sub-sector have decreased substantially, and there is cautious optimism that, with the continuing rebound of world cotton prices, a scaled-down COTONTCHAD will be able to resume making a significant contribution to the economy by the end of this century. The company currently employs between 1,000 and 1,300 permanent staff, operates 5 gins, two edible oil processing plants, and a soap manufacturing plant.

More changes are in store for COTONTCHAD and the sub-sector as a whole in the immediate future. The liberalization of the fertilizer market will allow private suppliers to compete in this market. However, with the elimination of input subsidies, there is likely to be a reduced demand for and use of fertilizer which could affect the overall profitability of this trade. It is also uncertain what the impact of reduced fertilizer subsidies will have on growers' incomes. On the more positive side, the closing of several ginning operations and a reduction in oil production may increase opportunities for more efficient artisanal production. Thus while the industry itself appears to be stabilizing, the effects throughout the national economy will be felt for many years.

The impact of the cotton crisis has had a lingering effect on many other sectors of the economy. The banking sector, already working to write off a large volume of unrecoverable accounts from the civil war years, will likely need to reschedule the already rescheduled COTONTCHAD delinquencies, which currently stretch well into the next century. By the end of 1984, COTONTCHAD accounted for almost 40 percent of all domestic credit provided by the banking system to the private sector. The figure increased to 67 percent as the financial crisis deepened. In 1985, 88.4 percent of private sector bank credit was allocated to short-term loans and only 11.6 percent to long term loans, reflecting the desire for liquidity in the early reconstruction period. Sixty-four percent of short-term and 3.8 percent of long term credits were directly allocated to cotton.

As a result of the cotton crisis and the need to extend credit for longer periods, medium- and long-term credits accounted for 33.8 percent of the banking sector's portfolio as of 1989. COTONTCHAD alone accounted for 76.9 percent of this amount. It also accounted for half of all short-term loans . The loans to COTONTCHAD are all at "priority industry" preferred rates only 1 - 2.5 percent above the rate at which the commercial banks borrow from the central bank. With COTONTCHAD making such heavy demands on the credit market, the availability of medium and long term investment credit for other businesses is thus greatly constrained. This is likely to remain so for the next decade.

3.5.2 Societe de Textile du Tchad (STT)

STT, with 21 percent State ownership, 5 percent COTONTCHAD ownership, and the rest divided among a number of investors from Europe and Cameroon, is Chad's only modern textile mill. In 1988, it employed 646 workers and had gross revenues in excess of FCFA 4 billion.

Because COTONTCHAD receives greater returns from cotton of a higher quality than that needed by STT, most of COTONTCHAD's production is exported and most of STT's raw materials are imported. In 1988, STT was operating at 60 percent capacity and has since been increasingly considered insolvent. The Ministry of Industry reportedly would like STT liquidated, but other interests have kept it open. The majority owners are undertaking a study of potential restructuring, with the future uncertain.

3.6 The Sugar Sub-sector

Societe Nationale Sucriere du Tchad (SONASUT). SONASUT is the national sugar conglomerate, with 85 percent GOC participation and 15 percent European ownership. The company

runs a highly integrated operation, its primary activities include: the management of 3,400 ha of cane production: import and distribution of 16,000 MT of sugar/year; refining (cubes, grain, cakes) at 25,000 MT/year capacity; and candy production, 500 MT/year capacity.

SONASUT employs 1700 permanent workers and approximately 800 day laborers. Its gross revenues in 1988 were FCFA 15.4 billion. It has an official, but unenforceable, monopoly on sugar in Chad. Although imports currently are suspended under law, contraband imports continue to appear on the local market. With this protectionist assistance, SONASUT is maintaining operations, with 90 percent of production for the Chadian market and only 10 percent exported to UDEAC members. Of the 12 enterprises studied by the UNIDO team, SONASUT had the worst debt ratio.

SONASUT is undergoing a restructuring which will likely result in an increasing amount of imports filling the raw material needs of its refining operations. Although the company's strategy envisions a growth in exports, this seems unlikely given the company's cost of production.

3.7 The Gum Arabic Sub-Sector

Natural gum arabic (Acacia Senegalais) stands are pervasive in the Sahelian zone of Chad, and are viewed as a natural resource similar to petroleum and natron. The sub-sector is export driven, and the minimum amount of processing and handling that are required makes integration of the essential operations relatively simple. The major production problem in the sub-sector is locusts. When infested, a tree's ability to produce resin diminishes.

The Ministry of Water and Forests controls the harvesting of resin from the tree. Potential operators wishing to export the commodity must obtain annual licenses from the Ministry and pay an export tax. Entrepreneurial interest in gum arabic comes from the fact that the major cost of an export operation is the rural labor necessary to tap the trees, traditionally a job for men, and to clean and sort the resin, traditionally the responsibility of women. Exports are primarily to Europe, and most exporters have European partners who arrange the necessary short-term finance and marketing logistics.

There are reportedly 10 gum arabic exporters in Chad, although 3 apparently dominate, notably SCCL/STEGA. There are conflicting reports as to whether these 3 have formed a cartel to fix purchase prices or whether the sub-sector is highly competitive; the Team was unable to ascertain which is closer to truth. It seems safe to assume that the prices Chadian exporters

receive are dictated by demand in their European markets. They are likely to be price takers rather than price makers.

The one exporter the PP Team interviewed has helped the villages in her licensed area of 30,0000 hectares organize into a cooperative, with which she negotiates prices based on supply. In her first season, 1500 persons were on payroll, but she has now cut back to only 500. She has worked with OPIT to develop a project profile for primary processing in Chad, which would also employ people and increase value-added. The OPIT feasibility study for in-country processing assumes that the GOC will spray her trees free. A longer-term project would be to plant new stands of gum arabic tress making the operation even more vertically integrated.

Given A.I.D. concerns about pesticide use, it is unlikely that the ASC will become actively involved with such large scale operations in the gum arabic sub-sector.

3.8 Tobacco

The discussion of the tobacco industry in Chad is a discussion of Manufacture de Cigarette du Tchad (MCT) . The company operates a cigarette manufacturing plant in Moundou which is believed to have the capacity to process 60 metric tons. MCT guarantees a purchase price depending on the quality of the leaf. According to a World Bank study (World Bank, 1988), the company contracted with 770 growers who produced 147 metric tons of dried product in 1987. Unlike many other firms in Chad, MCT has a surplus disposal problem. The 147 tons of tobacco grown are more than double its manufacturing capacity.

According to the World Bank report, MCT would like to create a producers association which would take responsibility for the distribution of inputs -- seed, fertilizers, and phytosanitary supplies -- and supervise production and drying operations, as well fill an assembly function. At yields of one ton per hectare, it would only take the production 60 hectares to fully satisfy MCT's raw materials requirements. Given this limited market, the tobacco sub-sector is not a very important one in Chad nor one that offers much investment potential.

3.9 The Role of Supporters

As stated earlier, supporters are those enterprises that provide goods and services to agribusiness operators. As Table G-3 indicates, this analysis of the role of supporters in Chad's agribusiness sector looks at three types: input suppliers, financial institutions, and business and management services. The role that agricultural research institutions, another

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important part of the supporting cast, is outside the scope of this analysis.

3.9.1 Input Suppliers

This analysis has already looked at several integrated operations that play a major role as input suppliers in their respective sub-sectors. COTONTCHAD, OMVSD, and MCT provide inputs to cotton, rice and tobacco growers, respectively. The formal sector enterprises that are important as input suppliers are the Laboratoire de Farcha, the Societe Industrielle de Materiel Agricole du Tchad, and the Office National de Developpement Rural.

The Laboratoires de Farcha (LDF) manufactures veterinary pharmaceutical on the outskirts of N'Djamena. It also maintains a research laboratory and an information service. In 1988, it had 68 employees and gross revenues of FCFA 124.7 million. The company is a major beneficiary of a World Bank financed investment program and therefore is assumed to be in sound financial shape. The local market accounts for 85 percent of its sales, exports to neighboring countries account for the remainder. Its only Chadian input besides labor is electricity.

Societe Industriel Material Agricole Tchad (SIMAT). SIMAT is a mixed ownership manufacturing company in which the GOC holds 49 percent interest and various European and Cameroonian interests the rest. Two state controlled entities, the Caisse de Stabilization du Prix du Cotton and COTONTCHAD, own 49.99 and 15 percent of the company, respectively. The second largest shareholder is the Compagnie Francaise pour le Developpement des fibres textiles (CFDT). Five other firms and one private shareholder account for the remaining 13.01 percent. SIMAT was created as a private company in 1985 after the demise of another firm, SOMAT.

As a recent study concludes, SIMAT is in an untenable position to define a coherent marketing strategy for its products (Louis Berger, 1990). Its major product lines consist of agricultural tools and non-motorized equipment, including ploughs, ox-carts, manual decorticators, cisterns and wheelbarrows, which in Chad are marketed exclusively through the Office National de Developpement Rural (ONDR). It also exports to Cameroon through one its minor shareholders, TROPIC.

SIMAT is in very poor financial shape. In 1988, it had 40 full time employees and gross revenues of FCFA 220 million. Cumulative losses through 1988 stood at FCFA 151 million and the firm's outstanding debt exceeded FCFA 550 million. In other words the company's net worth was negative. Since then, the company has been losing market share to cheaper imports and local

competition. The Ministry of Industry, however, is committed to keeping SIMAT open, and has commissioned a study to investigate options for restructuring and/or privatization.

3.9.2 Financial Institutions

There are three major formal sector financial institutions at work in Chad: the Banque des Etats d'Afrique Central (BEAC) is the central bank and there are two commercial banks: Banque Tchadienne de Credit et de Depots (BTCD) and the Banque Internationale pour l'Afrique au Tchad (BIAT). BEAC's has an indirect impact on Chad's agribusiness sector. One of its major functions is to lend funds at preferential rates to the private banks for on-lending to priority sectors.

For example, the private banks can borrow funds for as little as 6.5 percent for on-lending to the country's most important agribusiness: COTONTCHAD. COTONTCHAD currently accounts for about half of BIAT's outstanding loans.

BEAC's normal rediscount rate is 10 percent. The private banks add a margin of from two to four percentage points depending upon their assessment of the risk and creditworthiness of the borrower. In addition, the borrower's rate of interest is increased by two taxes. The "tax chiffre d'affaire" (TCA) is calculated at 17.65 percent of the base rate, i.e. the rediscount rate plus margin. The borrower also pays a two percent tax on the distribution of credit. Depending on the bank's margin, a qualified borrower will pay between 16.1 and 18.5 percent interest.

There are several major problems pressing the banking system. The first is a shortage of funds available from the BEAC for on-lending. According to officials at the BIAT, it has approved loan applications of between FCFA 3 and 4 billion but only as access to FCFA 1.3 billion through the BEAC. The bank has a limited supply of other funds for lending. Savings accounts provide the BIAT with only FCFA 200 million of potentially loanable funds. The fact that a saver needs to have a minimum of FCFA 100,000 to open an account paying interest at the meager rate of 4.5 percent helps explain why savings accounts are not a major source of funds.

Finally, it appears that the banks are both unable and generally unwilling to service the small- and medium-sized segment of the market. Again, according to BIAT, small- and medium-sized firms, with loans in the general range of FCFA 2 to 5 million, account for a disproportionate percentage of its non-performing accounts. The banks also find it hard to find qualified customers in this segment of the market. The private banks will not consider making loans to companies that are not

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properly registered and licensed and, more importantly, that do not have written and audited accounts.

The A.I.D.-funded Volunteers in Technical Assistance/Private Enterprise Project (VITA/PEP) project addresses some of the needs left unattended by the commercial banks. VITA is currently making loans at 12 percent to a cross-section of small- and medium-sized business. VITA has approved 186 of approximately 1,200 loan requests it has received from potential borrowers in N'Djamena since its program started in mid-1984. The average loan was approximately $5,000.

In addition to these formal sector financial institutions, this description of the financial institutions servicing the agribusiness sector would be incomplete without at least passing reference to the informal market. The amount of information about the operations, terms and rates of interest or return on informal market credit and venture capital is very limited. One cursory study (Cook, 1990) suggests that informal credit, much of it consumption credit, bears rates of from 7 to 32 percent per month. Anecdotal information provided to the PP Design Team confirms this, and indicates that N'Djamena-based traders and merchants might pay on the order of 20 percent for a three to four month loan.

One case cited was that of a merchant who borrowed half a million FCFA to stock the shelves of his store. He paid back FCFA 600,000 to his "banker" over the three months it took to turn the stock over. At a minimally acceptable gross margin of eighty percent, this exercise would have generated gross revenue of FCFA 400,000. After deducting FCFA 100,000 in interest expense, the merchant would have had FCFA 300,000 to cover labor and other variable expenses, if any, and any fixed costs.

3.3.3 Consultants

Consultants can play an important role in a country's agribusiness sector. Figure G-1 lists but a few of the typical types of consulting services that agribusinesses call upon. These include legal, construction, business management and accounting, sanitation, and engineering/equipment design specialists. In N'Djamena there are at least three consulting firms that may have the potential to fill the business management and accounting slot on this roster. The paragraphs below briefly describe each one. This section also reviews the role of OPIT, the Ministry of Commerce and Industry's in-house business consulting operation.

Tchad Business Conseils (TBC) is the only one of the three consulting firms which has a permanent, full-time staff. It has been in operation since March 1988 and currently has three full-

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time and five part-time employees. The full-time staff include the company's founder and sole stockholder, Dr. KA-GARA Idabaye. He holds a doctorate in economic and social development from the University of Paris (Sorbonne). Other permanent staff include KEMNELOUM DJIRAIBE Delphine who has a legal degree (license en droit prive) from the Marien NGOUABI University in Brazzaville, and KAGDOM Magourna who is a graduate of the University of Tchad and has a degree (license) in management and economics. TBC's part-time staff members are government civil servants.

A significant portion of TBC's work has been in the accounting and finance area: preparing income statements and balance sheets, and doing financial and management audits. From mid-1988 through April of 1990 the company had undertaken 14 "economic and financial" studies, mainly feasibility studies. Only two of these studies relate to the agribusiness sector. One study looked at the feasibility of creating three bakeries, one each in Moundou, N'Djamena, and Sarh. A second study analyzed the feasibility of establishing a poultry operation in the N'Djamena area. Neither study lead to any investment in these activities. TBC has also contracted to do some in-house training of accounting and financial management personnel for three clients.

A second consulting firm, Bureau d'Etudes des Projets et de Conseil dans les Affaires (BEPROCA), is the realization of USAID/Chad's training specialist, TEDAMBE Issac Godje. BEPROCA is a spin-off of the recently completed Sahel Regional Financial Management Project. The company has two full-time staff who are university graduates as well as a roster of eight part-time consultants. BEPROCA has only been operating since January 1990. Its list of clients includes USAID, UNDP, and Swiss Aid. Its major success to date has been the organization and execution of a seminar on payroll accounting and procedures. However, the firm claims that it has the capacity to offer consulting services in other areas, including: project design, business management and project implementation, follow-up and evaluation, market studies, and computerization.

The University of Tchad's Faculte des Sciences Juridiques et Economiques et de Gestion, is another possible source of consulting services. The faculty have organized a Bureau d'Etudes et Conseils (BEC) through which outsiders can engage the services of faculty members. Recent studies have included an analysis of commercial exchanges rates between Chad and Nigeria and an examination of ice production. BEC's clients include various government ministries and FAC.

Finally, a discussion of this segment of the agribusiness sector in Chad would not be complete without mentioning the Government's Office de Promotion Industrielle du Tchad (OPIT).

OPIT provides business consulting services to the country's private sector. It charges a fixed fee of FCFA 50,000 per study. Its portfolio of projects covers the economic landscape. In the agribusiness sector it has worked with entrepreneurs on several proposals, including one for tomato concentrate processing (dossier never completed) and one for fruit juice manufacture. The latter has been completed and the investor is seeking partners, with OPIT's help.

3.4 Summary

Many factors combine to constrain agribusiness development in Chad. Chad is one of the poorest countries in the world. The local demand for food, especially the processed foods that are major products of the agribusiness sector, is limited. But this is not a constraint unique to agribusiness, it has an impact on all areas of private sector development.

Transportation is another constraint that not only cuts across the major commodity sub-sectors that comprise the agribusiness sector, but affects the country's overall development. The transportation constraint is not only a function of the poor conditions of the country's road network, though this is the most obvious element of it. There are other elements. According to Chad's Chamber of Commerce, the nearest port is Port Harcourt in Nigeria, which is over a thousand miles, or 1,765 kilometers, by road, river, and rail from N'Djamena. The most used port is Douala, over two thousand kilometers by road and rail. Finally, there is no rail service in the country and limited air freight services.

Substantial donor support, including A.I.D. financing, is helping to rehabilitate the country's roads. An argument could made that the single best thing to do to promote agribusiness development in Chad would be to increase the Mission's contribution to this rehabilitation effort. It is hard to argue against this approach. An improved road system will only make it easier and less expensive for input suppliers to deliver their seed, fertilizer, machinery, equipment, and credit. Better roads will also make it easier and less expensive to provide extension services and disseminate research results. Producers need a better road system to reduce the costs of transporting their goods to market. Better transportation might also help the food processors reduce not only the costs they pay for these crops and livestock, but also the imported items they need to operate their plants. Finally, a better transportation system might help to reduce the cost of exporting agricultural products in which Chad has a competitive advantage in world markets.

The financial constraints are also imposing. The country's major agribusiness and industrial firm, COTONTCHAD, has long had

a voracious appetite for short-term credit. Of late it has also increased its demand for medium- and long-term funds as well. This massive demand risks to crowd smaller, and presumably to the banker riskier, borrowers out of the market. The formal banking system in Chad is not going to provide the longer term financing that agribusiness investments require.

This analysis concludes that any effort to promote private agribusiness development in Chad strive to mobilize the capital resources that exist outside the formal financial sector. An investment promotion strategy presupposes that there are sound investment opportunities. The evidence presented herein is not overwhelming in this regard. The grain sub-sector might offer some possibilities for value-added processing if it can be shown that the country's growing urban population has the appetite and checkbook for products processed from locally produced grains. Couscous or similar semi-processed cereals may be an example. The fruits and vegetable sub-sector may also have some promise. Possibilities that are worthwhile to investigate include efforts to extend the growing season, either by introducing new varieties, or improving the post-harvest handling infrastructure, i.e. cold storage. Exports of fruits and vegetables also may prove feasible. Lastly, although of lesser importance to USAID because of the involvement of other donors, is the livestock sector. Evidence herein suggests that Chad is not meeting the export demand for its meat products. Efforts to increase the country's export capabilities could prove remunerative. All of these possibilities need further investigation.

An investment promotion strategy also presupposes that investment capital exists. The PP team believes that it does, although the evidence is not conclusive. Somebody has capital, though in the current economic environment, he or she is more likely to invest it in short-term trading activities than in longer term, value-adding endeavors. But there have been at least a handful of entrepreneurs who have taken a look at potential agribusiness investment opportunities, and that is an encouraging sign. The Market and Policy Analysis component of the AMTT project will support studies of informal capital markets in order to obtain a better understanding of how they function. The next section of this analysis outlines the steps the AMTT Project will take to identify both bankable agribusiness investment opportunities and the entrepreneurs who are willing to invest.

4. PROPOSED AMTT ASSISTANCE TO THE AGRIBUSINESS SECTOR: THE AGRIBUSINESS SUPPORT CENTER (ASC)

The AMTT will support on a pilot basis the creation of an Agribusiness Support Center (ASC). The ASC's mission is: to promote investment in the agribusiness sector in Chad. To carry out this mission, the ASC will prospect both for bankable opportunities and the entrepreneurial capital to invest in them. The ASC will provide technical assistance and information services to the agribusiness sector in Chad. The AMTT project will provide one long-term expatriate agribusiness development specialist (see Attachment G-1 for a detailed Scope of Work) and a local counterpart. The project will also finance up to 18 person months of expatriate short-term technical assistance and an equal amount of local technical assistance as wel as cover the cost of short-term training for GOC officials and private sector participants for workshops and study tours in-country, third-country and U.S. To be successful, the ASC will have to establish itself as an important and valuable member of the Chadian business community.

The ASC has to be considered a risky undertaking. The potential demand for its services is unclear and difficult to measure. So little seems to known about the dynamics of the private sector, the processes that guide long-term investment decisions, including the required rates of return and expected payback. There is no certainty that the ASC will be able to establish itself as a worthwhile and competent entity within the N'Djamena business community. For these reasons, there will be an evaluation of the center eighteen months into the project.

4.1 Tasks

The tasks the ASC will carry out should all serve the same overall purpose: to increase investment in Chadian agribusinesses. To accomplish this, the ASC will engage in three types of activities. Its major line of business will be to identify potentially profitable agribusiness ventures, undertake feasibility studies of these possibilities, develop business plans for the ones that are feasible, and use the plans as a tool to convince locally available sources of capital to invest in them. The ASC's second principal task is related to the first. The center will become a clearing house for information on technology that is appropriate for the scale of undertaking in which Chadian entrepreneurs are willing to invest. The third task of the ASC will be to increase the ability of local consulting firms to service the needs Chadian entrepreneurs operating in the agribusiness sector. The project will also provide short-term training through in-country, third-country and U.S. workshops, study tours and conferences for GOC officials and private sector participants.

4.1.1 Feasibility Studies, Business Plans

In order to promote private investment, the ASC will work with local entrepreneurs to identify, undertake feasibility studies of, and develop business plans for new and/or expanded agribusiness ventures in Chad. The primary assumption upon which the ASC rests is that there are entrepreneurs in the Chadian business community who are willing to make equity investments in agribusiness if the conditions are right. The ASC is a risky undertaking because there is no way of knowing whether its approach will be an effective may to mobilize local capital.

The ventures ASC promotes may either be expansions of existing operations or entirely new undertakings. In the early stages of the project, the ASC may have to identify and pursue possibilities on its own rather than rely upon demand from its customers. Several possibilities for early studies include the feasibility of rehabilitating old or building new cold storage facilities in N'Djamena, the feasibility of producing dried and or powdered tomato on a commercial scale, and processing locally grown grain into couscous or other semi-processed cereal products. These first studies will become the ASC's principal marketing tools. The ASC will be much more likely to gain credibility within both the local business community in general, and potential agribusiness investors in particular, by showing potential clients what it has done and is capable of doing, rather than by simply telling them.

As the ASC becomes established in the N'Djamena business community, it should be able to attract clients who have already identified a potential investment and are seeking help to analyze its feasibility. In fact, one clear measure of the ASC's appropriateness will be the number of solicitations it receives for such assistance.

As part of this effort, the ASC will establish and maintain relations with the formal banking community and the VITA/PEP project. If the project is going to be successful, it will have to able to help its clients secure the debt portion of their capital from these institutions. They also should be helpful in identifying potential customers for the ASC.

Under this task, the ASC will complete at least one through feasibility study or business plan per quarter. To allow time for mobilization and start up, the first study or plan is expected to be completed within six months of the Agribusiness Specialist's arrival in country.

4.1.2 Agribusiness Technology Information

The ASC's second principal task is related to the first. The center will become a clearing house for information on technology that will be appropriate for the scale of undertaking in which Chadian entrepreneurs are willing to invest. The ASC will use its resources to help prospective investors and business operators obtain information about production, processing, and other post-harvest handling equipment. To provide potential investors and organizations supporting agribusiness (GOC and other donor projects, non-governmental organizations) access to information about technology appropriate for Chadian agribusinesses, the ASC will establish a small documentation center with catalogues and suppliers' brochures, emphasizing regional suppliers as well as such "appropriate technology" sources as the Intermediate Technology Development Group (ITDG) in London, and VITA and Appropriate Technology International (ATI) in the U.S.

ASC will subsidize its clients costs of gathering this information only to the extent that it picks up some of the communications cost (telephone, telex, or telefax) of obtaining it. The Agribusiness Development Specialist will be responsible for making sure that such requests are cost-effective, by having the client articulate as precisely as possible his or her need, and by ensuring that the information is needed for a sound investment purpose. As part of this information gathering process, the Agribusiness Development Specialist and local counterpart will complete an extensive survey of information already available and information networks already established in Chad. There is undoubtedly a wealth of information in GOC ministries, donor agencies, and NGOs that is not as accessible to the local private sector as it should be.

4.1.3 Strengthening Local Consulting Firms

The third task of the ASC will be to increase the ability of local consulting firms to service the needs of their existing and potentially new clients. The ASC will rely upon the expertise available in local consulting firms to the maximum extent possible to carry out feasibility and business plans. In this sense, the ASC will be providing extended on-the-job training to these local firms. This is an important function. It is only by working closely with these firms that the project will be able to institutionalize its expertise within the Chadian economy.

The ASC will establish relations with local consulting firms soon after it opens. In order to be able put together credible studies and plans, the ASC will have to develop early on a full understanding of the business regulatory environment in general, and its impact on agribusiness in particular. Likely topics for early consideration are the licensing, registration requirements and tax laws, which will be in the process of change as part of

the project's Conditions Precedent. ASC staff are likely to have to rely upon the local firms to gain a full understanding of the regulatory environment.

In addition, the ASC will work through these local counterpart firms to plan, organize and carry out round table discussions and seminars of general interest to the agribusiness community. The ASC will also provide training through in-country, third-country and U.S. workshops, conferences and study tours for GOC officials and private sector participants.

4.2 Clients

The description of the sector should make it clear that the ASC's clients will come from the SME segment of the business community. The large, formal sector firms either do not need donor-supported assistance, i.e they can contract for whatever assistance and services they need on their own, or they receive the support of GOC and donor-funded programs. The vast number of micro-enterprises, the millet beer breweries, neighborhood grain milling operations, and the men and women retailing small quantities of agricultural produce also fall outside the target market for ASC clients.

The ASC's target clients are the existing, privately or cooperatively owned and operated, Chadian SMEs engaged in or with a linkage to agricultural production, or entrepreneurs with capital to invest in agribusiness. Priority will be given to enterprises which use local resources as opposed to imported raw materials, promote Chadian value added, and which show promise for productive growth. Geographic focus during the first two years will be on enterprises in Chari-Baguirmi (around N'Djamena) and the economically active corridor running from the southwest near Moundou through N'Djamena to the shores of Lake Chad. This is basically where most current business is centered.

The ASC will be active in its efforts to identify women entrepreneurs who can take advantage of its services. Knowledgeable sources suggest that there are at least 40 women in business in N'Djamena who are in the ASC's target market. Given the overwhelming evidence in the literature that women are generally better credit risks and are more likely to use the profits from any economic activity for more productive purposes, the ASC should pursue women clients market vigorously. Women may also be able to offer special marketing insight about new processed food products a local firm could produce. The ASC will target 30 percent of its client services to women clients.

Potential clients will initially be solicited through a number of venues: focus group interviews and seminars with representatives of specific types of enterprises, referrals from

and direct contact with VITA clients, referrals and direct contact through NGO's, and individual interviews through the private sector network in N'Djamena. Indeed, the "Lists of Persons Contacted" in the series of reports leading up to and including this PP forms the basis for the beginning of an active client group.

4.3 Structure and Operations

The ASC will have offices that are separated from the main AMTT project office, but it will rely upon this main office for administrative and logistical staff and support. The center's staff will consist of one expatriate Agribusiness Development Specialist, one Chadian professional counterpart, and a secretary/administrative assistant. The Agribusiness Development Specialist will report to and be supervised by the AMTT COP/Senior Policy Analyst. Once its initial feasibility studies and business plans have helped the ASC take root and it has established a market, it will begin to charge fees for its services.

4.3.1 Structures

The ASC will have office space in the same building that houses the AMTT project office, but it will have a separate entrance (and/or separate floor). This is important in order that the ASC establish itself as a separate identity in the local business community. However, the ASC needs to be adjacent to the main project office in order to have effective access to essential support: photocopy machine, fax, additional secretarial support, and documentation center.

The ASC proper will consist of a minimum of three offices and a reception area. It will provide separate offices for the Agribusiness Development Specialist, the local counterpart, as well as at least one office for short-term consultants. The ASC will share library/information resources facilities with the main project office. The ASC's secretary/administrative assistant will occupy the office's reception area, which will also have a few chairs for visitors. The ASC should have a separate telephone number from the main project office, and will need two lines to adequately meet its needs.

The ASC will be equipped with two desktop computers, one for each of the full-time professional staff, plus two portable computers for field work. This should alleviate the need for expatriate short-term consultants to carry computers from the U.S. In addition to computers, each full-time staff will have a desk, chair, visitor's chair, computer table, file cabinet, and adequate lighting.

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The library/information center will be equipped with several file cabinets and bookshelves to hold the information that the ASC accumulates over the life of the project.

Lastly, the ASC will require one, four wheel drive vehicle for project use, primarily field trips. The main project office will take care of regular repairs and maintenance of the ASC's vehicle.

4.3.2 Payment for Services

Once it has established itself as a viable business service organization, the ASC will charge for its services. The basic principal in determining its fees should be to charge what its services would be worth were they readily available on the local market. For example, if a client's feasibility study requires the services of a tomato processing specialist, whom the project will supply from its 18 months of expatriate TA, the client should reimburse the ASC. The amount of the reimbursement would be the equivalent of what a comparably trained Chadian would command. Clients should also be expected to pay the costs of local consulting firms engaged on an ASC assignment.

The Agribusiness Development Specialist should have some discretionary authority, supervised by the COP, in setting client fees. The Specialist should have the option of reducing or waiving any fees if a particularly promising opportunity arises.

Any fees collected by the ASC will be deposited in an account separate from the AMTT's operating account. The funds will be managed in accordance with guidelines and procedures to be developed in collaboration with the Controller's Office, USAID/Chad. The total amount of fees collected, assuming that the local market price for short-term technical assistance is $100 per day, is unlikely to exceed $35,000 over the life of the project. The ASC will use these funds to defray the local costs of round table discussions, seminars, workshops and conferences to help disseminate the lessons learned from ASC endeavors.

4.3.3 Use of Expatriate Short-Term Technical Assistance

An important component of the ASC's technical assistance will be provided by eighteen person months of expatriate short-term consultants. The Agribusiness Development Specialist will be responsible for writing focused and detailed scopes of work for expatriate, short-term assistance. Broad-based needs assessments have been undertaken by a number of consultants in recent years, and such exercises are not viewed as necessary. Rather, consultants will be utilized for product- or skill-specific tasks, ranging from improved packaging of fresh tomatoes

to cost effective pump management to analysis of the medium-scale grain processing techniques for couscous, based primarily on specific client demand. Given the variety of very specific needs likely to come up, contractors will be encouraged to draw these consultants from a number of sources, including such groups as the International Executive Service Corps, Moody's Industrial Directory, the American Association of Agricultural Consultants, etc. The Specialist will coordinate and oversee the assignments undertaken by such consultants. It will be the Specialist's responsibility to incorporate any work carried out by expatriate TA into the product under development.

4.3.4 Use of and Collaboration With Local Consulting Firms

The ASC will also engage the services of local consulting firms, negotiating contracts on a case-by-case basis. These contracts will specify the role that the firms are to carry out in contributing to the development of an ASC feasibility study, business plan or other task. Local consulting firms will also play an important role with in-country training and seminars. Additional possible assistance with training activities may come from the A.I.D. centrally-funded Human Resources Development Assistance (HRDA, 698-0463) project.

There are at least three private sector consulting firms which have the capacity to support the ASC. Given the existence of this private sector resource, it is important that the ASC establish itself more as a conduit for providing technical and business services rather than as an entity in and of itself.

As demand for services grows, the ASC will assess when and if it is necessary to obtain additional full time staff. In the initial year of the project, however, it is assumed that the two-person unit will be able to fulfill most on-going needs by itself, with judicious use of Chadian and expatriate short-term assistance. In the event that ASC operations require additional full-time staff, positions should be filled by competent Chadians.

4.3.4 Annual Work Plan

Within ten weeks after arrival in Chad, the Agribusiness Development Specialist will submit a draft work plan for the first year's activities to the Chief of Party for review. Based on any comments received, the Specialist will complete a final work plan for the year be the end of month three. The Specialist will submit a draft work plan for Year 2 by the middle of month twelve and complete a final plan for ASC activities, based on the comments of the COP, by the end of the month. This same schedule will remain in effect for the life of the project.

4.3.5 Evaluation

The effectiveness of the ASC in meeting client group needs will be assessed after 18 months of operation. The major purpose of the evaluation will be to determine whether the ASC has demonstrated that there is significant demand for its services to allow it to continue or, if the demand is not present,to shift support to agribusiness to a different venue. Given identified needs at this time, the key AMTT output attributable to this component will be increased private sector investment in formal sector agribusinesses. The evaluation will review the feasibility studies and business plans produced and confirm the ASC's own estimate of the amount of investment they helped to mobilize. The evaluation will also seek out third party comments on the usefulness of the center. The major sources here would include both the VITA/PEP Project and the commercial banks. Interviews with ASC clients, including SME owners, cooperatives, including women and women's groups, will also be an important part of the evaluation. Finally, the evaluation should assess the capabilities of the local, Chadian consulting firms to take over the catalytic role ASC is attempting to play.

5. IMPLEMENTATION PLAN AND BUDGET

This final section of the analysis briefly describes the Implementation Plan and Budget. The actual plan and budget are at Attachment G-2 herein and Annex J, respectively.

5.1 Implementation Plan

Attachment G-2 provides an implementation plan for the ASC component of the project. As noted above, the major benchmark for ASC performance will be to complete one major feasibility study or business plan of a bankable agribusiness investment opportunity per quarter. During the first quarter in country, the agribusiness development specialist will establish the office, hire staff, and make initial contacts with the local business community. Work on the first plan or study should begin no later than month four and be completed by the end of month six. Thereafter, the ASC will complete at least one study or plan per quarter.

In addition to this major activity, the ASC will be responding to requests for information and carrying on an on-going basis. The Agribusiness Specialist will report on these efforts in regular, quarterly reports.

By month 18 it should be evident whether or not the risk in establishing this component of the project has produced adequate enough rewards. An evaluation at that point in time will determine whether the ASC should cease operations, continue on

the same tack, or continue to operate, but with a new frame of reference and set of objectives.

The implementation plan in Attachment G-2 assumes on-going operations and shows the ASC working along the same lines as those described above.

5.2 Budget

Annex J includes a detailed, year by year, line item budget for the ASC component of the project. The total budget for forty-two months of operation is almost $2.5 million dollars. The budget provides for 42 person months of long-term expatriate technical assistance, i.e. the Agribusiness Development Specialist; 18 months of short-term, expatriate TA; two full-time (42 months) Chadian staff, a professional counterpart and a secretary/administrative assistant; 18 person months of local, short-term consultants; and short-term training. The budget provides for one four-wheel drive vehicle and adequate computer hardware (two desktop models,two laptops; one laser and one wide carriage dot matrix printer) and software to meet the ASC's anticipated needs. Other than vehicle operating expenses, budgeted at $1,000 per month, all of the ASC operating expenses are incorporated in the Project Support Budget.

Attachment G-1

SCOPE OF WORK FOR AGRIBUSINESS DEVELOPMENT SPECIALIST

Primary Role: The Agribusiness Development Specialist will manage the day-to-day operations of the Agribusiness Support Center.

Primary Tasks: The specialist will supervise and coordinate the work of one local, professional counterpart and a secretary/administrative assistant in carrying out the ASC's principal tasks; develop terms of reference for short-term, expatriate technical assistance needed to complete feasibility studies and business plans; and contract for and supervise the work of local, Chadian consulting firms assisting on these same studies and plans.

Primary Relationships:

The Agribusiness Development Specialist will report to the AMTT Chief of Party/Policy Analyst. In addition, the specialist will maintain on-going relations with the operators, supporters and coordinators that play important roles in the agribusiness sector in Chad. Crucial here will be those economic operators who have the potential to make equity investments in agribusiness ventures, cooperatives, women's groups, and other SME-scale operators that have the potential to increase their involvement in agricultural marketing activities, and the public sector institutions - both local and donor-funded - which support and coordinate agribusiness activities.

Required Qualifications:

Business Skills: Developing country business management or consulting experience, preferably in agricultural production, processing or marketing; entrepreneurial outlook with strong analytical skills in finance or economics; good public relations skills, ability to interact comfortably in both the public and private sectors. Working experience with appropriate technology.

Academic Qualifications: At least a masters level degree in business administration, agribusiness, or business economics.

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Language Skills: Fluency in French, at least an FSI 3/3.

Computer Skills: Must be computer literate, able to use popular spreadsheet (LOTUS 123 or comparable) and word processing (WordPerfect) software. Competency in LOTUS 1-2-3 or comparable spreadsheet software

Desired Qualifications:

Francophone Africa experience, preferably in the Sahel.

Entrepreneurial or venture capital experience.

Additional computer literacy with data base management and/or graphics software.

Attachment G-2

Agribusiness Services Center: Implementation Plan

Month 1: Start-up: recruit and hire local counterpart, secretary/administrative assistant.

Make initial contacts with agribusiness community: private business people and business organizations; GOC agencies, and donors. Begin to build inventory of resources for information center.

Month 2: Continue contacts, inventory building; field trips.

Month 3: Complete draft Year One Workplan which will include priorities for first several feasibility studies, business plans. Review draft with COP, and finalize.

Month 4: Complete bibliography of agribusiness resources.

Begin work on first feasibility study.

First quarter report

Month 6: Complete study/plan No. 1

Month 7: Quarterly report

Month 9: Complete study/ plan No. 2

Month 10: Quarterly report

Month 12: Complete study/plan No. 3

Complete draft work plan for Year 2 by 15th; review with COP. Finalize by end of month.

Month 13: Quarterly report

Month 15: Complete study/plan No. 4

Month 16: Quarterly report

Month 18: ASC Evaluation

Complete study/plan No. 5

Month 19: Quarterly report

Month 21: Complete study/plan No. 6

Month 22: Quarterly report

Month 24: Complete study/plan No. 7

Month 25: Quarterly report

Month 27: Complete study/plan No. 8

Month 28: Quarterly report

Month 30: Complete study/plan No. 9

Month 31: Quarterly report

Month 33: Complete study/plan No. 10

Month 34: Quarterly report

Month 36: Complete study/plan No. 11
Begin transfer of ASC resources to local entity.

Month 37: Quarterly report

Month 39: Complete study/plan No. 12

Month 40: Quarterly report

Month 42: End of AMTT Project

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ANNEX H

MARKET AND POLICY ANALYSIS COMPONENT

TECHNICAL ANALYSIS
MARKET AND POLICY ANALYSIS COMPONENT

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TECHNICAL ANALYSIS
MARKET AND POLICY ANALYSIS COMPONENT

1. INTRODUCTION

The draft Bureau for Africa's (AFR) "Strategic Framework for Promoting Agricultural Marketing and Agribusiness Development in Subsaharan Africa," (July 1990) outlines three critical elements of an agricultural marketing system:

- the macroeconomic and sectoral **policies and regulations** that affect marketing activities;

- the **infrastructure** (including institutions and supporting services) that is necessary for marketing activities to occur and expand; and,

- the **participants** who engage in marketing activities, especially agribusinesses.

In Chad, the Mission has undertaken a number of studies to better understand the factors constraining marketing in terms of each element. Policies and regulations, and some "soft" infrastructure, were most recently analyzed in "Chad: Agricultural Marketing Policies" (Abt, 1990); this study forms the basis for many of the AMTT project initiatives proposed in this annex. The Mission's assessment of "hard" infrastructure has focussed on Chad's most visible, and arguably most important, developmental constraint, the national road network, which is receiving A.I.D. assistance through a separate, major project (667-0050). The Mission's early analysis of "soft" infrastructure led to the development of the Market Information System, described in detail in Annex F. And the Mission's on-going assessment of market participants, as supplemented through specific consulting studies (ref. Abt, 1989), led to development of the Agribusiness Services Center, described in Annex G.

This on-going process has also provided the Mission with an improved analytical framework for assessing Chad's level of marketing system development. For example, the draft AFR Strategy Framework classifies Chad as a "Stage One" country, where the three basic elements of the marketing system are weak. The Mission's assessments, however, suggest Chad has an equal number of characteristics of Stage One and Stage Two countries. It is fully into Stage Two in terms of its policy and regulatory environment, squarely in Stage One in terms of infrastructure, and about half-way between the two in terms of its market participants. The summary of Chad's "fit" between "Stage One" and "Stage Two" is found at Figure H-1 overleaf, and is discussed more in section 2 below.

Figure H-1: Chad's Stage of Market Development

STAGE ONE CHARACTERISTICS

o low population densities with many farmers located far from markets;

Chad's population densities vary considerably, from 0.2 persons/km^2 in the northernmost Saharan prefecture of BET, to 5 persons/km^2 in the Sahelian zone, to 19 persons/km^2 in the Sudanian zone. These low densities create a poor marketing environment.

o producers focus on food self-sufficiency rather than producing for markets, although they may sell small quantities of staple foods immediately after the harvest in order to meet cash requirements;

Estimates of the amount of cereals production marketed range from 10-50 %, with norms assumed at 20 % for the Sahelian zone and 50 % for the Sudanian zone. The amounts later bought back by farmers are not known, so that net portions marketed are not known.

o lack of incentives for farmers to produce marketable surplus and for private businesses to engage in marketing activities;

There are no GOC disincentives for production of surplus in cereals or food crops, except in rice. There are no major disincentives for private businesses to engage in marketing activities. The poor transportation network, high cost of transportation, and inadequate communications network may create economic disincentives. Little is actually known about farmer or trader incentive structures.

o most agricultural commodities ciruclate only in local trading networks and inter-regional trade is difficult and costly;

The channels of distribution for Chad's cereals trade are not known, but it is believed that inter-regional trade is both difficult and costly, primarily due to the poor transportation network.

o State-Owned Enterprises tend to dominate agricultural marketing, especially commerce;

The State-Owned Enterprises that have dominated cotton and sugar commodity sub-sectors are being restructured and rice is being privatized. There are no State-Owned Enterprises engaged in significant cereals or food crops marketing.

o private marketing agents tend to be small in scale and undercapitalized, and they tend to turn their stocks over as rapidly as possible;

The channels of distribution and number and types of marketing agents are not known, but it is likely that the majority are small-scale and undercapitalized.

o there is dilapidated or inadequate infrastructure.

Marketing infrastructure is inadequate.

STAGE TWO CHARACTERISTICS

o the policy and regulatory environment is being liberalized;

The environment for marketing of all food crops except rice and sugar is fully liberalized; the environment for rice and sugar is in the process of liberalization.

o there is a rudimentary extensive marketing infrastructure that serves a majority of the farmers;

Chad's marketing infrastructure for food crops (except rice and sugar) is at least 95% private, and weak. The market infrastructure for rice, sugar and cotton is undergoing restructuring.

o most farmers still process staple foodstuffs for their own household consumption;

o progressive farmers emerge and bring more land under cultivation, apply more inputs to the land, and sell a greater portion of what they produce;

Estimates of the amount of cereals production marketed range from 10-50 %, with norms assumed at 20 % for the Sahelian zone and 50 % for the Sudanian zone. Experience in small area development projects undertaken by PVO's and in the cotton areas demonstrates that when information and technology are made available, progressive farmers emerge.

o inter-regional trade in domestic staple commodities has emerged and links with the international economy are becoming stronger;

Inter-regional trade within Chad is unquantified but may be significant for certain crops. Trade with neighboring states is unquantified but believed to be significant with Cameroon and Nigeria. The constraints include limited availability of market information; the poor transport network; high transportation costs; and limited availability of capital to encourage the active participation of private traders. What cross-border trade exists is primarily contraband.

o the private sector is competing with public marketing agents;

Ninety-nine percent of cereals and food crops marketing, with the exception of rice and sugar, is wholly undertaken by the private sector. The public marketing agents involved with rice and sugar are being restructured.

o specialization is beginning to occur (e.g. transport, storage, processing); and

The trucking industry is specialized, and within the industry some specialization may be occuring. There is no specialization in storage or processing outside of the cotton, rice, and sugar sub-sectors.

o trading networks for consumer goods, especially imported manufactured items, emerge alongside input and output marketing networks.

With the exception of rice, cotton and sugar, there are virtually no input marketing networks. Trading networks for imported manufactured items are quite limited.

This process of assessment has also highlighted the very basic lack of information on Chad's agricultural marketing system which inhibits its progression from one stage of development to another. Until quite recently, Chad's heavy reliance on the cotton sub-sector presupposed a comparative advantage in that crop; when world prices plummeted, planners were caught scrambling for ideas for diversification. Although a number of potential crops for export markets--among them niebe (cowpeas), sesame, and hibiscus--have been identified, no systematic studies have been undertaken to determine Chad's actual comparative advantage for either domestic or export markets. In terms of the main commodities--primarily cereals--already produced, the net amount of production marketed by commodity group is only hypothesized; no empirical research has been undertaken to determine actual amounts or producer incentives to market. In terms of marketing channels, as noted in Annex G, virtually every report on cereals marketing in the last 15 years has carefully copied the same schematic from a 1974 UNDP report; in spite of war, famine, and major demographic changes planners still assume the same flows. Other similar major gaps include the degree and extent of competition at the wholesale level; the types and levels of inter-regional trade, both within Chad and to neighboring countries; actual costs of marketing, particularly related to packaging and transport, and consequent value added (or lost); and effective demand for increased capital for marketing efforts.

The relative importance of these information gaps to improving marketing efficiency commensurate with its level of market development is discussed in more detail in section 3, which provides criteria for assessing potential impact and thus priority for study. Section 4 provides the planned AMTT contribution to improving the GOC's information base on which to make its policy and investment decisions.

2. SUMMARY ANALYSIS OF CHAD'S STAGE OF MARKET DEVELOPMENT

2.1 Policies and Regulations Affecting Marketing Activities

As reflected in Figure H-1, government policies and regulations in Stage One countries are characterized by a lack of incentives for farmers to produce marketable surplus, and for private businesses to engage in marketing activities, and a tendency for State-Owned Enterprises to dominate agricultural marketing. In Stage Two countries, the policy and regulatory environment is being liberalized, and the private sector is competing with public marketing agents. As summarized below, analysis undertaken as part of PP development clearly indicates that Chad is fully into Stage Two in terms of its policy and regulatory environment.

As part of PP development, USAID/Chad commissioned a study of agricultural marketing policies in April-May 1990. The study analyzed Chad's policies and regulations, both formal and informal, affecting agricultural marketing and private sector development, including international and domestic marketing policies and controls. The conclusions of the resultant document "Chad: Agricultural Marketing Policies", (Abt, 1990) are summarized below.

Policies

- **Domestic prices are, in general, determined by supply and demand.** Exceptions to this are rice, sugar, cotton, and a few manufactured goods. The parastatals involved in rice, sugar, and cotton production and marketing are currently being restructured, with the objective of privatization for rice and sugar, and reorganization for cotton. Recently, a system of profit margin controls at the wholesale and retail levels on a number of imported products, including foodstuffs, was lifted.

- Except for licensing requirements, **trade policies are relatively liberal.** The import tariff is moderate for agricultural and industrial raw materials, average for semifinished or manufactures essentials and high for manufactured and luxury products. However, private sector imports of agricultural tools, chemicals, and seeds are assessed a high import tariff, whereas public enterprises and government approved projects are exempt from these tariffs. Import tariffs on transport equipment are also high and contribute to the high cost of transport. The **customs tariffs on both agricultural inputs and on transport equipment are set by UDEAC, the Central African Customs Union, and cannot be changed unilaterally by the Government of Chad.**

- **Low export taxes** on most foodstuffs have promoted exports of vegetables to Europe, although on a limited scale. Limited exports within the UDEAC region exist with possibilities for expansion. However, several marketing constraints associated with infrastructure, rather than policy, would need to be overcome in order to develop a meaningful export sector. These infrastructural constraints include lack of market information, rudimentary marketing technology, lack of appropriate conservation facilities, and lack of access to formal sector credit.

- **Interest rates charged are variable**, ranging from a low of 9.5 percent for "priority industries"--including cooperatives, small and medium scale (SME) industries, and the cotton sector--to 24 percent for short-term working

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capital for commerce and industry. Distribution of bank credit has shifted dramatically over the last five years, from 88.4 percent short-term and 11.6 percent long-term in 1985, to 66.2 percent short-term and 33.8 percent long-term by the third quarter, 1989. In 1985, 57.1 percent of all bank credit was provided the cotton sector, all but 0.4 percent of it in higher interest short term loans. In 1989, 59.8 percent was for cotton, of which about 40 percent was long-term, low interest loans. The GOC's major restructuring of the cotton sector, supported by the World Bank and IMF, has thus constrained availability of institutional credit in spite of generally high interest rates.

Administration and Regulation

- The process of **registering a business is cumbersome and costly**, thus discouraging entry into the market and encouraging the proliferation of the informal sector. Given the GOC's lack of infrastructure for enforcement, its informal sector is not simply the small and micro-enterprises found in most other countries, but includes medium and larger scale activities. Were the GOC to decrease fees and streamline the process, it is likely more businesses would register and its revenues would increase.

- **Access to commercial bank credit is limited.** In spite of lower interest rates for "priority industries", bankers cannot loan to unregistered businesses because of lack of legal recourse in cases of default, thus limiting access to a relatively small number of businesses. Qualifying criteria is strict for registered SMEs and thus the number and amount of loans to this sector is negligible. The banking community attributes this situation to a lack of bankable projects, reflecting limited business planning and capacity.

- The annual business **license tax (patente) discourages expansion** as the rate increases with the number of employees. There are two components to this tax: (1) a fixed duty ranging from FCFA 2,000 to FCFA 292,000 depending on the activity and capital; and (2) if appropriate, a variable portion according to the number of wage earners and the physical resources used. The GOC, under IMF pressure, recently eliminated the additional 7 percent for the Chamber of Commerce.

- **Access to the advantages of the Investment Code**, which offers fiscal advantages to enterprises engaged in transformation activities, **is limited by the complex process of approval**, often requiring several months. In addition,

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the high investment requirements for qualifying under the "Regime Privilegé" are beyond the capacity of most existing enterprises. Access to the benefits of the "Taux Global Reduit" of 5% on imports of equipment is easier to obtain.

- Although the GOC has made some effort to eliminate them, **unofficial transport fees and road blocks exist throughout the country** and increase the cost of transport. The PP team's interviews with truckers indicated that the fees have decreased by approximately 30 percent, but still exist and are still high. While the fees and road blocks are frequently non-governmental, the GOC's inability to effectively eliminate them continues to increase marketing costs.

Several policy and regulatory factors favor the continuing development of private sector agribusiness in Chad. The 1989 Plan d'Orientation reaffirms the Government's policy to promote private initiative. Privatization has already taken place in some sectors: in the transport sector with the abolition of a parastatal trucking cooperative's monopoly, and in the livestock sector with the abolition of the export monopoly held by the parastatal SOTERA. In addition, privatization of the parastatal SIMAT, which produces agricultural tools is underway, and future privatization of the parastatal OMVSD, which is engaged in the production and marketing of rice, is under active study. Finally, the Government intends to follow attractive fiscal and credit policies aimed at promoting SMEs and microenterprises. Some promotional policies are encouraging access to the advantages of the investment code, and flexible commercial interest rates.

In summary, with the exceptions noted above, the recent policy study found Chad's policy and regulatory environment to be generally propitious for agribusiness and agricultural marketing: relatively liberal trade policies; a movement toward free market prices; privatization of public enterprises; and elimination of public sector monopolies. A.I.D.-supported interventions to further improve the environment are discussed in section 3.

2.2 Marketing Infrastructure

Chad's marketing infrastructure is generally undeveloped and inadequate, and falls firmly into Stage One of the AFR scale. The most visible, and to all observers the most important, type of infrastructure is the road network and its primary user, the trucking industry. Roads and the trucking industry are thus summarized in section 2.2.1, followed by a brief discussion of other infrastructure elements, categorized as "hard" or "soft" following the AFR framework.

2.2.1 Roads and the Trucking Industry. The principal means of moving cereals to major consumption centers is believed to be vehicles. All studies reviewed indicate that the extremely high costs associated with transport account for a major share of marketing costs. Donors and the GOC have undertaken a number of initiatives in recent years to try to reduce that share.

Chad's highway network consists of 7,300 km of classified roads and 24,000 km of tracks in rural areas. The highway network deteriorated considerably through years of neglect, particularly during the war. Out of 300 km of paved road before the war, only about 30 km are still in good condition. The World Bank and other donors are currently financing the rehabilitation of 3,800 km of roads. As mentioned earlier, A.I.D. is providing road maintenance and training. These programs will reestablish road links between the country's principal markets and will greatly facilitate transportation of goods. Rehabilitation is targeted for completion in 1993.

The major policy reform under the World Bank-financed Transport Sector Adjustment/Investment Strategy (February 1988) was the abolition of administered tariffs and the road transport monopoly held by the Coopérative des Transporteurs Tchadiens (CTT). This was accomplished in 1989. In the same year, the Bureau National de Frêt (BNF) was created under the Ministry of Transport and Civil Aviation (MTAC) as a non-profit clearinghouse to make available information on demand and supply provided by truckers and shippers so that contracts can be freely negotiated.

A reference price spread for freight for each of nine categories of goods and routes is set as a guide for contract negotiation, but is not mandatory. This system is to be eliminated at the end of 1990. Some transporters have expressed their dissatisfaction with the new system, which they believe benefits consumers; others feel that the new system is more efficient. BNF reports that, in general, costs of freight have decreased between 15 percent and 20 percent, which is a satisfactory result. The overall impact to the economy is not known.

Although the GOC has phased out the CTT monopoly and is supporting a free price structure, the private truckers suffer from competition from the donor community. The humanitarian aid to Chad following the war and during the 1984 drought involved food aid as well as transport assistance. Since 1986, the donors have engaged in a process of phasing out or reducing the size of their truck fleets, which consisted of 340 vehicles in 1988. The UNDP and FAO transferred their entire fleets to the Government, and UNICEF has transferred a part of its fleet. The UNDP has a three year technical assistance project to maintain this new GOC fleet. The fleet, which was originally used to transport food

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aid, has also been used to transport other merchandise. As these trucks receive subsidized maintenance and parts, truckers complain of unfair competition. At present, however, the fleet operates mostly on routes to the remote region of BET (Borkou-Ennedi-Tibesti), where few private truckers operate.

In the not-too-distant future, the World Bank-financed micro-refinery for Chadian oil will be producing enough processed petroleum to satisfy all of Chad's energy needs, except for aviation fuel (avgas). Although planners have undertaken the requisite benefit/cost analyses to determine that the micro-refinery is viable, decisions regarding domestic fuel pricing, which could change freight costs dramatically, have not been seriously considered.

In summary, donors and the GOC are cooperating to improve the road infrastructure, and the transport industry has been partially liberalized. The impact of the latter, in terms of marketing costs and potential growth of the industry, is unknown.

2.2.2 Other "Hard" Infrastructure Elements. Chad has no railroads or ports. Other means of transporting agricultural commodities include animals (mainly camels and mules) and carts, for short distances, and small boats (pirogues) for longer distances. The profitability of these means for transporting cereals compared to that of motorized vehicles has not been studied. The 1988 DAI study suggests that animals could be a more economical means of transportation for certain market links, and it is known that pirogues are a common means of moving significant quantities of contraband. The potential for development of legal river transport has not been well studied.

Air transport is not well developed, and the potential for air freighting low weight, high value commodities has not been well studied. Under the Bank's Transport Sector Adjustment Program, rehabilitation of Air Tchad is planned. The performance contract includes measures to eliminate its operating deficit. The program includes rehabilitation of the airports of Sarh, Moundou, Abeche, Am Timam, Bol, and Mao.

Electric power and water supply facilities are run by parastatal organizations; water supply is satisfactory, and relatively cheap, while electrical supply is variable and reported to have the highest unit cost in the world. Assuming satisfactory negotiations between the World Bank and the GOC on the micro-refinery, factor costs for electricity should sharply decrease by mid-decade.

Storage facilities for cereals are adequate both on the farm and at the regional level, for emergency stocks. There is an

increasing need for improved storage and/or preliminary processing of produce from the growing horticulture sector, however.

Chad's agricultural sorting, and grading facilities for all but cotton, sugar, and rice are either non-existent or rudimentary at best. Processing facilities for these commodities are also well developed, although the restructuring and privatization activities underway are reducing their dominance and opening up possibilities for more artisanal efforts. Processing of cereal grains is more developed that for other products, with small motorized mills found throughout the country. As discussed in Annex G, the reopening of Chad's one large mill, the Grand Moulins du Tchad, is under consideration by a private Chadian businessman. Other processing operations are equally small-scale. Annex G includes a more detailed discussion of the processing industry overall.

2.2.3 "Soft" Infrastructure. Neither the Mission nor the PP team analyzed Chad's full range of "soft" infrastructure in any depth, focussing instead on two identified constraints: market information services and financial services. These have been identified in numerous A.I.D., other donor, and GOC studies over the past five years as being key constraints to market efficiency.

The nascent market information service (MIS) being developed by the GOC is fully discussed in Annex F. As described therein, and in numerous other sections of the PP, given the generally liberal policy environment and the dominance of private sector market agents in the agricultural marketing system, the Mission and the Design Team believe Chad is "intervention ready" for the MIS.

In terms of private financial services, Chad does not have a particularly supportive policy and regulatory environment influencing formal financial services for the private sector, but neither is it a particularly strong disincentive. The bulk of the financing for private enterprise development comes through the informal financial sector, which is virtually unstudied. Each of these financial service sectors is summarized below.

Formal Financial Services for the Private Sector

The formal financial services sector is essentially superficial. Aside from financial resources from the Banque des Etats de l'Afrique Centrale, or BEAC (some $ 110 million 1988), which serve to sustain priority sectors determined by the Government, the commercial banks have mobilized their basic resources from short term deposits. More than half of their

deposits originate from 20 clients, mainly public enterprises and international organizations. Whether this situation has resulted from the low interest rate on savings--currently only 4.5 percent--or a weak capacity to save is unclear; it is likely to be a combination of the two.

In addition to BEAC, two commercial banks, the Banque Internationale pour l'Afrique au Tchad (BIAT) and the Banque Tchadienne de Crédit et de Dépots (BTCD), currently operate in Chad. As stated in section 2.1, credit to the private sector is extended mainly to a few large enterprises, notably COTONTCHAD and STT, the textile mill. Two lines of credit worth $ 5 million, from the European Community and the French, earmarked for SMEs through the commercial banks, were never utilized, except for three loans to large enterprises.

The USAID-supported Volunteers in Technical Assistance (VITA) credit program has, to a limited degree, compensated for the absence of financing to SMEs, including small agribusinesses. In its five years of operation, VITA has granted 185 loans averaging $6,000 and generated some 600 jobs, indicating a very low rate of market penetration. About 33 percent of the loans were in the manufacturing (primarily artisanal) and agribusiness sectors and 17 percent in commerce. The loan default rate is estimated at 6 percent. The costs of such an operation are high, as are many programs of this nature, and thus self-sufficiency is an unrealistic goal, particularly due to the low rate of interest the GOC allows it to charge (12 percent) with respect to market rates (24 percent). The program is opening a branch office in Moundou by the end of this year.

Additional sources of formal financing for agribusiness are available through the GOC's ONDR extension program in the cotton sector, SODELAC's extension program in the Lake Region, and OMVSD in the rice sector. Credit assistance through these programs is very limited, and mostly in the form of seeds and tools. Marketing activities are generally excluded from these programs. There are a few credit programs linked to specific PVO-financed projects such as ORT, OXFAM, and SECADEV which have been relatively successful.

The Government Plan d'Orientation emphasizes the role of the Fonds d'Intervention Rurale (FIR), an institution created in 1985, attached to the Ministry of Food Security. The main objective of this institution is to promote a rural savings and loan system by encouraging the organization and participation of village groups. However, after five years of existence, this program still suffers from the absence of a well defined strategy and a shortage of funds.

The most promising efforts toward sustained development financial institutions are savings and loans programs directed at local organizations through two Chadian NGOs: Association d'Appui aux Initiatives Locales de Développement (ASSAILD), and Caisse Rurale d'Epargne et Credit aux Logones (CREC). The main objective of these programs is to support the efforts of local organizations engaged in community development activities by making available credit through savings, and by providing technical assistance and follow up. Eventually, the programs envisage promoting cooperatives or associations of groups, a system which could facilitate marketing of agricultural products.

ASSAILD is supported by 10 European NGOs and operates in the prefectures of Logone Occidental and Oriental. Seventy one groups (4300 individuals) are members of ASSAILD, and over 50 of them have received loans, some of them twice. The credit ceiling is FCFA 500,000 per group for a first loan, with the group providing 10 percent collateral from its own funds. The ceiling for a second loan is FCFA 100,000 with 15 percent collateral from its own funds. Loans are mostly for development activities, including building of village cereal banks. The rate of reimbursement is quite good; as the program is in place only for two years, however, it is too premature to evaluate it. Thus far, the ASSAILD program does not have a savings component, but eventually expects to include it.

CREC's program is similar to ASSAILD's, except that it also includes a savings component. CREC operates mostly in the Moundou area, with 64 member groups (1856 individuals). Loans are mostly for production.

Informal Financial Services

Very little is known about informal financial services and capital markets in Chad:

> Formal credit servicing agricultural and livestock production in the Sahel has been well documented. Public organizations (e.g. projects and development banks) and, to a lesser extent, private banks granting such credit to producers have been keen to evaluate the *ex post* effectiveness of their loans. Informal credit to aid production has been less well studied. Formal credit for trade in these products in the Sahel has received less study. The public sector tends to avoid trade finance. Private sector credit is often available for non-agricultural trade. It may not be subject to rigorous *ex post* evaluation, however, and results are not synthesized in widely circulated literature. Even less is known about the role of informal credit in trade. (Cook 1990).

The statement above is from the Ohio State University Sahel Rural Finance Project, which supported a non-random sample survey of 37 traders, of whom 18 were in Chad and 17 in Niger, over a two week period in 1990. The study identified a number of types of informal loans, including family assistance and reciprocal loans without interest, money lending with interest, profit sharing ventures, and commodity loans. The sizes of the loans ranged from about $40 to $45,000 in Chad, and implicit monthly interest rates averaging 13 percent. (Cook 1990) Few other studies have looked at such transactions in such depth, but given the size of the sample, no extrapolation is possible.

A report undertaken by the VITA/PEP project on credit and other sources of financing for the informal sector, including those with and without interest. The VITA report states that interest rates range from 50 to 100 percent from money lenders, although no term is given. More traditional forms of financing include: "azouma", which is a social occasion for the specific purpose of fund-raising, and carries only social interest; "pari-vente", which refers to associations which hold social events to raise funds; "tontine", which are mutual savings and loan associations; and several other revenue-generation activities. Many of these are mentioned frequently in the literature, but no data exist as to their prevalence or size.

The majority of wholesalers and medium-scale entrepreneurs interviewed by the PP team stated flatly that they avoid the banks due to high interest rates. As evidenced by their current stocks, however, they have found financing somewhere. Of those interviewed, most obtained financing through family or friends; again, levels and prevalence are not known.

2.3 Market Participants

Chad's private sector market participants fall somewhere between Stage One and Two of market development; as stated earlier, government market participants are rapidly being eliminated. Annex I to this PP, the Social Soundness Analysis, provides a detailed discussion of market participants in Chad. Annex G, the Agribusiness Support Center, described agribusinesses in particular. Both annexes conclude that while empirical data are scarce, what is known enables planners to proceed based on two key assumptions: (1) that market participants will respond to market signals, specifically improved market information; and (2) that market participants have generally low business and technical skill levels. Those key assumptions have driven the design of the MIS and ASC project components.

Of importance is the fact that the market is essentially bifurcated. Large public, mixed and private entities have

historically dominated a few commodities: COTONTCHAD for cotton, SONASUT for sugar, and OMVSD for rice. Other market participants, for these and other commodities, are relatively small scale, with the possible exception of milling and bakeries. One key information gap on market participants, then, is a better understanding of the number and types of firms in the marketing chain, by commodity, that link the numerous smallholders to these large, easy to identify industries. Given the on-going reorganization of the cotton sector and the future demise of OMVSD, the impact on input industries (fertilizer, chemicals) and on primary processing (grading and sorting) needs to be determined.

The analyses also highlight an important group of market participants which have frequently been by-passed by development activities: Chadian women. A recent FAO household survey in N'Djamena indicated that approximately 26 percent of N'Djamena's households are women-headed; while figures are not available for rural areas, they are expected to be equally significant. Ninety-one percent of women who work outside the home in N'Djamena are self-employed, and the majority of them in retail trade in unprocessed or semi-processed food. They are thus key market participants in the agricultural marketing system.

The most important activities of rural women are agriculture, livestock, fishing and handicrafts. In the rural areas women participate in 80 percent of the production activities, while they do the totality of the activities of transformation of agricultural, livestock, and fishing products into foodstuffs for family consumption or for sale. All these tasks are usually carried out using rudimentary, inefficient technologies which consume an important part of their time and energy. Case studies report considerable losses in marketing and transformation activities.

The usual place of sale or purchase of products is daily or weekly markets. These are frequently quite far from certain villages. Thus, women travel long distances daily on foot, by mule, by camel, or by cart or truck.

The basic problems in women's development are a lack of resources and business skills. Some of the solutions recommended are provision of technical and financial support, promotion of collective work and collective purchase groups, and research and dissemination of appropriate technologies.

There exists a mass of improved technologies developed for women, but these have been limited and localized. Women do not have access to them for lack of information, technical advice, or financial means. Institutional credit is generally not accessible to women. In this situation women have tried to

organize themselves, but have encountered technical and financial constraints difficult to overcome.

Efforts to disseminate new appropriate technologies are being made under the 1987 "Promotion des Technologies Appropriées pour les Activités Socio-économiques des Femmes" project funded by UNDP/UNIFEM. The project is to develop six technologies to be tested in five villages around Sarh and then sold to women under a credit scheme. Present efforts concentrate on locally produced threshers of millet, dehullers for peanuts, and manual grinders. However, as the project relies on raw material imports, it is questionable that the informal sector could secure these inputs after the life of the project.

The Government recognizes the need to design a strategy directed at alleviating the socioeconomic conditions of women. However, efforts to do so have been hampered due to a lack of qualified personnel and financial resources of the agencies involved. Some NGOs in collaboration with the Ministry of Social Affairs and Women's Promotion (MSAPW) have become interested in seeking solutions to the economic constraints faced by women, however, most programs have been localized. A more comprehensive strategy to address women's roles in marketing systems is needed.

3. PRIORITIES FOR POLICY AND MARKETING STUDY AND ANALYSIS

Analyses similar to those summarized above led the GOC to an early determination that implementation of a market information system (MIS) in Chad could have a significant impact on the economy, given the preponderance of private market agents and the dispersed and disintegrated nature of domestic markets. Earlier project development documents, and the work of the PP Design Team, support this decision. GOC actions to date, and the proposed AMTT support to the MIS, are described in Annex F. Although Chad's "hard" infrastructure is firmly in a Stage One mode, it is believed that the private sector will respond to price signals and that significant impact will result from improving its "soft" infrastructure through the national MIS.

The concept of "significant impact" is defined herein **as positive and sustainable change in the national economy and the lives of Chad's poor majority.** The MIS, for example, will have an immediate impact as spatial and temporal arbitrage occurs, which will affect the national economy by equalizing supply/demand imbalances and lowering marketing costs. It will affect the lives of Chad's poor majority by decreasing (or stabilizing) consumer costs and increasing (or stabilizing) producer prices. In that recurrent costs for its maintenance are only minimally above current data collection costs, it is considered sustainable.

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Neither the Mission nor the PP team have identified other key market elements about which enough is known that change could sensibly be effected in the short-term, except road infrastructure, which A.I.D. is already supporting.

In terms of establishing priorities for potential future support, the PP team assessed each "problem" identified in section 2 above against three questions:

1) Is the problem well defined?

2) Have alternative solutions been analyzed? and

3) Of the alternative solutions, which would have the most significant impact in the short-, medium-, and long-term?

Based on these three questions, the problem areas summarized in section 2 sort into three basic categories:

1) Precisely defined policy and regulatory bottlenecks for which clear solutions have been generally identified.

Of interest in this category are simplifying the business registration system, revising the license (patente) tax so that it is not regressive, and streamlining the process of gaining access to benefits of the Investment Code. Although data are often incomplete, there are believed to be less than 2,000 registered businesses in Chad, and at least 50 times that many unregistered. Given the tiny size of Chad's formal private agribusiness sector, none of these actions would yield significant impact in the short-term. Because the actions are relatively simple for the GOC to implement, however, and because their potential longer-term impact may be significant as Chad's marketing system evolves, the Design Team recommends that the Mission encourage the GOC to implement them without delay. Section 4 proposes that the two simplest, the business registration and Investment Code processes, form Conditions Precedent to Subsequent Disbursements under the project. Revising the patente, which is being studied by the Ministry of Finance and the IMF teams as part of its overall review of the fiscal administration system, should be a Covenant, with A.I.D. prepared to provide consulting assistance if needed. This is discussed further in section 4.

2) Precisely defined policy and regulatory bottlenecks for which alternative solutions and potential impact are more difficult to assess.

This category includes the UDEAC-influenced high import tariffs on agricultural tools and equipment, agricultural

chemicals, and transportation equipment. Given the rapidly changing structure of the cotton and rice commodity systems, which have been the primary markets for tools, equipment, and chemicals (and fertilizer, which was liberalized last year), the effective demand for such commodities and thus potential impact of decreasing tariffs is not known. The effective demand for lower tariffs on transportation equipment, including spare parts, is believed to be quite high. Because any solution to the problem must be implemented through the UDEAC forum, and cannot be unilaterally decided by the GOC, both potential impact and alternative solutions must be carefully assessed. The World Bank and IMF will be working with UDEAC in the near future, and the special problems of UDEAC's landlocked members are on the agenda. The Design Team recommends that the Mission, through use of covenants and possible specific consultant studies, encourage the GOC to keep the tariff issues in the forefront of its discussions. This is discussed in more detail in section 4.

3) Generally defined bottlenecks encompassing policy, infrastructure, and market participants, which are much more complex to understand and to change, but if changed could have a significant short-, medium- and long-term impact due to complex linkages throughout the economy.

Areas of interest in this category include the transport industry, formal and informal financial services and capital markets, linkages within specific commodity systems, and the role of women in agricultural marketing. The Design Team recommends a number of initial studies, with funds provided for more in-depth follow-up, to better define the parameters of the problems and to help assess alternative solutions. These are further defined in section 4.

One outlier in this categorization is the continuing presence of ex-official roadblocks and fees, which continue to delay transporters and increase transport costs. The GOC has already decreed that all such activity should cease, and the Surete National (National Police) are undertaking spot-checks to catch offenders. The Team recommends that the Mission include attention to the continuing problem as a covenant, and assess possible solutions as part of the recommended transport industry study.

It is expected that as the initial round of actions, due to covenants, and studies occur, additional potential study topics may be identified. **The key criteria for judging the priority of the studies is the potential for significant impact--i.e., a positive and sustainable benefit to the national economy and to Chad's poor majority--on the agricultural marketing system.** The

process for applying this criteria in a collaborative fashion is discussed in section 4.

4. PROPOSED AMTT ASSISTANCE TO POLICY AND MARKETING ANALYSES

4.1 Objectives and Basic Structure

The primary objective of the AMTT Policy and Marketing Analyses component is to enable to GOC to use improved information to assess the impact of policy alternatives. The component will thus provide funding for studies which meet the following criteria:

1) The proposed study will provide basic information on key elements of the marketing system which are currently not well understood; and/or

2) The proposed study will provide identification of key policy, regulatory, and "soft" infrastructure constraints to efficient functioning of the system; and/or

3) The proposed study will provide analysis of alternatives to alleviate constraints, including analysis of the impact of the various alternatives.

Each of these three criteria will be assessed against the overarching criterion of the potential for significant impact of alleviating the constraint.

The component will be managed on a day-to-day basis by the Chief of Party of the AMTT contract team. This person will be a Senior Policy Analyst with academic credentials in agricultural economics and extensive prior experience in agricultural policy analysis in developing countries. S/he will base at the AMTT project office, and will liaise frequently with USAID/Chad and the Director General of Agriculture regarding the conduct and outcomes of specific studies and analyses. S/he will have the leading role in on-going policy analysis under this project, and will personally manage some of the studies. S/he will also devote a significant amount of time to the management and quality control of short-term TA (64.5 pm expatriate, 64.5 pm Chadian paid by A.I.D., 34 pm Chadian paid by the GOC, and 129 pm Chadian enumerators/research assistants paid by A.I.D.) conducting studies and analyses.

With the possible exception of one start-up consultancy, expatriate TA for the studies will be provided under the institutional contract. Chadian TA will be sought from a number of public and private sector sources. The PP team carefully assessed the capabilities of several GOC research and studies offices to determine if any one could be developed to assume

overall responsibility for the component. The closest in terms of existing mandate and capabilities is BIEP. BIEP is a public office (not a line agency) under the MARD which receives core funding from the GOC and TA from UNDP/FAO; it charges market rates to other donors for all its work. It has 17 professionals, including three agricultural economists, two economists, and two agronomists, and is fully equipped in terms of information processing and logistic equipment to conduct the short-term studies foreseen under the project. It has conducted a number of studies in the agricultural sector, including commodity sub-sector studies on rice and wheat, and a preliminary assessment of fruit and vegetable production in Chad.

BIEP is thus a logical choice for collaboration on many of the studies planned under the project. Given BIEP's broad mandate and its full agenda for the next two years, however, the Mission is reluctant to designate BIEP as the lead agency for the Market and Policy Analyses component. Subject to firm availability of key personnel, BIEP will be considered as a leading candidate for collaboration on all studies undertaken on a case-by-case basis. It will not, however, be the only candidate, and may be asked to contribute only one or two specialists to multi-organizational teams.

Other potential public sector collaborators include the studies and planning office of the Ministry of Transport and Civil Aviation, and professional staff of the Women's Promotion office. The private Chadian firms and consultants described in Annex G will also be considered in each case.

In order that the component foster a continuing process of information collection, analysis, dissemination, and possible application, however, it is important that the analyses not be identified and undertaken by short-term consultants and then left in a library for the next consultant to read. It is thus recommended that USAID and the GOC form a Policy Oversight Committee, both to determine the topics and levels of effort for the studies, and to ensure dissemination and application of results. Given the focus on agricultural marketing, on the GOC side the Committee should include senior-level representatives from the following ministries: Agriculture and Rural Development, Food Security and At-Risk Populations, Plan and Cooperation, and Commerce and Industry. Additional representation from the Ministry of Finance, and of Transport and Civil Aviation, may be sought for specific topical studies. USAID/Chad representation would include the Director or his designee, the Agricultural Development Officer (ADD), and the Program Economist.

The contract COP/Senior Policy Analyst will develop annual workplans for the component which will be reviewed and approved

by the Committee each year. Thereafter, the Committee will meet at least once quarterly to review findings of completed studies, to assess progress of studies in process, and to propose or consider topics for future studies. Where findings appear significant, the Committee will develop and sponsor appropriate venues for widespread dissemination and discussion, including seminars, roundtables, and similar events. Given the key topics identified for further study and analysis in section 3 above, by the end of the project the following will be achieved:

- The GOC will have instituted an improved regulatory environment for agribusiness, including a simplified business registration process, simplified access to Regime A of the Investment Code, and a revised patente.

- The GOC will have a strategy for improving private transport industry efficiency which has been developed in collaboration with private transporters.

- The GOC will have a strategy for enhancing women's roles in agricultural marketing systems.

- The GOC will have detailed analyses of the behavior, incentive structures, and expectations of private investors,

The preliminary Market and Policy Analyses implementation plan is summarized at Figure H-2. A more detailed discussion follows.

4.2 Implementation Plan

USAID/Chad, working closely with the Director General of Agriculture (DG/AGR), will undertake a number of actions prior to the arrival of the main TA team, which is planned for June, 1991. These are described in sub-sections 4.2.1 and 4.2.2 below. Section 4.2.3 summarizes objectives of proposed studies to be conducted under the main TA contract. Illustrative Scopes of Work and estimated budgets form attachments to this annex.

4.2.1 Negotiation of the Project Grant Agreement (ProAg) Conditions and Covenants. Based on the preceding discussions, the following conditions and covenants related to the Policy and Market Analyses component are recommended for inclusion in the ProAg:

Conditions Precedent

First Disbursement

1. Prior to any disbursement under the Grant or to the issuance by A.ID. of documentation pursuant to which

disbursement will be made, the Grantee will except as parties may otherwise agree in writing, furnish to A.i.D., in form and substance satisfactory to A.I.D.:

A. A statement of the names and title of the persons who will act as representatives of the Grantee as defined in the appropriate section of the Grant Agreement, together with a specimen signature of each person named in such statement.

B. A statement of the names and titles of five senior government officials who will represent the GOC as the Bilateral Policy Oversight Committee for purposes of the Grant.

C. A statement that the Bilateral Oversight Committee (which will include representatives from A.I.D.) will meet not less than once per quarter at the request of A.I.D.

[The purpose of the Committee is to assure that topics chosen for project focus meet the criteria established in section 4.1 above (first paragraph) and that findings of analyses be disseminated and discussed in appropriate venues at appropriate levels of government. In negotiating this CP, it is important that USAID stress that the GOC representatives must be senior decision makers but also must be available to meet not less than quarterly to review conclusions of studies undertaken and discuss potential future activities.]

D. A statement that the GOC intends to revise and streamline procedures for registration of all businesses within one year of the date of this agreement. The revised procedures will allow businesses to be registered through a one-step application process, at one GOC office, at a cost lower than current practice.

[This process of revision will involve, but not be limited to, review and possible revision of the following laws and regulations: Ordinance 006/PR/84 of December 4, 1984 on the statute for commercial trade; By-Law 11/MC1/SE/DG/DC/DC/89 of July 5, 1989, on the right to obtain administrative approval to operate a business; Decree 168/PR/MEC/84 on the process of registering businesses run by foreigners; and Decree 282/PR/MCI/89 and Decree 113/ET on the process of importing and exporting.]

[The key office to implement these CP's will be the Direction de Commerce, which is aware of the need to reduce the number of steps and has expressed a willingness to study the possibilities. As enumerated in the May 1990 Abt study, other organizations currently involved in the process are

the commercial banks, the Ministry of Justice, and the Direction des Impots. For foreign-owned businesses, the process includes a stop at the Mayor's office (if the business is in N'Djamena) or the local Prefecture.]

E. A statement that the GOC intends to revise its procedures for granting access to the benefits of Regime A of the Investment Code within one year of the date of this Agreement.

[Specifically, the Mission should push for elimination of the required approval of the Investment Commission, which involves a number of ministries, in favor of simple approval of the Technical Commission, which is presided over by the Minister of Commerce and Industry.]

Subsequent Disbursements:

Prior to disbursements under the Grant after [one year from date of Agreement], or to the issuance by A.I.D. of documentation pursuant to which disbursements will be made, the Grantee will, except as the Parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D.:

A statement verifying that the GOC has:

A. Revised procedures for registration of businesses so that registration can be a accomplished through a one-step application, to one GOC office, at a price lower than current practice.

B. Revised procedures for granting access to the benefits of Regime A of the Investment Code.

[At the GOC's request, USAID/Chad should be prepared to provide one month of short-term consulting assistance to the Direction de Commerce to assess the potential impact of these measures on GOC revenues. This would be provided as a pre-implementation expense, using project funds and accessing the TA through an Indefinite Quantity Contract (IQC]. A draft illustrative Scope of Work for such a consultant is found as Attachment H-3.]

Covenants

The Grantee will confirm:

(a) that it will undertake a review and, if indicated, revise its annual license tax (patente) so that it does not

impose proportionally greater taxes on businesses which employ greater numbers of personnel.

[The terms of this covenant should form part of USAID/Chad's on-going policy dialogue with the Ministries of Finance and Plan, and its collaboration with the IMF, which is reviewing the GOC's fiscal administration and fiscal system. If the GOC and/or the IMF so request, the Mission should provide consulting services under the project to assess the potential impact of this measure on GOC revenues. The Scope of Work would be developed by the COP/Policy Analyst in collaboration with the IMF during the first year of the project. Funding for up to two person months of TA in FY 1992 for this purpose.]

(b) that it will undertake a review of its own tariff structure and maintain dialogue within UDEAC regarding the need to decrease tariffs for import of the following commodity categories: agricultural tools, agricultural inputs, transport vehicles (diesel), transport vehicles (gasoline), and spare parts for transport vehicles.

[The terms of this covenant should also form part of USAID/Chad's policy dialogue and its collaboration with the World Bank, which is supporting a regional adjustment program for the UDEAC member countries. The program's objectives include improving the efficiency and competitiveness of the UDEAC countries' manufacturing sectors by better integration and freer access to the region's markets. The program will include measures to harmonize the external tariffs and taxes as well as simplifying and harmonizing customs, transit, and transport procedures. Should the GOC or the World Bank so request, USAID should provide consulting assistance to determine the current revenues derived by the GOC from these tariffs, with the Scope of Work for such assistance to be developed by the COP/Policy Analyst in collaboration with the Bank. Funding for one person month of TA in FY 1993 is provided for this purpose, although the consultant should be brought in earlier, if requested.]

[The AMTT project will fund detailed studies of the effective demand for these items in a liberalized environment in the specialized transport and commodity sub-sector studies discussed in section 4.2.2 and 4.2.3 below.]

(c) that it will intensify its efforts to eliminate all roadblocks and unofficial transport fees which are prevalent in the country.

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[USAID is by law not able to provide direct assistance to the Surete National, but could provide limited funding for national awareness campaigns. Alternate means of discouraging such roadblocks and fees will be investigated as part of the transport industry study.]

Special Covenant

Both parties agree that under the Agribusiness Support element, new technologies to reduce post-harvest loss and preserve foods as well as the introduction of new cultivars will be promoted only if found to be promising and if subsequent IEEs find no environmental impact.

4.2.2 Contracting and Conduct of Initial Studies. The process of advertising for and negotiating the main technical assistance (TA) contract is expected to take six to eight months, with the TA team targeted for June 1991 arrival. As noted above, USAID/Chad should be prepared to provide separate and early consulting assistance through an IQC to assist the GOC in meeting the CP's for Subsequent Disbursement concerning business and Investment Code registration.

The Design Team has also identified one additional study that should be undertaken as soon as possible, a Rapid Appraisal (RA) of key horticultural crops marketing systems. Production is focussed in three areas of the country: Chari-Baguirmi, around N'Djamena and Karal; the eastern Sahelian zone, around Abeche; and the western Sahelian zone, encompassing parts of Kanem and Lac prefectures. Data that do exist, primarily from a small survey undertaken by Agricultural Cooperative Development International (ACDI), demonstrate a fragmented market but high elasticity of demand.

The purpose of the RA of these vegetables is twofold: 1) to provide a data base and improved market typology for early inclusion of key horticultural crops in the MIS; and 2) to identify specific bottlenecks--policy and regulatory, infrastructure, behaviors of market participants--that inhibit functioning of the commodity marketing sub-systems. Information obtained will be important to the early work of the Agribusiness Support Center as well.

The study meets the criteria for funding under this component as follows:

1) The proposed study will provide basic information on key elements of the marketing system which are currently not well understood. As described in Annex F, there have been no systematic assessments of national horticultural marketing. BIEP has undertaken one global study on

irrigated fruit and vegetable production, which is useful as a starting point. Very little about the rest of the commodity sub-system is understood.

2) The proposed study will provide identification of key policy, regulatory, and "soft" infrastructure constraints to efficient functioning of the system. This is one of the key purposes of an RA.

3) The proposed study will provide analysis of alternatives to alleviate constraints, including analysis of the impact of the various alternatives. Of particular interest to the AMTT project will be a rank-ordering of the contribution of various factors to the sub-system. Is varietal improvement of higher potential impact than improved storage and packaging? Is there a greater demand for fresh produce or dried? Does the demand differ by market? etc.

The potential for significant impact is considered high, particularly as the information is critical to addition of horticultural crops to the MIS. Accurate and timely reporting on prices of key horticultural crops will serve to stabilize supply across time and regions, thus benefitting producers and consumers. The information is also of importance to planned activities of the ASC, to identify potential for increased links to agribusiness for processing and possible export.

A draft Scope of Work for the RA is provided as Attachment H-4. It is recommended that USAID undertake the study either through a buy-in to an appropriate centrally-funded project or through an IQC.

4.2.3 Implementation of Market and Policy Analyses. The COP/Policy Analyst is expected to arrive in Chad in June, 1990. Within 90 days of arrival, in collaboration with various members of the Policy Oversight Committee, s/he will develop the first annual workplan for the Policy and Market Analyses component, which will include, but not be limited to, the following:

Highest Potential Significant Impact

- Conduct of a preliminary study of **Private Capital Markets and Financial Services.** This preliminary study will establish the parameters of the formal and informal services sector for future, in-depth, studies. Of particular importance will be an assessment of GOC policy and regulations which promote or inhibit capital formation and investment. Funding is provided for more extensive additional study and analysis based on the recommendations of the preliminary work. The background and rationale for

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this preliminary study, and a draft Scope of Work, is provided as Attachment H-5.

- Conduct of a study on the **Contribution of the Transport Industry to Agricultural Marketing in Chad**, including but not limited to trucking and other vehicular traffic, animal cartage, river transport, and air transport. Of particular importance will be the establishment of factor costs for transport of specific priority commodities over specific market links, and the preliminary quantification of losses per commodity in transport. Funding is provided for more in-depth study of particular problem areas identified in the course of the study. The background and rationale for this preliminary study, and a draft Scope of Work, is provided as Attachment H-6.

- Conduct of a study on the **Contribution of Women to Agricultural Marketing in Chad**, including but not limited to an appraisal of the proportion of agricultural value-added currently attributed to women's processing, marketing, transporting, and trading (wholesale and retail) of specific commodities by ethnic/religious group and/or region, and recommendations as to specific actions necessary to increase this value. Funding is provided for more in-depth study of particular problem areas identified in the course of the study. The background and rationale for this preliminary study, and a draft Scope of Work, is provided as Attachment H-7.

- If indicated through discussions with the GOC and World Bank, provision of consulting assistance to the GOC to assess the **potential impact of tariff reductions** on agricultural tools and equipment, fungicides and pesticides, and transportation equipment. The Scope of Work for such assistance will be developed by the COP/Policy Analyst in collaboration with the GOC, USAID/Chad, and the World Bank. It would be more useful to wait until the detailed analyses of the transport industry, and experience of the ASC with input suppliers, are available as background for the impact analysis, but if the GOC is ready to move, USAID should support it.

- Conduct of a long-term, in depth **Study of Millet and Sorghum Marketing Systems in Chad.** There are numerous RA's and area specific studies on sorghum and millet production and marketing in Chad, but as stated earlier, all draw upon a schematic presented in a 1974 UNDP study as the basis for analysis of channels of distribution. Because these are the primary commodities produced by the majority of Chad's farmers, and because they account for over one-fourth of GDP, it is essential that the marketing systems are better

understood. A very preliminary Scope of Work to establish budget levels is presented as Attachment H-8; the COP/Policy Analyst will undertake a detailed review of the literature and develop the full terms of reference, with home office assistance for research methodology, during the first 6 months of the project.

Moderate Significant Impact

- Provision of follow-on consulting assistance as recommended in the horticultural crops RA; scope and levels of such assistance to be determined.

- Conduct of other commodity studies, either rapid appraisals or more in-depth, if criteria are met. Particular importance will be attached to critical constraints such as post-harvest losses in the conduct of each commodity study.

The studies outlined above, including follow-up, form a full research agenda for at least the first three years of the project. Limited funding is provided for additional topics during the first two years, as emphasis should be placed on working with the GOC to utilize the findings of the initial studies for informed policy and regulatory reform, and possible revised public resource allocation. In this regard, modest funding is provided for limited short-term study/observation tours for senior officials to supplement studies with first hand observation of experience elsewhere.

The project's Mid-Term Evaluation, planned for second quarter FY 1993, will analyze findings of the studies to date and provide recommendations for revising the criteria and for additional topics for the remainder of the project. Of importance will be an assessment on the use of the studies by the GOC. It will also closely examine the potential for additional A.I.D. project or non-project assistance to promote policy or regulatory reform, based on information generated as of that time.

The summary implementation schedule for the component is presented as Attachment H-1. A Draft Scope of Work for the COP/Policy Analyst is found as Attachment H-2. A detailed component budget is found in Annex J.

Attachment H-1: AMTT Market and Policy Analyses Component Implementation Schedule

Action \ Fiscal Year	FY 91				FY 92				FY 93				FY 94				FY 95			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
ProAg CPs and Covenants																				
Committee established and functioning	XX																			
Business Registration			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Investment Code Access																				
-negotiated	XX																			
-TA provided		XX																		
-Revisions made				XXXX																
Patente Tax																				
• negotiated	XX																			
• TA provided					XX															
• GOC reviews						XXXXXXXXX														
• Revised tax									XX											
Tariffs																				
• negotiated	XX																			
• Bank/IMF review		XXXXXXXXXXX																		
• dialogue, reviews				XX XX	XX XX XX XX XX XX XX XX															
• TA provided									XX											
• GOC & UDEAC reviews										XX XX XX XX XX XX XX										
• Tariffs revised																				
Early Study														XX XX						
Vegetables RA																				
• PIO/T issued	XX																			
• Study Undertaken		XXXXX																		
• final report & Roundtable			XX																	
[L-T TA Arrives]				XX																

Action \ Fiscal Year	FY 91				FY 92				FY 93				FY 94				FY 95			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
[L-T TA Arrives]				XX																
Major Studies																				
Millet/Sorghum																				
- SOW developed																				
- Fieldwork				XXX																
- Final Report					XXXXXXXXXXXXXXXXXX															
- Follow-On Studies								XX												
Capital Markets													XX			XX				
- SOW finalized																				
- Prelim Study					XX															
- Report & Roundtable						XXXXXX														
- Follow-On Studies								XX												
- GOC Strategy Dev.									XXXX		XXXX	XXXX								
Transport Industry														XXXX						
- SOW finalized																				
- Prelim Study					XX															
- Report & Roundtable						XXXX														
- Follow-On Studies							XX													
- GOC Strategy Dev.									XXXX											
Women's Study												XXX								
- SOW finalized																				
- Prelim Study							XX													
- Report & Roundtable										XXXXXX										
- Follow-On Studies												XXX								
- GOC Strategy Dev.																XX				

Attachment H-2

DRAFT SCOPE OF WORK: Chief of Party/Senior Policy Analyst

Roles: The Chief of Party/Senior Policy Analyst will have two roles under the AMTT project:

1) The Chief of Party will serve as the Contractor Representative in Chad for the purposes of this contract, and will be responsible for the activities of all long- and short-term personnel, expatriate and Chadian, under the contract. The Chief of Party will work with the Regional Contracts Officer, USAID/Yaounde, to respond to any contractual questions and in general for all formal contractual obligations, including approval of key long-term personnel. S/he will directly supervise the work of the Market News Coordinator and the Agribusiness Development Specialist.

2) S/he will be directly responsible for the implementation of the Market and Policy Analysis Component of the project. This will include, but not be limited to: maintaining a current and in-depth knowledge of the policy and regulatory environment as it affects agricultural marketing; assisting A.I.D. with its policy dialogue in matters of concern; serving as informal secretary of the proposed Bilateral Policy Oversight Committee; developing scopes of work for, and supervising, all short-term personnel deployed under the contract for the purposes of the market and policy studies.

Tasks: The COP/Policy Analyst will be responsible for the following general tasks:

<u>As COP</u>

1. Establish and manage the AMTT Project Office, hire staff, establish administrative and financial systems and controls, and generally assure smooth functioning of the office.

2. Develop and/or assure the development of contractor annual workplans, for each project component and the project overall; The first annual workplan will be developed not more than 90 days after arrival in Chad.

3. Assure the implementation of the annual workplans, and report on same through quarterly progress reports submitted to USAID/Chad;

4. Assure all financial accountability for local procurements under the contract, including adequate bookkeeping and reporting to USAID/Chad as required in the contract;

5. Supervise the Market News Coordinator and the Agribusiness Development Specialist in the conduct of their components' annual workplans.

As Policy Analyst

6. Establish and maintain a professional and cordial relationship with the Bilateral Policy Oversight Committee, and ensure that it meets quarterly; if asked, serve as secretary to the Committee, developing agendas and writing and distributing minutes of each meeting;

7. Maintain current and professional knowledge of the evolving policy and regulatory environment affecting agricultural marketing in Chad; assist, if requested, USAID/Chad in its policy dialogue with the GOC regarding agricultural marketing.

8. In collaboration with USAID/Chad and the Bilateral Policy Oversight Committee, develop the annual workplans for the Market and Policy Analyses component;

9. Develop the detailed scopes of work for all studies to be funded under the project, assure that necessary relationships with key GOC offices for each study have been established, assure recruitment of appropriate consultants for such studies, and assure that such studies are completed in a timely and satisfactory manner.

Required Qualifications: The COP/Policy Analyst will hold a PhD or equivalent in Agricultural Economics or Economics with strong emphasis on agriculture and agribusiness. S/he will have at least 10 years prior in agricultural policy analysis in developing countries, preferably in Francophone Africa. S/he should be computer literate, and able to use standard word processing and spreadsheet programs. S/he will have demonstrated strong interpersonal skills and an ability to interact effectively with the public and private sectors. An FSI 3/3 in French and English is absolutely required.

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Attachment H-3

DRAFT SCOPE OF WORK: Business and Investment Code Registration Consultant

Objective of Consultancy: In order to foster a more supportive environment for agribusiness, USAID/Chad has encouraged the Government of Chad to streamline the process of registering a business and to revise the process of applying for access to the benefits of Regime A (for SMEs) of the Investment Code. Both processes currently take up to six months and involve several ministries and offices. Registration of a business is also costly. The objective of the consultancy is to quantify current revenues derived from such registration processes by the GOC, and to develop alternative scenarios for the impact on revenues if the processes are streamlined to a one-step, one-office effort.

Roles and Relationships: The Consultant will report to the Program Economist, USAID/Chad. S/he will work closely with the Direction de Commerce and the Direction des Impots of the GOC, as well as the Chadian Chamber of Commerce, which is in the process of becoming private.

Brief Statement of Work: The Consultant will quantify businesspersons costs (illustrative) and GOC revenues (empirical) from business registration for the last five years and registration for the benefits of Regime A to the Investment Code since its inception in late 1987. S/he will work with relevant GOC officials to determine which steps involving which revenues can be prudently eliminated (e.g., the requirement for a good health certificate), and which can be streamlined and decreased, while still fostering adequate public sector oversight. The consultant will develop a series of scenarios which demonstrate losses or gains to GOC revenues as a results of various changes in the process.

Duration of Consultancy: 4 weeks based in N'Djamena, Chad.

Qualifications of Consultant: The consultant should have a Masters in Business Administration and at least five years experience in private sector development in developing countries. Prior experience with regulatory regimes required. A minimum of FSI 3/3 French required.

Estimated Budget: Assumed for an IQC with a 2.4 weighting.

Salary: 26 days @ $ 250 x 2.4 weight	$	15,600
Per Diem: 28 days @ $ 199		5,572
International Travel (tickets, visas)		4,000
Report production, local travel, misc.		1,000
TOTAL	$	26,172

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Attachment H-4

Rapid Appraisal of Key Horticultural Crops

1. Objectives and Methods

RA Objectives. A rapid appraisal (RA) of key horticultural crops subsystems will be conducted by three teams of analysts. The principal objectives of the RA are as follows: 1) to provide a data base and improved market typology for early inclusion of key horticultural crops in the MIS; and 2) to identify specific bottlenecks--policy and regulatory, infrastructure, behaviors of market participants--that inhibit functioning of the commodity marketing subsystems. Information obtained will be important to the early work of the Agribusiness Support Center as well.

RA Methods. Production seasons and areas are similar for most horticultural crops, although types of packing, processing and channels of distribution are different. All members of the RA team will collaborate on the key products, and will produce three separate reports (a common background and introduction would seem appropriate) for each crop. The RA teams will use the following methods in conducting the RA:

- Review of available literature.
- Tabulation and analysis of available secondary data on commodity production, flows, marketing costs and prices.
- Direct observation of marketing facilities and processes.
- Structured informal interviews with key informants and, where suitable, groups of informants. See Appendix I for a listing of possible key informants.

2. Statement of Work

The RA teams will undertake the following key tasks:

- Describe key features of the organization and operation of each commodity subsystem.
- Identify and diagnose key constraints to improved subsystem performance.
- Identify domestic and/or international market opportunities that are currently underexploited or untapped.

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- Identify information gaps and recommend possible follow-up applied research for filling those gaps.

- Recommend, where sufficient information is available to make a strong case, policy measures, regulatory reforms, and any other public sector interventions and pilot innovations (in management, technology, system organization, institutional arrangements and training) that will improve subsystem performance.

Appendix II provides detailed information on key areas of investigation in doing rapid appraisal studies of commodity subsystems. This should be used as a comprehensive checklist. In the Chadian context, the following areas merit special attention:

- Production Trends, Geographic Concentration and Magnitude of Marketed Surplus. In what zones is production concentrated? Are their any data that show recent trends? What proportion of production is sold? When does most of marketed surplus enter marketing channels?

- Crop Production, Harvesting and Post-Harvest Handling Practices that Affect Subsystem Performance. Describe practices which lead to post-harvest losses and greater perishability. Estimate approximate post-harvest losses. Identify ways in which losses could be reduced.

- Commodity Subsystem Organization. Describe the organization of the subsystem and major marketing channels. Identify key participants or stages of the marketing system in which market power may be concentrated. Describe any special institutional arrangements, such as farmer organizations, contract farming schemes, trade associations, parastatals, joint ventures, etc., which play an important role in commodity subsystem organization and performance.

- Commodity Subsystem Operation. Principal exchange arrangements and methods of handling risk. Institutional arrangements for ensuring effective vertical coordination in commodity subsystems from input supply to product marketing.

- Price Behavior. Examine available secondary and primary price data to assess the magnitude of seasonal and secular trends, the degree of market integration and returns to storage.

- Marketing Costs and Margins. Using case study methods, prepare detailed horticultural crop trading budgets, which enumerate marketing costs and prices of horticultural

products at key transactions points. Special attention should be paid to transport costs, which are likely to be the largest marketing cost component.

- Demand Factors. Assess the strength, seasonality and other characteristics of domestic demand for the commodity, with particular attention to urban market consumption patterns. To the extent possible, assess trends in foreign demand, current sources of supply to meet that demand, and underexploited market opportunities that might be tapped.

- Performance of the Commodity Subsystem. Qualitative assessment of performance with respect to the following key criteria: efficiency, competition and international competitiveness, progressiveness (technology, organization, management), equity, wholesomeness/nutritional quality of food.

- International Trade. Examine international trade flows (direction, magnitude, prices). When commodity subsystem exports or has potential to export, analyze alternative sources of supply of major markets (including market share, prices, quality of produce), international marketing costs relative to competitors, trends in market share, and possible underexploitation or overlooking of market opportunities. Diagnose how international competitiveness might be strengthened.

3. Duration of RA

The RA field study should be completed in a period of no more than 2.5 months, with an approximate time table as follows:

- Week 1 (U.S.) - review of available literature and data; preliminary design of structured informal interview guidelines.

- Weeks 2-3 (N'Djamena) - team-building in Chad with full RA study team of Chadians and expatriates; intensive discussions and refinement of structured informal interview guidelines and planning for RA field work; pre-testing of structured informal interview guidelines and revision where necessary; interviews with selected government officials, private traders and knowledgeable observers of the commodity subsystem; initial briefing of USAID/N'Djamena on key hypotheses about system organization and performance.

- Weeks 4-5-6 (field) - three intensive weeks of RA field work, with weekends for discussion of preliminary findings and suggested modifications in itineraries, informant

selection, interviewing strategies during second week of field work. The three teams will work independently of each other in the three different regions: Chari-Baguirmi, around N'Djamena and Karal; around Abeche in the eastern Sahelian zone; and Cheddra and Ngouri in the Kanem and Lac prefectures in the western Sahelian zone.

- Week 7 (N'Djamena) - discussion of key findings and emerging themes & knowledge gaps; prepare outline of RA report and assign writing responsibilities; write intensively.

- Week 8 (field) - selective follow-up field work to strengthen findings, particularly where there are information gaps.

- Weeks 9-10 (N'Djamena) - finalization of draft; submission to USAID; seminar discussion of findings.

The RA study team will be comprised of three expatriate analysts and three Chadian analysts, as follows:

Expatriates

- Team Leader: Senior Agricultural Economist or Economic Anthropologist or MBA with extensive agribusiness experience;
- Horticulturalist with experience in semi-arid production systems;
- Food Technologist with experience in small-scale technologies;

Chadians

- Agronomist/Horticulturalist
- Economist
- Sociologist or Anthropologist

Preliminary study findings will be presented to USAID/Chad and to the Policy Oversight Committee formed under the AMTT project. The study will be translated into French in the U.S. under the contract. Resources permitting, one or more expatriate representatives of the team will return to Chad to present the final report to Chadian public and private sector parties.

4. Key Issues to Consider in the Chadian Context

A primordial constraint in agricultural marketing in Chad is transport. Limited availability of transport and prohibitive costs put Chad at a strong competitive disadvantage in export

markets, with the exception of regions of neighboring countries that border Chad (northern Cameroon, northeastern Nigeria, northwestern CAR). Poor road conditions in Chad also contribute to losses in perishable horticultural crops. Transport costs likely make up a large portion of marketing costs--both in interregional trade in Chad and in exporting produce. The transport issue needs to be addressed squarely and early in any commodity subsystem rapid appraisal; findings and recommendations will be fed into subsequent broader transport industry studies conducted under the project.

A second key consideration for horticultural crops is the likely thinness of the domestic market for vegetables, particularly higher grades that are attractively packaged. Rural demand is constrained by low purchasing power of rural households. Urban demand is likely to be greater in the aggregate, since almost 30 percent of the Chadian population is urban. Poor infrastructure and high marketing costs in shipping horticultural products to urban markets are likely to limit supply, however. The most successful horticultural production for urban markets is likely to take place in peri-urban zones or within 30-40 kilometers of major towns. Furthermore, national average per capita incomes of approximately $ 169 suggest that aggregate demand for higher-value, income-elastic fruits and vegetables is likely to be quite weak.

Research in Kenya has shown that about 90 percent of the Kenyan horticultural output is absorbed by the domestic market (of 22.1 million in 1987, of which 22 percent or approximately 4.8 million are in urban areas); the highest-grade produce is shipped to international markets, principally in western Europe. Kenya also has much higher average per capita income of $330 (as of mid-1987). Having a large domestic market, capable of absorbing lower-grade produce, is a decided advantage for Kenya.

A third key consideration in Chad is the weak data base on agriculture and marketing. Rapid appraisal exercises should focus on developing indications of trends, estimating orders of magnitude for key variables, and describing and diagnosing key constraints to improving the performance of commodity subsystems. An important output of the RA should be to identify knowledge gaps and areas for further study under the AMTT project.

5. Estimated Budget. Expatriate salaries and fees assume a 2.4 multiplier, i.e. 140 % overhead and fringe, for an IQC or centrally-funded contract. Chadian salaries and fees are based on established BIEP rates, fully loaded.

Expatriates, 2.5 pm X 3 X 7,100 X 2.4	$ 127,800
Chadians, 3 persons X 2.5 months X $ 3200	24,000
Per Diems	
Expatriates, 3 persons X 54 days X $ 199	32,238
Expatriates, 3 persons X 21 days X $ 100	6,300
Chadians, 3 persons X 21 days X $ 20	1,260
International Travel (tickets, visas, medical) $ 4000 X 3	12,000
Local Travel (assume USAID drivers used for fieldwork in cars) 6 persons X 2 r-t X $300	3,600
Report Production, photocopying, etc.	6,000
Total	$ 213,198
say,	$ 215,000

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Appendix I

KEY INFORMANTS IN FOOD SYSTEM RESEARCH: ADVANTAGES AND DISADVANTAGES AS INFORMANTS

KEY INFORMANT	ADVANTAGES AS INFORMANTS	DISADVANTAGES AS INFORMANTS
Wholesalers	a) Located at system node which offers vantage point and system perspective. b) Knowledge of production, stocks, flows, prices and strength of demand in different rural and urban areas.	a) Extremely busy and often difficult to interview for more than a short period. b) Given typical hostility of government, they may be uncooperative informants.
First Handlers	a) Detailed knowledge of exchange arrangements with producers and wholesalers. b) Knowledge of market opportunities, production, stocks, and prices in particular rural areas.	a) Knowledge rarely extends outside circumscribed rural areas. b) May have parochial perceptions and attitudes.
Managers of Processing Firms	a) Located at system node which offers vantage point and system perspective. b) Knowledge of production and prices in selected rural areas, and demand for processed products in urban markets. c) Detailed knowledge of exchange arrangements and risk-sharing mechanisms with producers or producer groups.	a) Given typical hostility of government, may be uncooperative informants. b) May be unwilling to divulge details of exchange arrangements with producers. c) Will often under-report throughput in order to evade taxation.
Transporters	a) Knowledge of direction and magnitude of commodity flows. b) Familiar with structure of commodity trade. Can often identify large volume traders.	a) Do not actually participate in trade, so lack knowledge of trading practices, prices and strategies.
Importers/ Exporters	a) Knowledge of magnitude, timing and prices of imports and exports. b) Detailed knowledge of import/export practices, procedures and regulations.	a) May know little about how commodities are assembled for export, or how they are distributed after importation. b) Since smuggling and underinvoicing are common practices in many countries, they may be unwilling to report volumes or prices. c) If rights to import/export are obtained through privileged access or rent-sharing, they may be unwilling to discuss business practices.
Representatives of Cooperatives, Trade Associations	a) Knowledge of numbers and sizes of member firms, and their output. b) May effectively represent membership and its perceptions of constraints, opportunities.	a) If representatives are appointed by government, may not effectively represent membership. b) Membership may be restricted to larger firms and producers.
Bank Loan Officers	a) May possess information about the operations, throughput and returns of larger wholesalers, processors and retailers. b) Access to information about composition of commercial bank loan portfolios.	a) May not possess systems perspective. May make judgements on basis of narrow rate of return criteria. b) May be unwilling to divulge confidential information about borrowers' operations.
Institutional and Private Sector (Large Supermarket) Buyers	a) Often major buyers of high value commodities, such as fruits and vegetables, livestock products. b) May have negotiated contractual arrangements with large volume wholesalers, processors or importers.	a) As buyers of final products, may have limited knowledge of system organization and operation. b) Usually constitute small proportion of final demand for staple commodities.

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Appendix I (cont.)

KEY INFORMANTS	ADVANTAGES AS INFORMANTS	DISADVANTAGES AS INFORMANTS
Missionaries, PVOs	a) Well-placed to describe difficult to observe phenomena and report on phenomena others unwilling to discuss. b) Sometimes provide extension, input supply and marketing services to rural clients.	a) Usually have separate agendas that lead to parochial perceptions and attitudes. b) May regard donor agencies or government as adversaries. c) May not participate directly in commodity subsystems.
Extension Agents	a) May have detailed knowledge of farmers' production and marketing practices and strategies, producer-first handler exchange arrangements, and the structure of the first handler stage. b) Knowledge of size distribution of farms, alternative technology utilization and range of marketed surplus, and food security situation of local farms.	a) Agents often not natives of area. b) May have few funds and no transport for extension visits. c) Low pay and difficult working conditions may induce poor performance. d) May be biased source of information regarding farmer production practices and technology utilization.
Managers of Parastatal Agencies	a) Parastatals may buy a large proportion of marketed surplus and manage reserve stocks. b) Parastatals are often major importers and exporters of commodities and inputs.	a) If possess legal monopoly powers, may know little of private competitors' operations and oppose them vociferously. b) If parastatal under attack, may be very defensive and try to justify/rationalize parastatal functions and role.
Agricultural Producers	a) Knowledge of sources of input supply, production practices and strategies, alternative technologies, prices, and marketed surplus in own area. b) May be able to identify largest and most productive farmers, as well as least successful farms with precarious food security situations. c) Detailed knowledge of local marketing opportunities and outlets.	a) Primarily subsistence farmers may know little of current prices and market opportunities. b) Some producers may have parochial perspective and malign traders. c) Few producers have systems perspective and knowledge of functions higher up the system.
Urban Consumers	a) Can discuss current and seasonal consumption practices and food prices. b) Able to discuss pros and cons of alternative retail food outlets.	a) Individual consumers cannot speak for full range of consumer groups. b) Care must be taken to identify and interview nutritionally vulnerable groups.
Retailers	a) Possess better knowledge of consumer wants and needs than other market system participants. b) Knowledge of wholesaler-retailer exchange arrangements.	a) Small volume retailers in many countries are relatively homogeneous, parochial, and lack systems perspective.
University or Agricultural Researchers	a) Detailed knowledge of literature and secondary data sources and reliability. b) May possess analytical framework that leads to better understanding of system and its constraints/opportunities.	a) May have parochial disciplinary perspective. b) May lack detailed knowledge of business objectives, practices and problems of participants at different stages of the system.

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Appendix II

KEY AREAS OF INVESTIGATION IN RAPID RECONNAISSANCE

AREAS OF INVESTIGATION	COMPONENTS	METHOD OF INQUIRY	REASONS FOR INVESTIGATING
1. Commodity Characteristics	a) Different grades, and uses. b) Degree of bulkiness, perishability. c) Physical handling requirements. d) Degree/type of processing.	1) Review commodity manuals, studies. 2) Observation of handling and processing. 3) Develop commodity calendars showing periods of production and transformations.	a) Commodity characteristics can influence operation of subsystem, which functions are performed, how they are performed, and relative cost at which performed. b) Nature of production process influences timing and magnitude of producer sales and marketed flows.
2. Consumption Patterns	a) Seasonal and secular trends in domestic and export markets. b) Disaggregated consumption patterns by socioeconomic and ethnic group. c) Future market prospects.	1) Review consumption studies, food balance sheets, and demand projections. 2) Construct food balance sheets if data available. 3) Interview nutrition/consumption researchers, selected commodity importers and exporters and institutional buyers, and selected rural and urban consumers.	a) Demand drives for path commodities through subsystems. b) Strength and seasonality of demand affect production and storage incentives, as well as direction and magnitude of marketed flows. Longer run trends and opportunities affect investment decisions of participants in subsystem.
3. Supply Situation	a) Production by year and by region for recent years, noting trends and variability. b) Stocks for transformation and consumption by season and region. c) Flows from major supply areas to major markets, including imports and exports.	1) Review commodity studies. 2) Interview large wholesalers, parastatal managers, crop production researchers, importers, exporters, processors, cooperative and trade association officials. 3) Use map to show flows and apparent surplus and deficit areas. 4) Describe seasonal variation in stocks and flows.	a) Supply and demand are basic elements of economic analysis. b) Production levels and variability affect prices (depending on elasticities), returns via price mechanism, and risk perceptions of producers. c) Level of stocks during different periods affects seasonal variation in prices and commodity availability. d) Shifts in supply over time may indicate response to policies, technological change, institutional environment and alternative institutional arrangements.
4. Price Relationships and Seasonality	a) Secular trends in real prices at the farmgate, wholesale and retail levels. b) Seasonal and cyclical trends in prices. c) Changes over time in relative price relationships.	1) Gather secondary price data for commodity and close substitutes/complements for ten or more year period. 2) Deflate prices or express in constant price terms. 3) Analyze secular, cyclical and seasonal price trends, and changes in relative price relationships. 4) Estimate supply and demand relationships if data permit.	a) Prices are a measure of incentives facing food system participants. b) Changing relative price relationships may indicate shifts in production and marketing incentives, especially if coupled with accurate cost of production data. c) Pricing structure provides insight into regional and national comparative advantage.
5. Food System Participants and Organization	a) Marketing channels and commodity subsector stages. b) Types, numbers and geographic distribution of firms at key subsector stages. c) Important assembly, redistribution and terminal markets.	1) Review previous commodity studies. 2) Check if existing enumerations or sample frames in government agencies (e.g., licensing offices). 3) Interview knowledgeable observers of subsectors and selected participants. 4) Draw subsector map (flow chart) showing principal stages and marketing channels. 5) Use map to show important marketplaces.	a) Food system organization for structural influences conduct of participants, which in turn affects performance. b) High levels of concentration of firms at particular stages of food system may lead to higher production/marketing costs than under conditions of lower concentration. c) Prevalence of myriad small firms who fail to specialize at one or more levels of food system may lead to scale diseconomies and high costs.

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Appendix II (cont.)

AREAS OF INVESTIGATION	COMPONENTS	METHOD OF INQUIRY	REASONS FOR INVESTIGATING
6. Subsector and Food System Operation or Behavior	a) Practices and strategies of subsystem participants (individuals, firms, organizations for procuring inputs, productive transformation, storage and marketing of outputs). b) Vertical coordination mechanisms: exchange arrangements, risk-reduction/sharing, information dissemination. c) Adaptability and responsiveness of subsystem to shifting supply/demand, exogenous shocks, policy changes and uncertainty. d) Evidence of market power.	1) Identify key stages and participants. 2) Develop informal interview guidelines. 3) Sample purposively based upon knowledge of universe from previous records or studies, or from above characterization of subsystem (#5). 4) Conduct selected in-depth informal interviews. 5) Crosscheck findings with other subsystem participants and knowledgeable observers.	a) Operation and behavior in the aggregate affect performance. b) Adaptability and responsiveness of commodity subsystems to changing conditions and uncertainty affect levels of output and performance, as well as continued viability of subsystem in a particular country.
7. Marketing System Infrastructure	a) Physical infrastructure (transport, marketplaces, storage and processing facilities, communications). b) Adequacy and bottlenecks.	1) Review studies of transportation and communication infrastructure, storage/processing capacity and utilization, and marketplaces. 2) Inspect and assess adequacy of sample of above. 3) Use map to show key infrastructure. 4) Identify bottlenecks.	a) In some developing countries infrastructural constraints constitute severe bottlenecks to food system development.
8. Government Marketing Institutions and Policies	a) Regulatory environments: rules; input and product regulations; laws affecting marketing and trading activities; property rights. b) Public marketing institutions (parastatals, cooperatives, joint ventures): extent and nature of participation in marketing; effects on behavior and performance of private participants in food system. c) Macroeconomic policies: price policies; exchange, interest, wage rate policies; fiscal and monetary policies. d) Banking and credit policies.	1) Regulations: use informal interviews with subsector participants to identify vexing or constraining regulations. Follow-up interviews with selected policy-makers. 2) Institutions: interview managers, determine mandate, outline functions, estimate market share, examine pricing policies, assess effectiveness of marketing services, assess impact of participation on system. 3) Policies: review macroeconomic assessments of World Bank, IMF or others. 4) Interview bank and credit agency officers.	a) The regulatory environment and particular regulations affect the behavior and incentives of food system participants. b) Public marketing institutions dominate food systems in some countries, influence the organization, operation and performance of food systems in all countries, and generally affect behavior of system participants. c) Macroeconomic policies condition and shape the environment in which system participants make decisions about investments and operations. d) All of the above contribute to food system stability and/or uncertainty, which greatly influence behavior. e) Banking and credit policies determine who gains access to formal credit, which is often subsidized.
9. International Trade	a) Commodity exports and world market situation. b) Imports of commodity or substitutes and impact on domestic production, markets and prices. c) Trends in exports and imports. d) Likely changes in exports and imports, and emerging market opportunities or dependencies.	1) Analyze trade quantity and price data available in statistical abstracts or outside assessments. 2) Review commodity production, price and trade forecasts.	a) Few, if any developing country food systems are autarkic. International trade in agricultural commodities affects production and marketing incentives, consumption patterns and preferences, and the behavior and opportunities of system participants. b) International market conditions influence developing countries' comparative advantage in production and export (import) of agricultural commodities.
10. Representativeness of Period Under Study	a) Timing of SR relative to annual production/marketing cycle. b) Agricultural and economic characteristics of year of SR relative to earlier years or climatic cycles.	1) Compare rainfall data and production estimates with earlier years. 2) Compare economic data: GDP, balance of payments, inflation rates, trade patterns. 3) Assess political factors: change of government, policy changes.	a) The period of observation may be unusual with respect to climate, agricultural production, economic and political conditions, and effects of recent changes. b) Food system development is an ongoing and long term process. Historical perspective of long run patterns of change in basic economic, institutional, political and environmental conditions is valuable in understanding food system development.

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Attachment H-5

Private Financial Services and Capital Markets Study

1. BACKGROUND AND RATIONALE

Persons interviewed by the design team, the Chadian Government, PVOs, and several studies maintain that the shortage of capital is a serious constraint to agricultural marketing. Commercial bank credit is focussed on a few large industries. VITA is the only institution lending to SMEs in N'Djamena. The demand for this credit, although currently growing, has been sporadic. Other donor-assisted credit programs have had limited success as indicated by the limited level of disbursement. In addition, the fact that neither commercial bank was able to place the credit funds from CCCE and BEI is evidence that the sphere of organized entrepreneurs is narrow. An important constraint to credit accessibility seems to be the inability to prepare adequate business plans.

Although formal sector financing for businesses in Chad is certainly limited, the importance of credit is unclear. For instance, it appears that grain traders do not generally use formal sector credit to expand storage capacity or to hold inventories. Informal lending, among small, medium, and several large traders, appears to be the norm.

No study has been conducted to identify the effective demand for credit in Chad. An ongoing FAO study on the FIR program for rural credit is underway, and BIEP's study on cereals discusses the need for credit at the farm level. No attempt has been made to assess the importance of this need for credit and the viability of the clients.

Very little is documented on the informal financial sector. VITA undertook a study which defined types of informal credit structures, but did not quantify effective interest rates or hypothesize the extent of each type. The Ohio State University Sahel Rural Finance Project supported a non-random sample survey of 37 traders, of whom 18 were in Chad and 17 in Niger, over a two week period in 1990 and identified a number of types of informal loans. These included family assistance and reciprocal loans without interest, money lending with interest, profit sharing ventures, and to commodity loans. The sizes of the loans ranged from about $40 to $45,000 in Chad, and implicit monthly interest rates averaging 13 percent. (Cook 1990) Few other studies have looked at such transactions in such depth, but given the size of the sample, no extrapolation is possible.

Most observers conclude that there are significant amounts of capital moving in the informal sector in Chad (and between Chad and Nigeria and Cameroon). Of interest to A.I.D. is how much of this private capital is involved in agricultural marketing, and what it would take to mobilize it for more productive investments.

2. OBJECTIVES

The main objectives of the study are:

1) To assess the availability of capital for private investment in agribusiness in Chad, in the formal and informal financial sectors;

2) To identify factors that influence investment decisions, in both sectors; and

3) To identify possible policy, regulatory, or administrative reforms that would provide incentives for increased capital mobilization.

Data and analyses on formal sector credit are relatively reliable and accessible. The study team will need to review recent analyses and interview key officials of formal institutions, but greater emphasis should be placed on informal services.

3. TEAM COMPOSITION AND DURATION

The initial financial services and capital markets study will take approximately 2 months of time. It will be undertaken by two expatriate and 2 Chadian consultants covering the following disciplines:

Agricultural/credit economist;
Financial Economist;
Economic Anthropologist;
Business Specialist (MBA or equivalent.

An illustrative schedule follows:

- Week 1 (U.S.). Review of available literature on credit. Preliminary design of structured informal interview guidelines.

- Weeks 2-3 (N'Djamena). Team building with Chadian team members. Review of additional studies on finance and marketing. Interviews with Government, financial

institutions, and PVOs, both Chadian and expatriate, traders, transporters, cooperatives and women groups.

- Weeks 4-5 (field). Interviews with groups or individual entrepreneurs in two teams and different regions.

- Week 6 (N'Djamena). Analysis of data from interviews and major findings. Write report.

- Week 7 (N'Djamena). Selective follow-up of field work to strengthen findings.

- Week 8 (N'Djamena). Finalize report for presentation to AID and the Policy Oversight Committee.

4. DETAILED STATEMENT OF WORK

Supply

1. Credit Policy: Analyze the present credit policies and regulatory constraints with respect to agribusiness investment. Assess the financial sector and the supply of credit to agribusiness by the banking system. Identify activities financed by type and by clients (by gender).

2. Credit Programs: Assess the effectiveness of government credit programs, e.g ONDR, SODELAC, OMVSD. Evaluate the experiences of PVO-sponsored credit programs. Evaluate the ASSAILD and CREC programs. Identify the explicit and implicit criteria on which decisions to invest (make loans) are based.

3. Informal Financing: Assess the types, volumes and levels of informal financing for agribusinesses in Chad. Where possible, identify explicit and implicit criteria used by investors (or lenders) on which decisions for investment are based.

Demand

4. Rural Marketing Activities: Identify the agribusinesses currently financed (cereal banks, transformation, conservation) in the rural areas. Estimate the types, volume, levels of marketing activities by region and the capabilities of the entrepreneurs involved. Estimate the number and cash volume of projects, village groups, cooperatives, or individuals entrepreneurs involved.

5. Urban Marketing Activities: Identify typical agribusinesses in the urban areas (wholesale trade, conservation, storage, transformation). Estimate the types, volume, levels of agribusiness activities and the capabilities of the entrepreneurs involved. Where possible, identify primary sources of initial investment capital.

6. Effective Demand for Credit: Estimate the absorptive capacity for credit groups or individual entrepreneurs by type of activity.

7. Recommendations: Provide preliminary options for possible policy, regulatory, or administrative reforms that would provide incentives for increased capital mobilization to meet effective demand.

It is recognized that the subject matter is very broad for a two-month, four person team. It is hoped, however, that the study will provide a better definition of the parameters of the financial constraints cited so frequently in the literature and in interviews, so that more focussed and in-depth studies can be planned.

Attachment H-6

Transport Industry Study

1. BACKGROUND AND RATIONALE

The performance of the agriculture and livestock sectors depends largely on climatic conditions, the cost of production and the cost of distribution. The latter two are determined by several factors, among which the cost and price of transporting inputs and outputs are particularly important. Transport costs and prices in Chad are significantly higher than in neighboring countries because of (a) high vehicle operating costs; (b) high import taxes on vehicles and parts; (c) unofficial road fees; (d) high domestic taxes; and, (e) the presence of various intermediaries at different stages in the marketing chain.

One of the main factors contributing to the high cost of transport is a relatively high import tariff for imported vehicles and parts. In addition, some indirect taxes such as freight taxes, other special taxes applied to transport, and high insurance costs may discourage transport operations. Also, the conditions of the roads necessitate a two or three year amortization schedule, which, when applied to the high purchase costs, greatly increases vehicle operating costs.

Alternate means of transport -- animal, river -- have not been well studied. The potential of village groups or cooperatives to develop transport initiatives conducive to reducing the costs of transport of cereals and vegetables needs to be evaluated. Some NGO projects have been successful in this area.

The improvement of the road network will have the following consequences: reduction in the duration of the trips, thus increasing the capacity of the fleet, and lower costs per kilometer. As roads are opened and/or improved, different fleet composition for different links might be indicated.

2. OBJECTIVES

The main objective of the study is to provide A.I.D. and the GOC with recommendations on ways to increase the efficiency of the private transport industry in Chad. Of particular interest is the establishment of factor costs for transport of specific priority agricultural commodities over specific market links, and the preliminary quantification of losses per commodity in transport, and means to overcome such losses.

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3. DURATION AND TEAM COMPOSITION

The study will take approximately two months. It should be undertaken by two expatriate transportation economists, one of whom specialized in trucking, in collaboration with three Chadian professionals from the Direction des Etudes of the Ministry of Transport and Civil Aviation. The approximate schedule is as follows:

- Weeks 1-2 (N'Djamena): Review of available literature and data; team-building with three Chadian professionals from the Ministry of Transport and Civil Aviation. Coordination of work with the various donor-financed advisors at the Ministry. Preliminary interviews with government officials and transporters.

- Weeks 3-4 (N'Djamena): Intensive discussions of survey guidelines in preparation for the field work. Interviews with government officials continue. Analysis of the data from the Lettre de Voiture Obligatoire (LVO) files of the National Bureau of Freight.

- Week 4-5 (field): Two teams will work in two different zones with weekend discussions of preliminary findings.

- Week 6 (N'Djamena): Analysis of survey data and of major findings. Assign report writing responsibilities.

- Week 7 (field): Selective follow-up field work to strengthen information gaps.

- Week 8 (N'Djamena): Finalizing of draft; submission to AID; presentation to Policy Oversight Committee.

4. STATEMENT OF WORK

The following tasks will be undertaken:

- Evaluate present GOC and UDEAC policies and regulations which affect the transportation industry.

- Inventory the modes of transport, by main category and detail (i.e. types of vehicles, types of animals, etc.), used in the transport of cereals, fruits and vegetables.

- Identify the most common transport arrangements by major production zones and products.

- Identify the agents involved in the sector and degree of competition.

- Analyze the profitability of the transport operation, by type and/or commodity.

- Analyze the impact of the elimination of CTT on such operations.

- Analyze the impact of privatizing the MSAPS truck fleet.

- Evaluate the impact to a) transporters revenues; and b) GOC revenues; of import taxes and fiscal policies on the transport sector.

- Recommend policy measures and regulatory reforms that will contribute to the efficient operation of the transport sector and lowering of marketing costs.

More specific terms of reference include:

1. Background of the Transport Sector: Recent developments in the transport sector. Analysis of the PASET program and present regulatory environment.

2. Inventory of Vehicles: Number and types of vehicles used in the transport of cereals, fruits and vegetables. What are the most common types used by zones of production. Recommend most adequate and cost efficient types of vehicles given the improved conditions of the roads.

3. Agents Involved: which ethnic groups are in charge of the transport operations in the cereals and vegetables marketing. Degree of competition in the trucking operation. What is the role of each agent. Are the truckers, mostly men, women, wholesalers in major consumption centers? Is there a pattern of transport operations depending on the commodity or trajectory travelled?

4. Role of SMEs: Identify the most dynamic elements of SMEs (groups or individuals) in the marketing of cereals, fruits and vegetables, which could lead to developing more efficient transport operations. Identify major constraints, e.g. need for better organization, training, and financing.

5. Profitability of the Transport Operation: Structure of costs. Are illegal fees declining? Analysis of costs and benefits by major type of vehicle and commodity(ies). What does it take to start a business.

6. Profitability of Alternative Sources of Transport: Transport by river, animals or carts. Compare profitability of these operations with that of vehicle transport.

Identify main trajectories and constraints to more efficient operations. Tariff structure for imported carts.

7. Market for Transport Equipment: Basic statistics on the recorded number, value, and origin of imported vehicles and parts for the last 10 years (depending on availability of information). Import tax revenues collected. What does it take to import transport equipment. Estimate the extent of contraband. Evaluate the market for vehicles and spare parts (supply, demand, regulatory aspects), and potential for improvement.

8. Taxation: Analysis of the import tariff structure, customs regulations and rationale in the context of other UDEAC countries. Plans to reform the customs code and impact of a reduction in the tariff on fiscal revenues and transport costs, or liberalization of imports. Study possibility of reducing or eliminating domestic taxes and surcharges on imports, e.g., TCA tax, etc. Evaluate freight taxes, and other indirect taxes in the transport operation, including fuel and lubricant taxes.

10. Recommendations: Policy recommendations for a more efficient transport operation.

Attachment H-7

Role of Women in Agricultural Marketing Study

1. BACKGROUND AND RATIONALE.

Because statistics are lacking, it is impossible to fully understand the nature of work performed by women. Women's work is largely invisible in national accounting since women's contribution includes mainly subsistence food production, processing and petty agribusiness activities. But it is immediately obvious that women contribute a substantial part of the labor to productive activities on the farm, in the market, transporting agricultural products between the two, and at intermediate steps in the marketing chain. Unfortunately, most of the effort of rural and urban women in production, transformation, conservation and transport for marketing is accomplished with minimal technology. Except for a recent, small, UNIFEM/UNICEF, appropriate technology project, and selected NGO projects in specific areas, women have generally been denied access to information on the use of certain existing technologies. Such technical assistance that has been provided has been primarily for cash crops generally managed by men.

Women are undeniably the principal productive force in small and medium size agribusiness activities. Outside of production, some of the activities in which women are typically involved are: dehulling of cereals, transformation of rice, peanuts and sesame, drying and smoking of fish, drying of vegetables, milking, processing and sale of dairy products, and small commerce of transformed products, cereals, fresh fruits and vegetables. Peanut oil extraction is laborious and nonlucrative under present conditions. The fishing sector is rudimentary, and losses are in the order of 30% in the drying process, whereas smoked fish has a high value added and is produced in very small amounts because of inappropriate practices. Constraints on women's time is a limiting factor to agricultural and rural development. Increasing the efficiency of women's labor makes eminent good sense for the women involved, for her family which depends on her labor and supplementary cash income, and for the economy, in general.

Some improved agricultural and marketing technologies have been identified but have yet not been broadly disseminated. Little efforts have been made to develop appropriate technologies for small agro-industries, conservation and packaging activities of use to women. Conservation of fresh products is a serious problem, and appropriate, low-cost equipment is available and should be identified and adapted for use in Chad. There is also a need for financial resources and government attention to educate women in marketing and business management, creating and

opening up new markets, improving their techniques of production, use of marketing services and intermediaries, and access to credit. Their is a need to reduce inefficient work by women and to increase the benefit of the effort that is undertaken by women.

Traditional credit, for example, is generally granted by traders and old combattants who benefit from pensions, or provided by intermediaries as advances on future production and sales. These credits are secondary and expensive, and do not resolve the basic development problems. Capital is also accumulated through tontines and other forms of mutual aid groups, but the amounts are so minimal as to be useful primarily in emergencies. Rural credit granted by rural development organizations such as ONDR and OMVSD, is not generally accessible to women. Credit programs must be supervised, and adapted to suit the uniques constraints and needs of women.

There is substantial micro-level, geographic specific, research on the role of women and women's contribution to segments of the economy of Chad. However, in marketing as in other subsectors, the research is scattered and incomplete. This study aims at gathering all the available information on marketing technologies, finding and proposing ways to fill the gaps in the data base, and supplementing it with specific additional research on the needs to improve marketing of food. Marketing activities will be studied for cereals, vegetables, dairy and fish products in major cities and areas of production in order to identify constraints and recommend improvements in those areas. The study will identify appropriate technologies and present feasibility studies for each one. It will also assess the availability of formal and informal sector capital and women's effective demand for it for investment purposes.

2. OBJECTIVES

The primary objective of this study is to identify, to the extent possible, the proportion of agriculture value-added that can be attributed to women's processing, marketing, transporting, and trading activities, and to provide recommendations to the GOC and A.I.D. on means to increase this value.

3. DURATION AND TEAM COMPOSITION

The study will cover a two month period. It will be undertaken by a team of three expatriate consultants (one women in development economist, one marketing technologist/financial analyst, and one rural anthropologist specializing in the socio-cultural activities of women) and in collaboration with the Direction de la Promotion Féminine (DPF) of the MASPF. The approximate time table is as follows:

- Week 1 (N'Djamena). Intensive review of literature, including research on women's participation in agroindustries. Preliminary design of structured informal interview guidelines. Team-building with study team from DPF. Planning of field work.

- Weeks 2-3 (N'Djamena). Interviews with government officials and women's associations, credit institutions, UNICEF, UNIFEM and NGOs involved with women's projects. Initial briefing of USAID/N'Djamena on key hypotheses about system organization and performance. Finalize field interview guidelines, itineray and team structure. Interview market women, transporters and wholesalers.

- Weeks 4-5 (field). Two intensive weeks of field work, with weekends for discussion of preliminary findings and needed modifications in guidelines, informant selection, and interviewing strategies. Three teams will work independently of each other in the same location.

- Week 6-7 (N'Djamena or field). Analysis of survey results. Selective follow-up field work to strengthen finding. Intensive writing and preparation of first draft report for submission to USAID.

- Week 8 (N'Djamena). Final report submitted to Policy Oversight Committee and USAID.

4. STATEMENT OF WORK

The following tasks will be undertaken:

- Develop comprehensive information objectives on women's activities and initiate data collection that will fill priority gaps.

- Assess the role of women in marketing in terms of activities: production, transformation, transportation, conservation, wholesaling, selling,small commerce.

- Identify the major constraints--informational, technological, financia, attitudinall--per specific activity.

- Identify the education and training needs and constraints of women in marketing.

- Assess women's available financial resources and effective demand for financing by major agribusiness activity.

- Evaluate the dynamic of women's formal and informal groups, associations, and cooperatives.

- Recommend policy measures to strengthen government programs directed at women; sensitization for men; technology transfer possibilities; credit innovations; and training needs for women.

A more detailed terms of reference includes:

1. Role of Women: Evaluate the participation of women in specific marketing activities: transformation, conservation, wholesaling, retailing, and transport of cereals, fruits and vegetables, dairy, fisheries, and livestock. Is there an incentive for profit making. Estimate women's contribution to GDP.

2. Ongoing marketing projects: Analyze the experiences of ongoing Government programs; projects sponsored by NGOs or indigenous organizations.

3. Appropriate Technologies: Evaluate ongoing research. Evaluate experience of UNDP/UNIFEM project. Feasibility of agroindustries recommended by the Groupement de Recherches d'Echanges Technologique (GRET), and current BIEP research as they related to women's involvement.

4. Marketing Activities: Identify potential marketing projects in major cities and rural areas. Forms of possible intervention (groups, coops, etc.).

5. Training Needs: Assess the need for training in marketing activities and the resources to support training programs.

6. Social/Legal/Institutional Constraints: Determine actual socio-cultural contrants to the productive role of women, including ability to own and transfer property, invest capital and retain earnings, and make and carry out economic decisions.

7. Information/Statistics/Data: Review government agencies plans and programs for information gathering abd reporting, including plans for the 1991 national census, to determine what data is now being collected on womens social and economic activities. Attempt wherever possible, the collection and analysis of gender disaggregated data.

8. Informal Sector Study: Analyze the informal sector work in performed by approximately 90% of women in urban area -- as a separate dimension from work performed in rural areas.

9. Recommendations: Recommendations on the policy and regulatory framework; potential agribusiness activities to promote; design of training programs in marketing; credit programs.

Attachment H-8

Millet and Sorghum Study

1. Background

The principal agricultural food crops in Chad are millet, sorghum, rice, maize, and groundnuts, and accounted for 30 percent of GDP in 1988. Food production in the Sudanese zone is diverse, and includes over half the country's cereal output, over 80 percent of the groundnuts and sesame, sugarcane and a variety of fruits and vegetables. In the Sahelian zone there is substantial cereals production, about 70 percent of which is millet and sorghum,and the remaining, berber, maize, rice and wheat. In addition, groundnuts, sesame and a variety of fruits and vegetables are grown for subsistence and marketing. Food crop production is infrequent in the Saharan zone, and consists mostly of wheat and forage crops grown in oases and ouaddis (river beds) during seasonal flooding. Some vegetables and fruits are also produced in this zone.

Chad is largely self-sufficient in cereal production during years of adequate rainfall. Because of poor transportation infrastructure and the distances involved, most of the food is consumed close to the area of production. Thus, even in years of deficit production, border trade in cereals takes place with the neighboring countries of Cameroon and Nigeria. The food deficit, estimated at over 400,000 tons in 1984/85, had virtually disappeared in 1988/89.

The DAI (1988) study reports that sizable quantities of cereals are traded locally--one fifth of the production in the Sahelian zone and up to 50 percent of the production in the Sudanese zone. Interregional trade, on the other hand, is much more limited. According to the World Bank (1987), domestic freight flows in a normal year total about 265,000 tons, of which domestic food accounts for about 500,000 tons.

2. Rationalo

Although numerous studies on the cereals markets (and a limited number of studies on fruits and vegetables) have been conducted in the last three years, the basic information on production and marketing listed above is not available. Indeed, most studies (conducted over a two to six week period with heavy reference to studies completed in the 1960's and 70's), acknowledge the lack of information as noted below.

* Calculation of cereal deficits is extrapolated from consumption studies conducted in the 1960's for the entire Sahelian region (BIEP, 1989).

* Population data are based on a 1964 sample survey with current figures calculated using estimated population growth rates (BIEP, 1988).[1]

* Private cereal stock, needed to estimate cereal deficits, is completely unknown (BIEP, 1988).

* Market flows from surplus to deficit regions, cited in four major studies since 1988, are based on a United Nations study conducted in 1974.[2]

These are only some examples of the lack of basic knowledge on production and marketing systems in Chad. Arditi also points out ONC's inability to answer the most basic questions with precision. These include: (1) What cereals are consumed in the largest quantities and where do they come from? (2) What intermediaries are there between the producer and consumer for the principal marketing channels? (3) What is the level of cereal consumption in the urban area (Arditi, 1989, p. 52)?

To address this lack of information, the policy component of the AMTT project will carry out a subsector study of the grain marketing system (focussing on sorghum and millet) and rapid appraisals for three vegetables (tomato, onion, and garlic) during the first year of operation. Because numerous short-term cereal studies have identified marketing constraints, a 6-week rapid appraisal for millet and sorghum does not seem appropriate. Instead, the AMTT policy component will conduct the subsector study over a 12-month period. For vegetables, only one national study and a few area-specific studies were identified during the PP design. For this reason, a rapid appraisal of selected vegetables should identify major constraints and areas for further investigation. The RA will be conducted separately early in the AMTT project. The subsector study is planned for one year, during CY 1992.

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[1]The first full census of Chad will begin in the spring of 1991.

[2]The four studies are: DAI, 1988; BIEP, 1988; Arditi 1989; and BIEP 1990.

As enumerated in Annex G, the study will provide the following information necessary to an effective MIS:

Production Information. (1) Knowledge of production and storage data facilitates calculation of surplus and deficit zones. (2) Classification of local varieties and quality levels improve price reporting services as discussed above. (3) Costs of production and thus profits can be calculated through production and complementary information.

Market Organization. (1) Knowledge of marketing channels improves market selection for the MIS. (2) Subsector accounts to calculate marketing margins can be developed through knowledge of marketing channels and thus monitor MIS impact.
(3) Classification of market participants helps to identify user-needs and target groups for user-needs surveys.
(4) Identification of marketing constraints or concentration of power may reveal reasons for a low MIS impact with appropriate measures to ameliorate the situation.

Demand. (1) Knowledge of urban consumption improves crop selection for the MIS. (2) The impact of the MIS may be more accurately monitored through knowledge of consumer demand and preferences.

Prices. (1) Analysis of historical price data sets helps determine trends and improves the forecasting ability of the MIS. (2) Correlation coefficients of current price data provides a base to measure future impact of the MIS.

The study will also provide information on which potentail agribusiness invesment by the ASC can be planned. Finally, it will provide A.I.D. and the GOC with vastly improved information on which to base future public and private investment priorities and plans.

2. OBJECTIVES

The objectives of the study are twofold:

1. in the short- and medium-term, to provide the national MIS with improved information against which to perform trend analyses;

2. to provide A.I.D. and the GOC with information on Chad's major contributor to GDP on which to base future public and private investment priorities and plans.

3. DURATION AND LEVEL OF EFFORT

The study will be managed by the COP/Policy Analyst over a one-year period, targetted for CY 1992. Twelve person months of short-term TA are included in the budget, in order to establish illustrative costs. These might be used to hire one graduate researcher and two or three Chadian researchers; or to hire Chadian researchers and have a more senior short-term consultant make periodic visits. The COP is expected to develop the detailed scope of work and resources for the study within his or her first six months in country, with home office input as appropriate.

4. ILLUSTRATIVE TERMS OF REFERENCE

1. Production Trends: Principal zones of production and varieties. Evolution by region and total of: quantities, area, yields. Common technologies used and costs of production. What proportion of production is sold and when? Which farmers produce most of the marketed surplus?

2. Production and Harvest Handling: Describe handling, storage and processing technology and practices and identify the ways these techniques could be improved. Types of products transformed. Estimate losses and and discuss ways in which losses could be reduced. Identify conservation and conditioning practices and recommend imporved methods.

3. Marketing Organization: Describe the organization and major marketing channels. Identify key participants, by gender, at different stages of marketing in which market power may be concentrated. Identify institutional arrangements, such as men's and women's farmer organizations, contract farming schemes, trade associations, etc. which play an important role.

4. Marketing Operation and Margins: Identify major crop flows at the local and regional level. Quantify storage capacity at the village level. Using case study methods, prepare detailed trading budgets, which enumerate marketing costs and prices of traded product at key transaction points. Identify the costs of transportation and intermediation.

5. Demand: Evaluate the size, seasonality and other characteristics of domestic demand for the commodity, with particular attention to urban market consumption patterns. To what extent are locally produced or imported rice substituting for millet and sorghum. Estimate consumption and apparent demand by region and total.

6. Prices: Examine available seconday and primary price data to assess the magnitude of seasonal and secular trends, the degree of market integratin and returns to storage. How variable are commodity supplies and prices by season or from year to year, and how does this variability affect farmer production, storage and purchase/sale strategies. Evolution of average producer, wholesale and retail prices by region and total. Evaluate international prices and prices in the UDEAC region.

7. International Trade: Analyze border trade and export potential within the UDEAC region and outside it. Assess contribution to foreign exchange.

ANNEX I

SOCIAL SOUNDNESS ANALYSIS

ANNEX I

SOCIAL SOUNDNESS ANALYSIS

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SOCIAL SOUNDNESS ANALYSIS

1. METHODOLOGY

The AMTT project is a national level intervention. Analysis of its potential impact requires country-wide (by geographic and ecological zone), comprehensive (by type of agricultural marketing activity), integrated (by economic and social subsector), longitudinal (over time) and dissagregated (by gender) data. However, these basic data and analyses are generally unavailable in any reliable or consistent form. They have not been collected and the present institutions of government are insufficiently staffed, trained or equipped to collect, analyze or use such data.

On the other hand, select Chadian agencies, many individual Chadian and foreign researchers, and external organizations have conducted studies on specialized topics. A bibliography relating to women, for example, has just been published with 600 entries, none of which were listed in the A.I.D./W Library or the World Bank/IMF Women's Sector Library in Washington. The design team has located and reviewed many of these studies.

FAO has completed a preliminary household expenditure and consumption survey in N'Djamena. The World Bank, under its Social Dimensions of Adjustment Program, will initiate a more detailed household expenditure survey in N'Djamena in early CY 1991. UNICEF has prepared a working document which analyzes the condition of women and children in Chad as the basis for its next 5-year Action Plan. The Ministry of Social Affairs and the Promotion of Women (MSAPW) is in the midst of designing and carrying out a country-wide study on the needs of women. And preparation has begun for the first, comprehensive national census, which should provide much of the basic demographic data for AMTT and other development projects. Data collection is scheduled to start in the spring of 1991.

The social soundness analysis which follows is comprehensive where data are available but is mostly a review of individual micro-investigations. The design team did not carry out statistical surveys. It conducted numerous interviews with government officials, consumers, and participants in the agricultural marketing chain in N'Djamena and on selected visits to markets around the country. Additional data on selected topics will be collected during project implementation.

2. SOCIO-CULTURAL CONTEXT

2.1 Ethnicity and Religion

Chadian population is an aggregate of sedentary and nomadic, Sudanic, Saharan, and Subsaharan ethnic groups representing a mix of languages and cultures numerous even for Africa. The diversity in forms of socio-economic organization and political hierarchy represented in traditional Chadian life are such that certain ethnic groups find the lifestyle of others alien and unacceptable.

The degree of ethnic, socio-cultural, and religious variety found in Chad underscores the area as a transition zone between the Sahara, Sahel and tropical rain forests; between the Moslem north and east and the Christian and animist and Black south; and crossroads of cultural interaction and migration. In the north it is estimated that 95 percent of the people are Muslim, 4 percent are followers of traditional African religions, and 1 percent are Christian. In the south, an estimated 48 percent are Christian (mainly Roman Catholic), 47 percent to be followers of traditional religious forms and 5 percent to be Muslims. Adherence to either Islam or Christianity does not preclude simultaneous participation in certain traditional rituals.

The immense size of the country, its level of impoverishment, and historic inter-ethnic rivalries of great intensity and duration have entrenched feelings of ethnic, cultural, and regional exclusiveness that exist today and which will have an impact on the project. Ethnic rivalries may affect who will buy and sell from and to whom, how resources and capital can be accumulated and credit provided, how commercial rules will be applied and enforced, and the incentives to respond to project interventions. Analyzing and understanding these relationships are a crucial part of this project.

A rough approximation of known ethnic groups in Chad in 1964 is presented at Table I-1. There has never been a census in Chad. More recent data are not available. It is not known whether the new national census, which is due to begin in the spring of 1991, will collect data by ethnic group or not.

Table I-1: Chad's Population by Ethnic Group, 1964

Ethnic Group	Population	Percentage
Southern Sedentary Groups	1,139,000	38
Sara	800,000	25
Mboum, Lake	112,000	4
Moundang	90,000	3
Toubouri	75,000	2
Massa	50,000	2
Others	12,000	1
Sedentary & Semi-nomadic Groups of the Sahel	902,000	27
Maba	170,000	5
Haddad	100,000	3
Hadjeray	87,000	3
Bulala	80,000	2
Dadjo	65,000	2
Kenembou	60,000	2
Massalit	48,000	2
Zaghawa	40,000	2
Barma	35,000	1
Moubi	25,000	1
Massalat	23,000	1
Budouma	20,000	1
Kotoko	7,000	0
Others	142,000	4
Saharan, Northern and Nomadic Groups	613,650	17
Arabs	460,000	14
Toubou*	121,650	2
Fulani	32,000	1
Other Groups	645,650	18
TOTAL (1964)	3,300,000	100

* Includes the Teda and Daza subgroups also known as Gorane

Source: Decalo, Samual, Historical Dictionary of Chad, African Historical Dictionary No. 13, The Scarecrow Press, Inc., Metuchen, N.J., 1987.

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2.2 Traditional Socio-Economic Systems

A brief summary of Chad's socio-economic systems is presented below to assist project managers to be sensitive to the impact of these systems on project implementation. While traditional systems are gradually being transformed they will certainly continue to be influential during the life of the AMTT project.

A variety of social organizations have been in force among the country's ethnic groups, ranging from small clans to powerful sultanates. Three major patterns have been discerned within the three major geographical zones. (Area Handbook for Chad, 1972). The nomadic society of the Toubou is a representative of the northern pattern; the Sara serve as an example of the sedentary, agricultural system of the south. The culture of Arab society provides the major unifying influence in the Sahelian midsection, where nomads and sedentary people live together in a symbiotic economic relationship.

A pattern of ethnic fragmentation has been reinforced by loyalty to the immediate kinship group, which continues to be a predominant social value of all Chadians. Control of behavior is exercised through a sense of reciprocity that links an individual's social and economic rewards with the fulfillment of his obligation to the group. This has been equally true of the camel-herding Toubou of the Saharan north, the Moundang cotton growers of Mayo-Kebbe, the Kotoko fisherman in the area of the Logone River, and Sara government official in N'Djamena.

A key point for the AMTT project is that the interests of the group have been, and will continue to be, paramount. In cases of conflict, group interests will probably continue to override those of the individual, as exemplified in legal principal, in land tenure, or in attitudes toward women. Land was and continues, in general, to be communally held but individually used. The major goal of marriage was, and in most cases continues to be, to assure the permanence of the group. It is, therefore, too serious a matter to be left to individual discretion -- the decision often being made by the group.

Chadian societies are basically inward looking and hesitate to accept innovation unless the potential benefits clearly outweigh the potential risk, which in Chad, may mean survival itself. Where there has been change, religion seems to have been as significant a force of change as other important variables (e.g., the environment, prices, etc.). Most important of all has been Islam, which has brought some unity to the ethnically diverse people of the Sahel. Western ideas stressing individual effort and responsibility have found acceptance primarily among Christians. But until these traditional ideas are further

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transformed and western economic and social concepts are more generally accepted, the AMTT project will have to understand traditional patterns, accommodate, and work with them.

2.3 Language

Chad's large number of language groups reflects the ethnic diversity of the country. The languages generally fall into 12 linguistic groups, which are presented at Table I-2.

Table I-2: Chad's Major Language Groups

Sara-Baguirmi, spoken by well over one million persons in the south;
Chado-Hematic, related to Hausa
Moundang-Toupouri, spoken by up to one-half million persons in the south;
Kenembu-Zaghawa, spoken in the center and the north, mostly by nomadic clans;
Maba, spoken in the east in Biltine and Ouaddi;
Arabic, in several dialects, widely spoken or understood by Arab clans and by Moslem groups in the center and north;
Central Saharan, with 5 sub-groups;
Tama, with 2 sub-groups;
Dadjo, with 2 sub-groups;
Mimi;
Banda-Ngbaka, with 4 sub-groups; and
Peul (Fulani)

Source: Area Handbook for Chad, Foreign Area Studies, The American University, Washington, D.C., 1972.

Public education in Chad is in French. Approximately 49 percent of the school age population is registered in schools, representing 69.3 percent of school-age boys and 28.5 percent of school-age girls. The adult literacy rate in French is 40 percent for males and 11 percent for females. Other students in Muslim areas attend Koranic religious schools and learn primarily Arabic. Given the lack of one primary common language, the national radio station, Radio Chad, broadcasts its programs in nine different languages: French, which is the official language of government, Arabic, Sara, Toupouri, Massa, Moundang, Fulani,

Kenembu, and Gorane (the President's ethnic language). The market information system component of the AMTT project will thus need to target dissemination efforts by predominant languages in specific market areas.

2.4 Land Ownership and Local Authority

The traditional village or ethnic chief maintains an important role in Chad. It is with the traditional chiefs that contacts must be made and the gap bridged between the state and traditional society. The state has title to all land in the country. In most rural areas, according to tradition, however,the village chief, canton chief, or the sultan "owns" the land and holds authority over the population. The village chief, or in some cases a lesser "Chef de Terre" (field chief), has the right to distribute parcels of land to anyone who expresses an interest in it and demonstrates an ability to work it. There is no exchange of money, but the tiller of the land is expected to pay back a portion of his/her harvest to the chief or sultan.

Given the lack of transportation infrastructure in Chad, and the resultant isolation of most towns from each other and from N'Djamena, the traditional chiefs still wield great power, authority, and influence. The village chief's position gives him access to resources in the village. When the villagers pay fees -- for stalls in the market, for land, taxes -- they are paid to the village chief. It will thus be necessary that project activities requiring the gathering of local market information involve traditional chiefs.

The nature of land ownership by the state rather than individual farmers has an impact on access to credit. In many countries, land is the major collateral to guarantee repayments. With no private land ownership, minimal assets in agricultural tools, and no ready cash, Chadian farmers must rely on supplier credits, advances or loans against production, mutual savings associations (tontines), or traditional transfers such as bride price to secure capital for investment or working capital. The subject for the AMTT project is not to suggest changes in land ownership, but to study and proposes credit programs that takes into account the limitation on collateral.

2.5 Impact of Moro Recent Military/Political Events

On the political front, although the civil war and war with Libya have officially ended and reconstruction and stabilization efforts have begun, peace is still fragile. As recently as August 1, 1990, the Council of Ministers made an announcement, given heavy play on national radio, that troops were massing on the Libyan and Sudanian borders for a possible attack on Chad. Whether true or not, this announcement could serve to increase

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the general state of insecurity, increase the level of fear in the country, and reduce motivation for long term investment.

Some Chadians, unsure of stability of the government, have adopted a "wait and see" attitude before making significant investments in the country. A number of informants have indicated that the inter-tribal killings in the early 1980's have left open scars. ACDI reports that this insecurity has had direct implications for the fruit and vegetable sector in their zones of interest, where many farmers have either decreased production or reverted to subsistence farming until the security situation stabilizes. Farmers stated that if the political situation does stabilize, they would be willing to take more risks in terms of what they plant and send to market, and would utilize credit to finance machinery purchases.

The stability of traditional communities and the relationship between men and women has also been affected by recent military actions and movement of people. Whole families emigrated to Cameroon, Nigeria, and Sudan. In 1980, the bulk of N'Djamena's population fled to safety across the river to Cameroon, escaping the cross-fire in the capital. The massive exodus of the Sara from the northern prefectures transformed Moundou, Bongor, and Doba from vibrant regional centers into sprawling metropolitan refugee centers. Women gained new perspectives from their new environments and took over many duties previously the responsibility of men who had gone off to war, were killed, or just deserted.

The military actions of the recent past have had financial effects on the economy. In addition to regular taxes, people are still required to pay the "Effort de Guerre" and "Effort de Reconstruction" imposed during the last war. For workers and business people in the cities this is a percentage of salary or profit. In rural areas it is a head tax of FCFA 1,500 per adult per year. An aggressive military draft continued until early 1990, thus depriving many households of key revenue earners. Moreover, despite the recent peaceful parliamentary elections, the ability of the government to guarantee peace and security is still fragile. For example, an increase in animal thefts have been reported in the pastoral zones and recently some Europeans were stoned in the Abeche area.

2.6 Political/Administrative Structure of the State

2.6.1 <u>Political Structure</u>. Chad is a centralized state headed by a President. A constitution, promulgated in 1982, provides its legal basis. N'Djamena is the political and administrative capital. There is a 30 member National Assembly composed of delegates recently elected by the population of each

of the 14 Prefectures. There is one political party, l'Union Nationale pour l'Independence et la Revolution, or UNIR.

Fourteen Prefectures are the major units of administrative control. The Prefecture is managed by a Prefect named by the Council of Ministers, who represents the state in all political, judicial, and administrative powers. The Prefect represents the central government in his location and is responsible for the economic development of the Prefecture. The Prefect, with the assistance of a Regional Action Committee, supervises the technical agents of the central government ministries assigned to his area. Prefectures are subdivided into Sub-Prefectures of which there are 53. Sub-Prefectures are administered by Sub-Prefects who are also appointed by the Council of Ministers.

Sub-Prefectures have within them cantons, village groups, and nomadic areas, administered by traditional leaders appointed or elected according to local custom. Among the cantons there are still seven Sultans, vestiges of the ancient Kingdoms of Ouaddai, Kanem, Zaghawa, Fitri and Baguirmi, and the traditional social units of Dar-Sila and Dar-Tama. The exact number of individual villages or nomadic fractions is unknown.

2.6.2 Area and Demography by Prefecture. All population figures for Chad are estimates. Prefectures are listed in Table I-3 (overleaf) in order of total population. The first eight Prefectures account for almost 80 percent of the population, and they contain all of the major market towns listed in Table I-4 (same overleaf). Chari-Baguirmi includes the city of N'Djamena, which accounts for about half of that Prefecture's large population. Mayo-Kebbi has only two small cities--Bongor and Fiango--but is highly populated due to its fertile land and excellent trading location. Moyen-Chari is the location of Sarh, Chad's second larges city. And the third largest city, Moundou, accounts for the high population density for Logone-Occidental.

Seven of the first eight Prefectures are in western Chad, and they border the Central African Republic, Cameroon, Nigeria the shores of Lake Chad and Niger. The outlier is Ouaddai, which is in the far east on the Sudanese border, and includes the major city of Abeche. BET (Borkou-Ennedi-Tebesti) is the northernmost, Saharan Prefecture; it is the largest but least densely populated area with nomadic herdsmen predominant. There are slightly more women than men in most parts of Chad.

The AMTT project will have its greatest impact in the first eight Prefectures, as these are where the primary producers and consumers lives, and where most of the agricultural marketing occurs.

Table I-3: Chad's Area and Population by Prefecture, 1989

Prefecture	% of Area	Total Population	Male Population	Female Population	Persons per km²
Chari-Baguirmi	6.6	1,146.2	620.6	525.6	13.8
Mayo-Kebbi	2.3	650.2	287.6	362.6	21.6
Moyen-Chari	3.5	620.0	288.3	331.7	13.7
Ouaddai	5.9	405.8	191.5	214.3	5.2
Logone Occidental	.7	338.2	155.6	182.5	43.9
Kanem	8.9	316.8	143.0	173.8	2.8
Tandjile	1.4	315.4	134.7	180.7	17.5
Logone Oriental	2.2	313.4	141.0	172.4	11.2
Batha	6.9	265.8	117.2	148.6	3.0
Lac	1.7	243.2	135.1	108.1	10.9
Guera	4.6	242.0	99.5	142.5	4.1
Biltine	3.6	168.7	71.1	97.6	3.6
Salamat	4.9	132.6	52.9	79.8	2.1
BET	46.8	105.0	60.9	44.1	.2
TOTAL	100.0	5,263.1	2,498.9	2,764.3	4.1

Source: Bureau de Statistiques, Planification et Etudes, Ministere de la Sante Publique, Annuaire de Statistique Sanitaires du Tchad, Annee 1989, Tableau I3, I4.

Table I-4: Major Market Towns in Chad, by Population 1975-1988

Market	1975	1982	1988
N'Djamena	224,000	378,850	544,000
Sarh	50,000	77,700	101,009
Moundou	45,000	69,930	90,909
Abeche	32,000	54,560	70,928
Bongor	15,700	24,400	31,720
Doba	15,000	23,322	30,320
Fiango	11,100	17,259	22,437
Moussoro	7,700	12,858	16,715
Mao	5,500	9,180	11,934

Source: Seminaire National sur Population et Developpement au Tchad, N'Djamena, 10-14 Decembre 1984, Nations Unies, Commission Economique pour l'Afrique.

2.6.3 Markets in Chad. The market is a vitally important institution in Chadian society and culture, with a special place set aside for this purpose in every village. Most villages have a special "market day" when the majority of transactions take place; this is a social as well as economic community event. In the market local farmers interact with local buyers, traders from outside the locale, transporters, and other intermediaries in the marketing chain.

The physical structure of the average Chadian village market is quite simple: an open area in or around the village with wares spread on the ground or in miscellaneous sacks, boxes, bottles and pans in the open, or in the shade of a tree, shrub or mat/bamboo/straw covered stall. The volume traded is quite small, the producer exchanging, generally through cash transactions, the excess of production over family consumption, for such essential commodities as salt, sugar, oil, cloth, matches, and kerosene. Some village markets are open all week but may only have a few buyers and sellers except on the principal market day. The Attachments to this Annex provide details on selected markets visited by the design team.

Besides village markets, there exist the consumer markets of larger regions, towns and cities, the most important being N'Djamena, which accounts for 10 percent of the total population of the country. In the case of larger volumes, generated by market oriented production, the absorptive capacity of the village market is soon exceeded, and the produce is shifted to regional markets and then to the principal urban center: N'Djamena. There is also substantial cross-border trade to and from markets in Cameroon and Nigeria. There is no data on this trade.

2.6.4 Family Size by Prefecture. According to a survey undertaken by the MSAPW, the average family in Chad has 8 members, but varies considerably by region. Table I-5, below, lists the estimated family size.

It is not clear how a family is defined in the MSAPW survey. For example, what is considered a family unit among pastoral nomads may be different from a family unit among sedentary farmers; similar differences may exist between rural and urban residents. The household unit in the rural south is usually the family concession. It is a walled compound containing several huts, a granary or two and an area to tether livestock. Only members of the same patrilieage live within a concession, i.e. a nuclear family and some paternal relatives. A widow may remain in her brother-in-law's concession or a son will leave his family with his father while he works in N'Djamena. Another variation is the man who lives in N'Djamena with his two wives and the child of his older wife. When his second wife has children he

will send her and the children to his father's village to work and provide him with additional food. In return, he will supplement his father's village income with cash salary from his city job.

Table I-5: Chadian Family Size by Prefecture

Prefecture	Family Size	Prefecture	Family Size
Ouaddai	12	Lac	7
Logone-Occidental	11	Batha	7
Mayo-Kebbi	10	Guera	5
Tandjile	9	Biltine	5
Logone-Oriental	9	Salamat	5
Moyen-Chari	8	Kanem	NA
Chari-Baguirmi	8	BET	NA

Source: Rapport de la Pre-Enquete en Vue D'Identification et L'Evaluation des Besoins des Femmes Tchadiennes, (April 1990), Republique du Tchad, Ministere des Affaires Sociales et de la Promotion Feminine.

During field trips to villages, the team found it difficult, without a fair amount of discussion, to explain to village chiefs exactly what we meant by the word "family." The nature of the family structure, therefore, must be better understood and conventions of usage agreed upon in any project survey. This will be particularly important in the study on women in the Market and Policy Analyses component.

2.6.5 Administrative Structure in Agriculture and Rural Development. The rural and agricultural development process involves a number of institutions. The AMTT project is most directly concerned with the Ministry of Agriculture and Rural Development (MARD). Ministry units are clustered as follows:

- Technical Directorates, with offices for agricultural production, research, statistics, crop protection, agricultural education and vocational training, rural engineering, and water resources and meteorology;

- Authorities and Parastatals, which include the National Office for Rural Development (ONDR), the Sategui-Deressia Development Authority (OMVSD), the Office for the Development of Lake Chad (SODELAC), the Rural Intervention Fund (FIR), and the National Office for the Development of Horticulture (ONADEH);

- Staff Offices, including that of the Director General and various administrative units.

The MARD has a structural relationship with several independent entities, which have been established by separate decree (similar to the relationship of A.I.D. and the Department of State). These include the Interministerial Office for Studies and Programming (BIEP) and the Cotton and Exotic Textiles Research institute.

The Director General of Agriculture (DG/AGR) will provide overall formal leadership for the AMTT project, and will supervise the lead implementing agency for the market information system, the Bureau de la Statistique Agricole (BSA), as part of his normal management responsibilities. Annex F, Section 3.1.1. provides a detailed analysis of BSA. The project may also collaborate with BIEP in the conduct of a number of the studies planned under the Market and Policy Analyses component. Collaboration with the Ministry under the ASC component will be on an informal and informational basis.

The determination to work with the private sector in development of agribusiness was based in part on the very limited capacity of the Ministry to carry out its mandate. The Ministry's staff levels, particularly for field agents, is small in relation to need. ONDR, for example, has only 450 employees and 937 contractual laborers. A recent survey by UNICEF indicated that only 37 agricultural technicians, technical agents, instructors and extension agents are actually in the field.

Difficulty in serving the farmer is due as much to budgetary limitations on field travel as to lack of qualified staff. According to data collected by UNICEF in the course of a socio-economic survey of 101 villages, only 20 MARD extension workers were identified in these villages. Most field technical extension was being carried out by NGOs.

An additional problem is the field agents' credibility with farmers. ONDR (for cotton and other crops), SODELAC (for wheat), and OMVSD (for rice) all operate production credit programs in specific areas. Because the field agents must collect repayment at harvest, many farmers have come to think of MARD agents as mere tax collectors. The lack of continued relationships, confidence, and dialogue between farmers and agricultural employees makes it difficult for agricultural development operations to be performed smoothly.

Given these circumstances, project design has carefully avoided assuming too great a role for the GOC in project activities. The one choice of a GOC agency for a lead implementing role is that of BSA for the MIS. This choice was

based on a detailed assessment of BSA's staff levels, capabilities, and budgetary resources, and the design team is confident that it can fulfill its lead role. Other project interventions will be implemented through the private sector, or in collaboration with specific GOC offices on a case-by-case basis.

2.6.6 Cooperatives, "Groupements" and Local Organizations. As discussed above, the traditional importance of the group as opposed to the individual fosters a supportive environment for local organizations in Chad. More formal cooperatives, "groupements" and other local organizations to market agricultural products, secure credit, create business enterprises, and otherwise strengthen and improve the economic situation, are becoming more important. This development results, in part, from traditional mutual aid societies being less able to provide necessary resources as modern institutions begin to demand hard guarantees for credit or other assistance. The observations below are meant to provide some background for the possible involvement of local organizations in project activities. The fact that so little detail is known about local organizations in Chad suggests that the subject be considered as one of the later studies under the project.

Cooperative legislation dates back to a 1961 Decree. That Decree did not, however, include reference to "pre-cooperatives," "groupements" or other intermediate cooperative developmental stages. The Committee in charge of approving cooperative associations reportedly has not met for 12 years. Part of the reason why new cooperatives have not been registered is that potential groups feared the GOC would take over their financial resources. The Department of Industry, however, lists 143 cooperatives formally registered since 1982, about 40 percent of which are in agriculture. It is unclear how many of these are still functioning.

Both GOC offices such as ONDR, and most NGOs, tend to avoid formalizing local organizations into registered cooperatives, and focus on single purpose "groupements", or pre-cooperatives. ONDR, for example, grants agricultural credit only to farmer groups. NGOs also generally do not grant agricultural credit and do not implement projects to assist individual persons.

A large number of groups were formed by displaced populations with NGO assistance during the drought, but were dissolved as soon as donors stopped distribution of food aid. Other temporary local groups, realizing the advantages of cooperation, established new objectives to stay together as self-reliant organizations. Groups in rural areas today are found for the following types of activities:

- farm equipment management, e.g., shared management of a motorpump used in an irrigated perimeter, animal traction, or a cereal bank;

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- collective farming; and
- marketing, e.g., self-sustaining cotton markets.

As the ASC gains a client base and experience, it may look to some of these groups as potential sources for larger processing operations.

2.7 Women in Agriculture and Marketing

2.7.1 General Status of Women. Because there are few accurate statistics, it is difficult to quantify women's economic activities by sector, and their overall contribution to the economy or GDP. Women's efforts are largely invisible in national economic accounting since in rural areas their work includes mainly subsistence food production and petty trade; in urban areas, their work is often in the informal sector; and domestic tasks are unpaid. Although the Ministry of Labor estimates that women's labor represents 5 percent of the non-agricultural sector, the proportion of women working in services or commerce in unknown.

Although a mosaic of ethnic and religious groups, Chadian society has one fundamental characteristic: it is a patriarchal society where individual rights and obligations are determined by status in a group, and the group is defined by male lineage. The traditional role defined for women is in terms of family and domestic work.

The Chadian Constitution ensures "equality before the law of all citizens" and "freedom and fundamental rights of all individuals." Some articles specifically refer to equality between men and women as regards access to jobs and salaries. But according to much of the literature, the Chadian woman is not an equal before the law, especially as regards to family law. In fact, her social status is identified according to the logic of the traditional, patriarchal society. According to that tradition, once she marries, a woman shifts from her father's to her husband's authority. The husband has full power over her. She has neither freedom of movement nor freedom to carry on a job or manage her own property. When a woman is involved in any commercial activity, the proceeds usually go to her husband.

While the above situation still obtains to a great extent in rural area, the situation is changing in urban areas where many households are women-headed (26 percent in N'Djamena),and where there are more educated, salaried and professional women. The design team met independent businesswomen in both N'Djamena and Moundou, both in the formal agribusiness sector and in the informal transport and trade sectors. Women themselves organize a number of informal financial institutions to provide mutual aid, including the "Vente a Domicile" and "Pari-Vente" (private restaurant and social clubs). But women are still currently represented in a marginal and almost symbolic manner in business and at various management positions: one women minister, a few

physicians, three women magistrates. Women are represented on the Central Committee of the National Political Party -- UNIR.

A discriminatory process is established as soon as a girl is born. Her birth is welcomed with less happiness than that of a boy since the girl is expected to go to another family when she marries. Although schooling is compulsory for all, girls' education is neglected and interrupted very early by marriage. The family in which she was born has little interest in investing in her education since her productive life will be elsewhere.

Marriage comes with a varying size bride-price from the husband's family. In the south, it can be between FCFA 35,000 and 50,000 and in N'Djamena it can be easily over FCFA 1,000,000. The bride-price can also include gifts such as livestock, grains, objects of every day use, or work to be done, exchanged mutually between the two families. Since the husband's family pays, he expects a financial return on his investment, i.e., the labor of his wife.

In a traditional setting men perform the activities considered prestigious in religious, political, and economic activities. These activities cannot be performed by women. Other, less prestigious work, is reserved for women. In many sedentary societies, the man builds the house and the woman takes care of it. In most areas agricultural lands, working tools, oil or fruit trees, and animals are the property of the male head of the family. The woman takes care of the garden and helps in the fields. In other areas, however, men are the principal farmers on the small agricultural plots. As the area cultivated becomes larger, it is the women who become the principal workers of the land. In nomadic societies, temporary dwellings are constructed by the women. Food processing and cooking are exclusively reserved for women. Cattle raising is a man's activity.

In Chad, where an estimated 80 percent of the population makes its living from agriculture, a very large proportion of women spend their time in subsistence agricultural activities, including growing crops, backing-up men's agricultural activities, poultry farming, food processing, food gathering, handicraft, fuel-wood gathering. The following sections provide further detail on women's productive roles in rural and urban Chad.

2.7.2 <u>Women's Productive Roles in Rural Areas</u>. As in many parts of Africa, Chadian women hold an important position in food production, processing, and marketing systems. Their role from production to consumption puts women in a key role in household food security. Sometimes women are given personal plots, the production of which is entirely controlled by them. Unfortunately, most technical services and technological support are generally reserved for cash crops, usually controlled by men.

Women's work is performed within the family framework where the distribution of tasks ensures that each member has a place.

In cattle rising areas, women are responsible for the small ruminant stock, and milking and marketing of animal products (milk, eggs, butter). In fishing areas, women are primarily responsible for conservation activities, i.e. drying and smoking fish intended for family consumption or sale in the market.

In the agro-pastoral areas of the Sahelian zone, the typical economic system depends on family labor. The average size of a household is stated to be 6 to 7 members. The family is, as in the south, generally patriarchal. The father, as the group leader, holds all power and exercises authority over his wife or wives and children. The division of labor is as follows: (Bonfiglio, 1988).

- men are responsible for animal care and watering, search for pastures, and construction, repair, and maintenance of wells and drainage pits. Men look after anything pertaining to the sale of cattle in the market.

- women are responsible for cattle milking, sale and exchange of milk provided by cattle, the care and watering of small animals (especially donkeys, young sheep and goats). They also take charge of the household unit, food, and children's education.

- children are involved at an early age in herding tasks, providing care of cattle, watering, water supply for family needs, and chasing birds away from farms.

In the Sahelian zone, the labor breakdown is estimated as follows: (UNICEF, 1988).

	MEN	Women
Farming	57%	43%
Transport	15%	85%
Processing	24%	76%

Work categories which are invariably marked by a strict division between men and women concern the clearing of bush and fencing for men; and sowing, weeding, and food preparation reserved for women.

In rural areas, as elsewhere, women also do craft work for sale or household use. According to a CARE survey conducted in two villages in Kanem, those activities are critical to the household economy, as they bring in income required for purchasing other necessities. However, despite the need for additional income, many women in the survey had little time for craft work since their time was taken up fully by farming in the

wadis. As a result, handicrafts had become an activity for older women. (Adelski, 1987).

Another source of family income is the sale by women of surplus crops, including millet, cowpeas, groundnuts, beans, sorrel, and okra. This activity supplies local markets with small quantities of produce and ensures the small-scale redistribution of excess produce. Women also process part of the crop to be sold on the local markets into millet beer, sheanut oil, peanut oil, peanut millet flour, and doughnuts (beignets).

In rural areas, work is regulated by the season. For farmers and herdsmen in the Sahel, the beginning of the rainy season in June/July is a period of exhaustion and stress, following the long dry season which weakened households and cattle. Everybody -- men, women, and children -- work hard in farming and taking care of cattle. This is the pre-harvest period, when the prior year's food reserves are depleted and the current year's harvest is not yet available. This difficult period has clear correlations with health problems due to the poor nutritional status of people. Farmers are compelled to buy scarce food at high prices and frequently go into debt by mortgaging part of their future harvest. For women, who must feed the family, this is a particularly difficult time. In addition to their work in the fields and in marketing, they try to harvest wild grains as well as to take care of the family gardens.

After the harvest, during the long dry season, the family is less overworked. At this time men often go to town in search of jobs. Surveys conducted in other Sahelian countries indicate that this seasonal migration sometimes involves 20 to 30 percent of the male population. Women, with only their children, remain home and undertake all family activities, not counting much on the money they might receive from their husbands. The UNICEF food consumption survey cited above indicated that women and their children are badly malnourished at this time for lack of food, worktime, and energy. There is no reason to believe that the same situation does not also exist in Chad.

Environmental crises such as drought and desertification have had a particularly severe impact on women, especially concerning their role in water and firewood supply. The death of cattle and loss of lands, as key elements of subsistence life, leads to the displacement of men, or whole families, and makes the female's work even more burdensome.

The environmental factors and the seasonal activity schedules are also important for other categories of rural populations, including fishermen, northern nomads, and farmers in the cotton areas. In the context of an unreliable and risky environment, the household food security situation and community

welfare requires appropriate strategies on the part of those rural populations. Hence, the importance of cooperative tasks within families as well as that of traditional community, mutual aid societies and credit systems. When applied by herdsmen these systems involve the borrowing of cattle among family and friends. The systems of donations and exchange has very specific rules. (Chapelle, 1981).

Among the Massas, a community of farmers and herders who comprise 2 percent of the population, these self-help relations are centered on house building, collective hunting of game in dry season, and women's collective fishing. Among the Saras, the cereals producers of the south, who make up 25 percent of the population, granaries have a central importance in establishing personal cereals reserves as well as meeting the needs of the other members of the extended family and community. The richer and more powerful the group, the more is the food security it can provide to its members, male and female. (Magnant, 1986).

In fact, all the great events occurring in the community -- whether war, flood, drought or important activities in the life of an individual, such as birth ceremonies, circumcision, marriage and death -- mobilize this structure based on collective mutual aid and family solidarity, so that the individual member is not quite alone facing his difficult environment. For lack of an effective national social security system, the family and the local community are still the basis of social and economic life throughout Chad. Weakening of the family structure will be difficult for women, particularly as regards their responsibility for their children's survival.

Rural areas in Chad are changing. Individualism is appearing as a result of modern influences. New values are changing the foundations and functions of the traditional family. Growing urbanization and monetization of the economy are causing the disintegration of the mutual aid societies and the community solidarity system. The traditional mutual aid societies and solidarity group system also seem to be fading because of food shortages, the depletion of sustained food reserves, and a growing desire to "go it alone". In the Sara areas collective farming is reportedly gradually being dropped in favor of individual plots, making the family link looser. The influence of money in current life has resulted in the pauperization of those who are unable to earn it. One result has been the increase in the rural exodus of the poor. Exact figures on such movement have yet to be collected.

In the Sara areas, with the introduction of cotton, the mechanization of production through the use of plows, and the increase in acreage, the workload of females has became even more burdensome. This increased demand for labor has contributed to

an increase in polygamy. i.e., the farmer investing in a spouse to help him to farm (Magnant, 1986). More constraints on women's time become a limiting factor on rural development. Studies have yet to be carried out on the effect of the recent cotton crisis on household economics and social structures in this zone and on the capabilities of the household to attain food security.

Analyzing women's roles in agricultural marketing will be one of the principal studies under the Policy and Market Analysis component of this project. The study will take into account the effects of social changes and natural disasters which have changed the Chadian scene over the last few years. The study will examine the contradictions between the growing role of women in food production, processing, and marketing, and women's subordinate place in decision-making. Limited access to, and the possession and control of, productive factors which influence women's capability to be effective producers will be studied. The study should take into account regional particularities and separate actions needed in each zone to increase the productive capacity of women.

2.7.3 Women's Productive Roles in Urban Areas. According to Chadian law, no male/female discrimination exists in the Civil Service or in labor law. However, social realities do not always reflect the legal rules. For example, in 1987, among wage earners recorded with the Chadian Social Welfare Administration (CNPS), men represented 96 percent of the workforce. (Ministere du Plan, DSEED, 1988). The situation may be better in the Civil Service but accurate information is not available. It is obvious that women hold very few top government positions.

The FAO/DSEED household survey of N'Djamena recorded that 46.1 percent of adult women work for pay, of which only 9 percent earned salaries, as compared to 40.3 percent for men. The other 91 percent of those women who work are self-employed. Most are in the informal sector on which very few data are available. One study estimates that 60-75 percent of the overall urban workforce is employed in the informal sector (Hemida 1988), but the data are not disaggregated by gender.

Urban women resell vegetables in the central market, prepare and sell a local beverage named "bili-bili" in the neighborhoods, make earthenware and sell cakes, rice pancakes (kissar), and peanut oil. A survey undertaken on craftworkers organized into pre-cooperatives within N'Djamena recognized the importance of the female contribution to the family budget, but found that women had to have multiple and diverse sources of income due to the low yield of each activity (Woods, 1987).

Living conditions in the towns are difficult for households. Data collected in 1985 in N'Djamena (Groupe, 1984) reveal that

the average monthly household income for an average size household of 5.2 persons was FCFA 28,500. A small minority (2 percent of households, mainly major traders) earned over FCFA 100,000 per month. Seventy percent of the population included low income households with less than FCFA 32,000 (or 6,000 FCFA per individual) per month. According to WHO, the minimum food ration for a 5 member household would cost at least FCFA 650 per day, or FCFA 19,000 monthly. This, added to the average rent of a one room house (FCFA 4,000), comes up to a monthly expenditure of FCFA 23,000. An estimated 50 percent of the households in N'Djamena were below the minimum standard of living set by WHO, exclusive of medicine, school supplies, transportation, etc.

Other indicators for N'Djamena were provided by the 1988 survey by FAO and DSEED on 300 households (2,439 members). The structure of employment in urban areas reveals a concentration in trade, services, and transport (18.8 percent) and a smaller concentration in productive activities, i.e., industry (5.4 percent) This structure can be found both in the formal and informal sectors.

Annual household expenditures are difficult to accurately understand. They are estimated to include the purchase of food and consumables (44.8 percent), transport (10.5 percent), clothing (8.3 percent) and lodging (5.2 percent, varying by socio-professional category). Senior government staff devote 1.9 percent of their expenditures to education against 0.9 percent on average for the whole population. Household expenditures on education are less than health (2.9 percent) and those two categories represent the lowest expenditure categories. Although these categories of expenditures are supposed to be provided by the GOC, it may explain the low school attendance and the poor health of the population. Unfortunately, the survey did not deal with differences in male/female budget-consumption, which would be needed to better assess women's economic contribution.

Financial difficulties were a major preoccupation of the surveyed populations in urban area. The compulsory war levy and the reconstruction tax was noted. There was little to stimulate the purchasing power of the population and, therefore, the demand for services and products. The application of the new Investment Code was not well understood and, consequently, little used. Working with this Investment Code could become a useful activity of the projects Agribusiness Support Center. Other suggestions from the investigation by the Ministry of Plan include:

- modifying the tax system to encourage local business,
- providing access to credit on favorable conditions, and
- providing job opportunities so that the people can meet their own needs.

2.7.4 Recent Efforts to Improve Women's Roles in Development. Within the past three years a Direction de la Promotion Feminine was created within the Ministry of Social Affairs and Promotion of Women. The Direction has undertaken a number of project activities in support of women that should be taken into account by AMTT implementers. Three of the more relevant activities are summarized below. They are:

- A Bibliography on women in Chad;
- A comprehensive study on the needs of Chadian women;
- A program on appropriate technology for women.

The Giraffe Bibliography

In conjunction with UNICEF, OXFAM, EIRENE, CILONG, and an informal group of Chadian and expatriate women known as Giraffe, the Direction has cooperated in the production of a Bibliography on women in Chad. The first edition of the Bibliography, entitled Fonds de Documentation sur les Femmes au Tchad, has 600 entries. One copy of each of the publications is kept on file at the CEFOD library. Major sections of the Bibliography cover:

Social Affaires	Cultural Anthropology
Artisinat and Crafts	Social Anthropology
Demography	Rural Development
Legal Position of Women	Economics
The Family	Education and Training
Women's Organizations	Oral Literature
Marriage	Promotion of Women
Health	Sociology
Work	

The very existence of the Bibliography indicates changing attitudes toward women's status and activities and the desire on the part of some to give it the recognition it requires. This material can provide the starting point for the AMTT project's study on women and agricultural marketing.

Identification of the Needs of Chadian Women

The Direction organized a study during the past six months to look into all facets of women's productive roles. The survey was to be the basis for the Ministry to design a comprehensive, long term, program of action to improve the condition of women in Chad including their roll in agriculture and agricultural marketing. The first step in the study was to prepare, distribute, and analyze a preliminary questionnaire to women in each of Chad's 14 regions. Since only 54 responses were received from 12 of the 14 Prefectures, the responses can not be considered representative. However, the responses can be helpful in pointing up directions for future study.

a) Problems Reported by Women

These problems offer a wide range of subject matter for investigation under the project's proposed study on women in agricultural marketing.

Agricultural Services
- Lack of means to pump water
- Slow and late purchase of cotton
- Shortage of dehusking equipment
- Shortage of modern means of production
- Lack of adapted agricultural seeds/crops

Socio-Cultural Issues
- Shortage of women's support groups
- Illiteracy
- Sharecropping by very poor farmers
- Destruction of fields by nomadic livestock
- Shortage of time for agricultural work

Transportation
- Bad state of roads
- Shortage of vehicles
- Difficulty of bringing out agricultural products

Land
- Destruction of agricultural lands
- Poor laterite soils
- Shortage of agricultural land

Agricultural Inputs
- Shortage of modern agricultural tools
- Excessive cost of agricultural tools
- Expensive fertilizer and other agricultural inputs

Physical Environment
- Unsupportive and difficult climate
- Grasshoppers, other insects and grain eating birds

Agricultural Pricing
- Low prices for agricultural products

Food Processing and Conservation
- Difficulty of preserving agricultural products

b) Suggestions by Women for Improvement

Agricultural Services
- Training in agricultural technology
- Create new markets for agricultural products

A factory for cotton ginning
Facilitate access to modern agricultural tools
Develop the export of agricultural products
Improve the production of cotton
Increase the number of wells
Introduce seed adapted to different growing cycles
Create cereal banks for food security
Open storehouse for products of primary necessity
Train farmers in soil conservation
Improved management of irrigated perimeters

Socio-Cultural Issues
Train a larger number of extension agents to help women
Lighten the task of women by installing grain mills
Take disciplinary measures against livestock nomads
Encourage the development of women's groups
Agricultural credit for women's groups
Create agricultural training centers for women
Intensify literacy training for women

Food Processing and Conservation
Install equipment to process tomatoes
Develop agricultural technology for women
Train women in techniques of food processing

Agricultural Inputs
Introduce herbicides
Reduce the cost of agricultural inputs
Subsidize agricultural inputs

Agricultural Pricing
Increase the price of agricultural products
Increase price of cotton

Physical Environment
Reforestation by the population
Extend means to fight insects, grasshoppers and birds

Agricultural Credit
Credit to buy animals, carts and agricultural tools
Shortage of agricultural credit

Transportation
Improve the transport of agricultural products

c) Women's Mutual Aid Groups

An entire section of the report by the Direction de la Promotion Feminine was devoted to "groupements feminine." These groups are of all size, structure and legal status. They may be 3 women who join together to buy, kill, smoke and sell one

animal. They may be half a dozen women who rent a truck to take one load of vegetables to a regional market or to the N'Djamena market and bring back other products to sell in their local market. They may be a pre-cooperative or a village organization with officers and a treasury that buys and sells village produce. It may also be a legally registered cooperative that provides credit or guarantees the loans of individual members. The detailed information can only be summarized here. It has been organized by "primary activity" of the women's group and, secondly, by the cooperative's "intended output."

Primary Activity of the Association

Tontines (Self-finance cooperatives)
Collective farming
Technical training
Community farming
Small commerce
Small gardening
Small animal husbandry
Literacy, health, nutrition training
Acquisition of appropriate technology
Arts and crafts
Community storage/warehousing

Intended Output of the Association

Augmentation of women's revenue
Food security
Food self-sufficiency
Mutual aid/support
Improving the condition of women's lives
Lightening women's workload

The report of the survey noted the absence of comment on community warehousing which does exist and suggested that this area of activity might be subsumed under the food security heading. The present project will take into account how to secure information from and about these groups and how the marketing information will impact on them.

Appropriate Technology Enterprises for Women

In conjunction with UNIFEM and BIEP, the Direction for the Promotion of Women is implementing a program to determine what new appropriate technology-based women's agribusinesses might be promoted. The first phase of this program was a nationwide survey of the technology presently being used in the daily life of women. The second phase was the determination of which technologies should be selected and improved. The technologies

selected were millet threshers, peanut dehullers, grain harvesters, metal cookstoves, and grain mills.

The next phase of the program will be to popularize and spread these new and improved technologies to women and sensitize women to agribusiness opportunities with the new technologies. A recent evaluation of the program, however, indicates problems with producing these technologies locally at a price that would enable them to be commercially viable. The issue of credit to purchase the technology or to create a business to sell a product processed or manufactured by the new technology has not yet been considered. These activities of the MSAWP are being taken into account in the women's study being proposed under the Policy and Market Analyses component of this project.

2.8 Brief on Agricultural Marketing Constraints

The agricultural sector's contribution to GDP does not significantly increase in years of good harvest because of the inability to market excess production. A major part of the problem is that Chad does not yet have nationally integrated marketing systems. Instead, there are a series of fragmented, isolated, village area, or regional, markets; N'Djamena is the largest market. Surpluses can be found in one area while another has scarcity of the same product. The major physical infrastructural factors impeding market integration are the lack of adequate farm-to-market roads, lack of transportation services, and unavailability of storage.

These constraints contribute to an extreme variation in the price of agricultural products. Within a one week period, the design team found that maize was selling in Baltram at FCFA 200/coro; in Lamadji at FCFA 125/coro; and at Am Timan at FCFA 25/coro. Transportation costs must be taken into account by an entrepreneur when s/he decides whether s/he should take advantage of the large price differences among different area markets. The relatively high costs of agricultural products has a significant dampening effect on demand in a country where the consumer has limited purchasing power.

Inadequate storage facilities for perishables limit a farmer's marketing options. Cold storage is not available. Vegetables, which are highly perishable in a hot climate, must be sold within a day or two after being transported to market. Availability of on-farm storage for cereals is less a problem. But it can be one factor that could force farmers to sell on unfavorable terms immediately after the harvest when prices are most depressed and the needs of the farmer are the greatest. Such bumper crops are not a recent occurrence. Unavailability of storage prevents intermediaries and retailers from holding significant stock, which could have a price-balancing effect.

Other elements of the marketing systems are discussed further in Annexes F, G, and H. Attachments to this Annex describe the marketing situation and constraints in villages and cities visited by members of the design team. The next two parts of this analysis discuss the effect of Chad's socio-cultural environment on this project ability to carry out market and policy studies, collect and disseminate agricultural price information, and promote agribusinesses in order to increase market efficiency.

3. PARTICIPANTS IN THE PROJECT

This section of the social soundness analysis will focus on the participants who will carry out and be part of the intervention in each of the three project components. Section 4 which follows will discuss how participants may or may not benefit from project interventions.

3.1 Participants in the Market Chain

Participants are grouped below into a commonly accepted breakdown of an agricultural marketing system. The participant/operator group is in approximate sequential order of the marketing chain. But sequencing can be misleading. Many people can fit into more than one category and intermediate steps in the chain can be bypassed and/or repeated.

Operators are defined as participants who actually "put their hands on" and work with agricultural products. Operators in Chad include:

- Farmers, as producers and sellers;
- Cooperative Members, for production, marketing, and capital accumulation;
- Food Processors and Packagers, including the farm family and the commercial private sector;
- Transporters, at the local level toward the market, and at the market level toward the consumer;
- Wholesalers, including small scale at the local level, intermediate at regional markets, and large at the N'Djamena market;
- Warehouse/Storage Operators, from individual farms, cooperatives, and the commercial private sector; and
- Retailers, at village, regional, and the N'Djamena market.

Supporters are defined as service providers who do not actually touch the product. Supporters in Chad include:

- Bankers/Credit Providers and Other Financial Services, informal and traditional at the farm/producer level, formal and institutional at the larger/modern level;
- Food Brokers and Commission Agents at all levels; and
- Input Suppliers of all kinds; and
- Government Institutions, including agricultural research, training and extension.

Coordinators are defined as integrators of various parts of the food/fiber marketing system. Coordinators in Chad include:

- the Government of Chad, to set the policy and regulatory environment, provide information, etc.
- International Donor Agencies, including A.I.D., UNDP, the World Bank, FAO, etc.; and
- Private Institutions, including the Chamber of Commerce, labor unions, and other regional or national level groups.

Consumers, at the village market, at a regional market, and at the N'Djamena market.

3.2 Participation Within Each of the Three Project Components of the AMTT Project

Most of the above noted participant categories are in the marketing chain in Chad, although roles in Chad are less specialized than in more developed countries. Table I-6 summarizes these participants in terms of their actual participation in each component of the project and the benefits they will, or will not, derive. The potential project participants included in section 3.1 above are listed in the first column of the Table. For purposes of analysis, the Table has separate lines under each category in for male and female participants. In fact, while the nature of gender participation differs in degree, in no case was it necessary to include a different response for males as for females.

Table I-6: Analysis of AMTT Participants and Beneficiaries by Project Component

Component / Actors	Market Info System Direct Partic	Market Info System Direct Benef	Market Info System Indir. Benef	Business Support Ctr Direct Partic	Business Support Ctr Direct Benef	Business Support Ctr Indr. Benef	Policy Studies Direct Partic	Policy Studies Direct Benef	Policy Studies Indr Bene
Farmer									
Male	yes	yes	yes	no	no	yes	no	no	yes
Female	yes	yes	yes	no	no	yes	no	no	yes
Cooperative Member									
Male	yes	yes	yes	mby	mby	yes	no	no	yes
Female	yes	yes	yes	mby	mby	yes	no	no	yes
Food Proc./Package									
Male	yes	mby	yes	yes	yes	yes	no	no	yes
Female	yes	mby	yes	yes	yes	yes	no	no	yes
Retailers									
Male	yes	yes	yes	no	no	yes	no	no	yes
Female	yes	yes	yes	no	no	yes	no	no	yes
Transporters									
Male	yes	mby	yes	mby	mby	yes	yes	mby	yes
Female	yes	mby	yes	mby	mby	yes	yes	mby	yes
Wholesalers									
Male	yes	mby	yes	mby	mby	yes	no	no	yes
Female	yes	mby	yes	mby	mby	yes	no	no	yes
Warehouse/Storage									
Male	mby	mby	yes	mby	mby	yes	no	no	yes
Female	mby	mby	yes	mby	mby	yes	no	no	yes
Food Brokers/Comm.									
Male	mby	mby	yes	no	no	yes	no	no	yes
Female	mby	mby	yes	no	no	yes	no	no	yes
Credit Providers									
Male	mby	no	yes	mby	mby	yes	yes	mby	yes
Female	mby	no	yes	mby	mby	yes	yes	mby	yes
GOC Pub. Officials									
Male	yes	no	yes	yes	no	yes	yes	yes	yes
Female	yes	no	yes	yes	no	yes	yes	yes	yes
Consumers									
Male	no	yes	yes	no	no	yes	no	no	yes
Female	no	yes	yes	no	no	yes	no	no	yes

The three project components are listed in the top heading. Under each project component are columns for:

Direct Participants: These are the people who will directly participate in project implementation;
Direct Beneficiaries: These are the people who, it is anticipated, will directly benefit from the project interventions; and
Indirect Beneficiaries: These are people who will receive benefits from the project, over the long term.

Participants are discussed below. The same Table will be the basis for the consideration of beneficiaries in section 4. which follows.

3.2.1 The Market Information Systems (MIS) Component. The principal participants in this project component are farmers, cooperative members, food processors, vendors, intermediates, and GOC officials, primarily in the Ministry of Agriculture and Rural Development and in Radio Chad. A comparison of tasks and participants is presented below.

MIS Tasks	Chadian Participants
DIRECTION	
Managing the Program	Director General of Agriculture
Technical Direction	Dir., BSA
DIAGNOSTIC PHASE (one time only)	
Survey of User Needs	Prof. Staff, BSA
Designing Collection Forms	Prof. Staff, BSA.
DATA COLLECTION/PROCESSING PHASE	
Field Data Collection	BSA Enumerators
Source of Field Data	Farmers, Cooperatives, Traders, Vendors, Transporters
Analysis of Field Data	Prof. Staff, BSA
DISSEMINATION PHASE	
Preparation of Radio Prog.	Prof. Staff, BSA
Transmission of Programs	Radio Chad
Receipt of Mkt. Information	Farmers, Cooperatives, Traders, Vendors, Transporters
USER PHASE	
Users of Mkt. Information	All of the above.
Extension agents for Process	MARD (ONDR/BSA), PVOs (ACDI/ORT)
EVALUATION PHASE	
Monitor and Evaluation	MARD (with USAID, while US funding is involved)

Participants will be involved in the MIS as follows:

The Farmer: Farmers and farm families comprise 80 percent of the population, more than half of whom are women and girls. The improved market information system, on a national scale, could enable as many as 4 million Chadians to increase the amount of product marketed and increase the price for the product. Since farmers are not only producers but also the sellers of agricultural products, they will be important participants as informants for the collection of basic agricultural price data under the project's MIS component.

Cooperative Members: Cooperatives should become important informants and participants for the MIS if they organize farmers and other participants in the marketing chain and purchase commodities from their members and sell to intermediaries. As they strengthen the position of their members, cooperatives will, no doubt, develop the power also to affect price decisions. Cooperatives can provide, through the "solidarity" approach a guarantee for credit that most individuals would not have acting alone.

Food Processors/Packagers: This category of participants may be a useful source of data for the project's market information component, depending on what data collection point and levels are agreed upon with BSA.

Retailers: Retailers of agricultural products will be informants and the source of market price data, particularly at the village level.

Transporters, Wholesalers, Commission Brokers, and Warehouse Owners: These are a more complicated group to understand, perhaps because so little is presently known about their activities. A major study will be carried out under the Policy and Studies component of the project to better understand the mode of operations of transporters. All of these participants will be active informants in the MIS.

Bankers and Credit Providers: While information generated by the MIS will be available to the existing commercial banking systems, they will not be participants in the intervention. Other sources of credit for agribusiness such as the ONDR extension program in the cotton sector, SODELAC's program in the Lac Prefecture and OMVSD in the rice sector will also have access to the new information.

GOC Officials: GOC officials will be the principal participants in the MIS component of this project. GOC decision makers and technical staff must provide creative and energetic leadership for this project to succeed. They must take the

initiative to spread the project concept beyond MARD, the principal ministry in which it is located, to make it an effort that spreads throughout the country. It is presently planned for the MIS to be supported through the Bureau of Agricultural Statistics (BSA) in MARD. The Director General for Agriculture will assume an important policy, coordination, and management function.

3.2.2 The Agribusiness Support Center (ASC) Component. The ASC is a limited pilot effort concerned mostly with the N'Djamena based business community. In the early phase of the project, participation will be limited to the work of one expatriate advisor and ASC Chadian staff with three private Chadian consulting firms and interested members of the business community. Additional participation will be provided by the GOC in the form of information and contact with officials in the MARD, Ministry of Commerce and Industry, the Chamber of Commerce, "Patronate," (the new private business association), and possibly women entrepreneurs identified with the help of the MSAWP.

Participation will be sought with the range of PVOs carrying out similar (VITA) or supportive (CARE/ACDI) programs. Participation with local consulting firms will be essential. Encouraging business consulting firm to continue the work of the ASC will be a key project output.

Because the effective demand for the ASC services is not known, the component is initially planned for two years, with an additional two years pending the findings of an evaluation at month 18. At this time, the primary effective demand is expected to come from medium-scale investors, primarily in transport and processing. A summary of the likelihood of participation by various members of the marketing chain follows:

Farmers: The ASC services are geared towards medium-scale entrepreneurs, i.e. those who will be able to invest (and/or obtain credit) in business development. There are a few large-scale farmers in Chari-Baguirmi and the south who might avail themselves of ASC services, but the number is likely to be quite small.

Cooperatives: There is assumed to be a demand for credit and business development services among cooperatives but the levels of demand and capabilities of such groups are not known. Cooperatives at the village level or in rural areas are not likely to participate except indirectly, with NGO's forging the links with the ASC on their behalf.

Food Processors/Packagers: New opportunities for private enterprise, particularly in the wide range of agribusinesses associated with food processing and packaging, will be a prime

target of the ASC. An outreach effort will be made to encourage existing agribusinesses and potential investors in this field to use the services of the Center.

Retailers: New or expanded agribusinesses at the retail level are not immediately obvious

Transporters and other Intermediaries: This group of participants is diverse. The larger ones, with money to invest, could become clients of the ASC as grain, vegetable, fish, and related food products becomes more competitive, and the demand for intermediate services and products increases. Similar potential exists with intermediaries such as assemblers, collectors, wholesalers, warehouse, and storage facility owners. Certainly transporters could become an important client group if the import tax on transport equipment is lowered.

Credit Providers: These participants, particularly the commercial banks in N'Djamena and perhaps the Chad Development Bank, if it recommences operation, could be of concern to the ASC as it assists existing businesses expand their operations and new business to enter the commercial sector.

3.2.3 Policy and Market Analyses Component. Participation in this component will be limited to GOC and donor officials who use the information generated to consider policy alternatives. The proposed creation of a Policy Oversight Committee will help focus and foster this participation, as will the proposed roundtables and seminars to consider conclusions of individual studies.

Private citizens will participate in the studies only as informants or interviewees. Certain groups, such as the three transporter cooperatives, may be more involved in selected studies, but in general, widespread participation is not anticipated.

3.2.4 Women as Project Participants. Women are not included above as a separate participant category because women are part of each of the other target populations. The MIS will include separate questions in the annual user surveys specifically designed to measure women's access to and use of the radio broadcasts, and special activities, such as use of women's voices in the broadcasts, will be tested to enhance such access and use if need be. The ASC has a target of 30 percent women clients, which it believes can be achieved. And the Market and Policy Analysis component will support a separate study on women's participation in agricultural marketing, as well as assuring that all other studies under the component collect gender-disaggregated data.

The descriptive sections of this social soundness analysis have given considerable attention to the unique constraints on

women involved in agricultural marketing. Principal participants for the study on women in marketing under the Market and Policy Analysis component will include the MSAPW, the local UNIFEM representative, UNICEF, the small but growing number of formal sector businesswomen throughout the country, women's formal and informal cooperative and pre-cooperatives, and certainly the large number of individual women carrying out informal agribusiness in every village, market and city in the country.

Policy level and data collection units of Government should be consulted to begin collecting gender disaggregated data and to consider policies that take note of women's contribution to the economy. There is no separate women's component in this project. Each of the project components has given attention to overcoming constraints to women and indicated how women will be participants in the interventions.

4. SOCIAL CONSEQUENCES AND BENEFIT INCIDENCE

The analysis in the body of the Project Paper and Annex H locates Chad somewhere between the first and second of the five stages of market development noted in the draft Bureau for Africa's "Strategic Framework for Promoting Agricultural Marketing and Agribusiness Development in Sub-Saharan Africa." The AMTT project is essentially a Phase I effort designed to generate information and experience to move Chad on to the next stages of development.

The following indicators of goal and purpose level achievement have been set for the project:

Goal Indicators

- Lower marketing costs;
- Reduced seasonal price fluctuations;
- Increased stable supply of agricultural products across time and space;
- Lower consumer costs; and
- Increased value added attributable to agribusiness.

Purpose Indicators (End of Project Status)

- Market correlation coefficients will have increased due to improved market communication;
- Private sector investment in agribusiness will have increased in relative and absolute terms; and
- The GOC will be using improved information to assess the impact of policy alternatives.

Only approximately 21,000 persons were employed in the formal sector in 1989, so that any improvements to the policy or regulatory environment affecting the formal sector would have a relatively limited direct benefit. Increased investment of

agribusiness is also expected to be modest, in that the Business Support Center is a pilot effort and will need to gain experience prior to generating any measurable impact. As described in the following paragraphs, the area where the greatest direct impact in terms of achievement of goal and purpose indicators will occur is probably through the MIS.

While this project may help speed up modernization and social changes already in process, there are no negative social consequences resulting directly from this project.

4.1 Market Information System Beneficiaries

GOC Officials, in the short run, will be the principle beneficiaries of the MIS. GOC officials will have more information to better understand their country's agricultural marketing systems and have strengthened capability to carry out more sophisticated studies and make more effective decisions.

Farmer/producers and farm families comprise as many as 4 million Chadians who can potentially benefit from this Phase 1 project. Assuming that the majority of the first 30-40 markets chosen for MIS reporting are in the eight Prefectures of highest population, which also include the 12 largest cities in Chad (ref. Tables I-3 and I-4 at page I-9), it can be expected that as many as 3 million persons in rural farm families will benefit from more stable, and possibly increased, producer prices. These Prefectures are also the areas in which A.I.D. and other donor road rehabilitation or maintenance projects should, by the end of the project, help reduce the transportation constraints to a more efficient marketing network, which will have an even greater impact on margins.

Socio-cultural reasons which may inhibit farmers from responding to the new market information have been noted, above. It will be essential to work with other units of the Chadian government, with NGO/PVOs, cooperatives, etc. to assure that farmers receive the market information, understand its implication, and receive help in how to react to the information.

Consumers will benefit substantially from a more competitive, economically efficient, agricultural marketing network, which will lead to lower prices for food in urban areas. Consumers in the major city markets would no longer have to pay for inefficiencies in the marketing chain, thereby reducing their cost for food and increasing their options for consumption. Assuming the initial 30-40 markets are in the eight Prefectures of highest population and with Chad's 12 major cities, almost 1 million non-agricultural, urban consumers, in addition to the 3 million rural producers already noted, could benefit by the end of the project.

Cooperative Members and Private Sector Food Processors and Packagers could benefit to a greater extent than other participants from information provided by the MIS. As markets improve and supply and demand for agricultural commodities stabilizes, especially for those products to which value can be added through processing, the need for additional or new types of cooperatives will also increase. Since women in Chad have been very active in cooperatives, they should be able to take advantage of these new opportunities.

Transporters and other Intermediaries. There is an impression that these entrepreneurs already have much of this information for their zones of interest and that they are already taking advantage of this information. It is common to hear that they gouge the farmer, particularly just after harvest, and sell at high prices to the consumer. The other side of the story comes from a woman truck owner in Moundou. She indicates it is the farmer rather than the transporter who sets the prices. She indicates that she is being taken advantage of under the present system. She lists her high costs, from purchase of the expensive piece of equipment, to maintenance of the truck, taxes, bribes at road blocks and down time for her truck. She contends that she does not make an exorbitant return for the entrepreneurial service she was rendering and risk she is taking. She therefore agreed that the project's improved market information system would be a benefit to herself and to other transporters, wholesalers and traders.

USAID will be a direct beneficiary of the results of the project. In the early stages of developing an agricultural marketing strategy for Chad, the results of AMTT will certainly be useful.

4.2 Agribusiness Support Center Beneficiaries

The principal beneficiaries of this project component will be those entrepreneurs who seek the assistance of the Center and actually invest in a productive agribusiness. These persons will probably not be the largest investors presently engaged in commodity trade who, with large amounts of their own capital, are already earning substantial profits in short term commodity sales. Nor will they be the very large number of small, informal, entrepreneurs with little capital or potential commercial credit guarantees. It is the group in between that the ASC will seek out. They will probably be those individual entrepreneurs or owners of capital engaged, or wishing to become engaged, in food processing and packaging, possibly in transport, wholesale or warehouse activities. As stated earlier, the ASC has a target of at least 30 percent women clients. The completion of three-to-four business plans during the first

eighteen months is anticipated, so that one or two will be for women.

4.3 Market and Policy Analysis Beneficiaries

The only direct beneficiaries of this component during this Phase 1 effort will be GOC planners and A.I.D. and other donor officials. Both will have reduced risk to their investments in agricultural marketing through availability of improved information to inform policy and investment decisions.

The GOC may benefit from increased revenues if more businesses register when the process is simplified. Selected small and medium-scale businesses may benefit when access to the benefits of Regime A of the Investment Code is simplified, although numbers and levels of benefits are not yet known. As policies are reformed, numerous benefits may accrue to others, especially in terms of the patente and selected import tariffs. There is great potential for substantial impact to a wide number of people if practical solutions to identified constraints in the transport industry and private financial markets are overcome. However, it is impossible to predict such benefits until studies demonstrate alternatives; such predictions will have to await the planning for Phase 2.

In the long run, this project should have indirect economic benefits to all noted participants, not only to those in the market chain, but to the economy as a whole.

4.4 Women as Project Beneficiaries

While there is no separate women's component to this project, the productive role of women has been emphasized in this social soundness analysis and constraints on increasing women's contribution to agricultural marketing have been noted throughout the analysis. Women are important participants in each of the components and will benefit accordingly. The Market and Policy and Analysis component includes a major study on the role of women in agricultural marketing. The study will seek to develop comprehensive gender disaggregated data at the national level and will review with government agencies their statistical collection plans and programs to encourage them to develop new data series which will give special attention to the status of women and their economic contribution. The study on private financial services and the capital markets will likewise seek ways to benefit women in their role as producer, transporter, processor and related agricultural marketing activities. The substance of the studies themselves, but also the very fact that they are being proposed and carried out, will increase the sensitivity of policy makers to the unique contributions made by women which

could lead to policy changes effecting the two and a half million women in the country.

The Agribusiness Support Center component has more limited anticipated beneficiaries in term of numbers of business plans prepared and new or expanded investment encouraged. Nevertheless, the ASC will target its output so that at least 30 percent of the beneficiaries will be women entrepreneurs and investors.

The MIS will include data collection and analysis, radio broadcasting techniques, and commodity selection that will be particularly useful to, and will benefit, women. Since women make up more than 50 percent of the 4 million agricultural population and, depending upon the geographic area, can be 60 percent of the producers, 75 percent of the food processors and 85 percent of the transporters, this project will have a positive impact on magnitudes of approximately 2 million women. Monitoring and evaluation of the MIS will permit fine tuning of the intervention to assure that target populations, including women, will benefit.

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ATTACHMENT I-1

FIELD TRIPS TO MARKET VILLAGES

1. Methodology

As noted in the social soundness analysis, the design team did not, itself, carry out statistical studies. Much of the social science analysis results from a review of prior literature of micro-investigations carried out by individual Chadian and foreign researchers. In addition, the design team conducted numerous interviews with government officials, consumers and participants along the agricultural marketing chain in N'Djamena and during visits to villages and markets around the country. These included Karal, Linia, Moundou, Dougghia, Danounda, Lahamdji, N'Gourie, Isseirom, and Mao, as well as constant stops along roads with un-named villagers, farmers in the field, foyers feminine, and merchants. The purpose of these visits was to corroborate the literature, to confirm comments of government official, to test assumptions included in the project, and to get a first-hand feel for the agricultural marketing situation.

The interviews were mostly carried out through interpreters. While team members spoke French, people on the ground spoke local languages, dialects, or Arabic -- the language of commerce. The interviews flowed from the nature of the informant and what his/her activity may have been. The field report which follows, therefore, is not comprehensive but is impressionistic from edited field notes.

The interviews were not, of course, entirely unstructured. The team had the following points in mind as it conducted the interviews.

- What is the price of the commodity being sold or bought?
- From whom did the seller buy the (agricultural) product; was the seller also the producer?
- Did the seller go, by foot, animal or vehicle, to his source of supply -- or did the source of supply come to the seller?
- Was the seller/buyer resident of the local village or was s/he from some other place? -- how far away?
- How did the seller/buyer know of, or decide upon, a price?
- Who had the stronger bargaining position in setting prices?
- Did the seller/buyer know the prices in other village markets/regional markets or in N'Djamena?
- Did the product come from/thru Cameroon or Nigeria?
- If the buyer/seller knew the price was lower/ higher in another market, under what conditions would the seller/buyer go to the "other" market?

- What happens to the agricultural product if it is not sold the day of the market?--later? --after six months?
- Are there facilities available for short/long term storage/conservation/packaging?
- Are there any men/women involved in agribusinesses (very broadly defined) in the village or in the market?
- Did people have access to radio? Did they listen to Radio Chad?
- Do women have the same/different marketing problems as do the men?
- Most sellers of agricultural products are women. What happens to their market earnings?
- What help do men/women need to improve agricultural marketing (again, very broadly defined)?
- What is the availability and form of capital loans - from private, public, family, group, institutional sources?

2. Field Trip to Karal

Description of Village: Located 115 Kilometers north of D'Djamena, 23 Kilometers south of Lake Chad. The trip from N'Djamena takes 3 hours over deeply eroded, dirt track often cut during the rainy season, totally isolating the area. Estimated population of 2000, 300-350 households, live in sunbaked, mud houses. The traditional Sultan of the zone lives in Karal. He is also the administrative authority appointed from N'Djamena. He is responsible for the villages of Baltram, Darbaya, Tribe, Dandi and Mani - all of which are in a 25 km radius - some of which have markets on other days of the week. Most adults speak Arabic and most children go to the Koranic school which teaches classes in Arabic.

The Thursday Market: While people are in the market all week it is essentially a Thursday Market. The market area is in the 50 x 75 sq/m village center with approximately 200 thatch covered and 100 uncovered stalls. Sellers pay FCFA 25 per week to the Sultan to use the market. Because August is the rainy season the market was said to be less than full. Six-eight camels for transporting commodities to the market were in the area. There were the same number of donkeys. Two light vehicles were evident.

People and Products: There were approximately 500 people in the market; most seemed to be sellers. Most sellers and purchasers were women who head carry items bought and sold in the market. Ninety percent of the sellers in the market were involved with food and agricultural products - grains (maize and berber), vegetables (onions, tomatoes, cucumbers, peppers, okra), tubers (yams), peanuts, dried and smoked meat and fish, oils (peanut and dairy), cooked and processed food (beignets, peanut pate), spices, and cola nuts. Ninety percent of the food sellers and purchasers were women. Men sold batteries, radios, mats, pots and pans and other hard goods. Onions were the only agricultural

products which seemed to be sold by men. These men were the owners of the camels.

Interviews With Individual Sellers:

Maize Seller - A woman from Karal. She also sells Gumbo at other times. She said the rains were not so good this year so the price of maize had to be higher than last year. Maize was FCFA 185/coro; last year it was FCFA 125/coro. She said this was the price charged by everyone in the market but she could not explain how the price was set. There was no price competition among individual sellers in the market. There was no bargaining with sellers except on "larger" purchases. The women's husband worked the land while she sold the product. All sales proceeds went to him, but "he used the funds for the good of the family." She became impatient with our questioning and returned to her selling.

Cola Nut Seller - A woman from Karal who works in the market every day of the week. Cola nuts grow in Nigeria and are transported to Karal by a Nigerian intermediary. She buys a 2-3 week supply at a time and pays in cash. She seemed to be the only local supplier of this product.

Beignet Seller - A woman from Karal who cooks and makes the beignets, herself, from products that comes by truck from N'Djamena. She gave the team the receipt for one batch of beignets as 2 coros of flour (FCFA 1000), 1 1/2 liters of COTONCHAD cottonseed oil (FCFA 750), firewood (FCFA 100), sugar (FCFA 50). She earned 150-200 FCFA/batch or about 10% on her investment, not counting her time. These figures are based on the rainy season delivered price of a sack of flour of FCFA 11,000 . She assumed she would get 22-23 coro/sack. A sack costs FCFA 1,500 for transportation; less in the dry season which increases her profit at that time.

Animal Oil Seller - A woman from the bush who collects milk from her own animals from which she makes a form of liquid butter. The oil is sold by the bottle of which she only had three. We determined the price to be FCFA 850/bottle against an equivalent of 1,200/bottle in N'Djamena. At other times, when she had a surplus after family consumption, she also sold her own maize.

Peanut Butter Seller - A young woman from Karal who was being instructed on what to say by her neighbors. She was selling sweetened peanut butter - 3 balls for FCFA 5. The peanut butter balls were made in N'Djamena where they had been purchased at 5 balls for FCFA 5. They had been delivered to Karal in a truck that had been rented by local women who were producers of vegetables that they sold to the N'Djamena market. This seller had a husband who was working the field -- which produced little surplus for sale. There seemed to be a loose association of

women vegetable producers/traders who had found a product to bring to Karal on the back-haul.

Rice Seller - A woman of Karal who worked in cooperation with her brother. He bought rice in N'Djamena for which he charged her FCFA 500/sack for delivery in his truck as against the standard FCFA 1,500-2,000/sack for regular commercial delivery. She estimated 20 coros/sack which she sold for FCFA 500/coro. This relationship indicated a potential increased benefit for retailers if transportation were less costly.

Onion Seller - Three male onion sellers from outside the Karal area. They used camels as means of transport and went from market to market selling their onions. A "bunch" of 5 onions was FCFA 50 for smaller onions and FCFA 100 for larger onions. Onions sold, at a lower unit price, to wholesalers who sent trucks directly to their production sites.

Dried Meat Seller - A woman was selling strips of dried meat which she had processed herself, from an animal that she and two other women had purchased, killed, processed and divided for sale. Since an animal cost FCFA 35-40,000 she was a member of a group (tontine) which pooled its resources to raise cash to purchase animals. The original owner of the animal offered "suppliers credit" to help the women make the purchase. She estimated it took 3 weeks for herself and the other women to sell the meat and repay the original animal owner for the credit provided. She belonged to two tontines - one that cost FCFA 250/day; another that cost FCFA 500/week. This woman seemed to deal in large amounts of money which she was managing with profit.

Other Products - During a meeting with the local SECADEV (a Catholic-sponsored NGO) representative we learned the following additional market information:

Fresh Fish - While most fish is dried or smoked for sale in the local market, fishermen know there is a market in N'Djamena for fresh fish. Fishermen, therefore, periodically hire a truck to ship fresh fish directly to N'Djamena. This is done with some information as to the price in the N'Djamena market and when the roads are in a sufficiently passable state to assure a quick delivery and sale.

Niebbe - There used to be a market across the border into Nigeria for this bean. This export was closed off by Chadian authorities. Local producers sought a market for this product in N'Djamena but it was never developed and this crop is being discontinued.

Chickens - Chickens in Karal were higher priced than in N'Djamena - 1,200 in the former market and half that price in the latter.

Meeting with the Sultan - The Design Team paid a courtesy call on the Sultan who was holding court on thick rugs, in his concession courtyard under the shade of a straw cover. He was well aware of the isolation of his canton and inquired into the status of the road the team traveled on to get to his area. He was aware of the reduced rain so far this year and that the price of grain was going up. He told the team the price was even higher - 200 FCFA/coro - in Baltram, a village 12 Km. away. He knew that it cost FCFA 2,000 to ship a sack of grain from Karal to N'Djamena. He thought the AMTT market information project component was a good ideas. He said there were plenty of radios around; that Radio Chad reached his area; and that the Arabic language would reach all his people. The team suggested some of the villagers might want to buy a truck and create a new source of income and help their neighbors at the same time. He thought that was an interesting idea, but the Team did not sense that any initiative would be taken to buy a truck. The Sultan seemed satisfied with the way things were.

Some General Observations

- The market was full of product; there was a large variety of merchandise with similar products in the same general area; there were more sellers than buyers.

- The market seemed well organized, relaxed, cooperative, communal and non-competitive.

- It is a free market with no government intervention of any kind.

- Everyone knew the source and quality of their commodity, its price, and what everyone elses' price for the same commodity was in the market

- Most purchasers seemed to be within walking distance of the market. With the difficult conditions of the road network and the price of vehicular transport, individual villagers would probably not think it was worth the extra effort to go to another market in the area to compare quality or price.

- Most local sellers, except for the onion men and the vegetable producers who are from the local area, would probably not seek out other markets unless some external force, such as Radio Chad broadcast significantly different prices being paid in other markets.

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- There were some perishables in the market. Eventually the vegetables would spoil if not sold. Everything else was dried, smoked, or otherwise processed - except grain which did not need processing.

- Fish is caught in the Lake Chad area. While much of it was processed and could remain in the market for 6-8 months, fishermen often rented trucks to bring fresh fish to the N'Djamena market - which, they said, would more than cover the truck rental..

- Until demand is substantially increased from outside the area it would not appear that local producers, traders, processors, or sellers would make an effort to increase the level of efficiency of their operation.

- The possible exception to the above, might be fishermen who could use cold storage.

3. Field Trip to Lahmadji

Description of Village: A population of about 360 persons, located 18 Km. north of D'Djamena on the paved road to Dougghia. The principal occupation of the villagers is raising cows in order to sell milk and to make and sell "sour milk." In the middle of the village is a 20'x30' ground level water reservoir filled by a solar powered pump from a nearby well. Across the road from the village is a shop in which an entrepreneur makes "string cheese" from the milk which he sells to passing motorists. The men spoke Arabic but the children went to the local French school and spoke French. The men realized that their culture would be changed as the children grew up.

Interview Setting: The interview took place on mats in the shade of a hut. The principal informant was the village chief, surrounded by half a dozen men, surrounded by about a dozen young boys. Some young girls were getting water from the reservoir. No women were to be seen; they were "all working in their houses or fields."

Marketing Discussion:

Milk was being sold at 150 FCFA/liter. It would be FCFA 250 in the dry season although the reservoir would help reduce further price fluctuations. "Sour milk" or a watery form of yogurt sells at a somewhat higher price. The price did not vary for bulk purchasers who came to the village except that "constant clients" did get a price reduction.

There are no village markets in the area. Women, occasionally, take milk or yogurt to sell in the N'Djamena market. They put the milk into a calabash and stop a passing

bush taxi to take them into the city. The women would bring back tea, sugar and condiments from N'Djamena.

There is no conservation, refrigeration or processing of the milk in the village, except for the souring process. Yogurt for the day's sale is from cows milked the night before; regular milk is from milking in the early morning. Milk and yogurt are seen as a cash crop. The village grows maize for consumption and some trade. They drink the milk that they can not sell - but this is seen as an economic loss.

The selling price of maize was FCFA 175/coro. This compares with 185 FCFA/coro 2 days earlier in Karal, 100 km. further north. The response to the question of whether they would go to Karal to get the higher price, was a shrug of the shoulder. They did not consider the price differential large enough to change their marketing practice.

According to the men, they did the hard work of plowing the fields, digging wells, cutting wood, pulling animals out of wells. The women work in the house, buy and sell in N'Djamena and plant and weed the fields. Men and women harvest crops together.

The men said they feared for the future because of the bad rainy season. They said the government could help them by providing agricultural tools and plows. They wanted these as gifts. They claimed they were too poor to borrow money -- which they would not be able to pay back. The discussion of loans and credit was somewhat strained since the villagers did not even think in these term, i.e., that loans was an option open to them. They had little respect for the services provided by ONDR.

Some General Observations:

- Receipt of information on commodity prices in N'Djamena, could lead people of this village to change the direction of their marketing strategy.

- Men and women lead fairly separate and distinct economic and social lives -- coming together primarily for reasons of family and children.

- There is a welfare attitude on the part of the village; they want someone -- USAID or their own government-- to give them some help. They could use the help but they need to show more initiative.

4. Field Trip to Moundou

Description of the City: Third largest city in Chad with population under 100,000 -- small even by African standards;

headquarters of COTONCHAD and the Gala beer brewery. Moundou is considered the industrial city of Chad. The road connection to N'Djamena is often cut during the rainy season. Air Chad, when it flies, is the principal link between the two cities at that time. Farm-to-market grade roads permit vehicular travel between Moundou and village markets and farmers fields to its south and east. Because of the cotton trade there are good roads to Sahr, Cameroon, and Nigeria.

Description of the Market: There are two market areas in the center of the town, adjacent to one another. The smaller area is for wholesalers and other intermediaries and their orderly sacks of agricultural products. This market is open in the morning, particularly to resell to small retailers. It begins to shut down in the afternoon. The second area, looks like a typical village market, only larger, with perhaps 1000 stalls -- some under thatch or the shade of a tree -- with wares spread on the ground on sacks, in bottles and boxes, small measuring cans on top of larger ones, women nursing babies, radios blaring from all sides. As in most village markets visited 90 percent of the produce was food and processed food products and 90 percent of the sellers were women. In this market, men were making clothing on Singer or Olivetti sewing machines. Being closer to the Cameroon border there were more hardgoods such as pot and pans, and manufactured goods.

Moundou is a regional, daily market which draws sellers and buyers from a wider geographic ares. It is more of a commercial operation than, as in the village market, a place to sell small amounts of surplus, a place to meet friends and gossip. The Moundou market is dirtier (the tragedy of the commons) and more difficult a market to meet with and talk to informants.

Products in the Retail Market:

Onions (women) bought from a trader in the wholesale market who had bought the produce from a transporter who came from Cameroon. Onions do not grow in the Moundou area and onions produced in the northern part of Chad are too costly.

Salt (girl) bought directly off a truck which came in from Cameroon.

Fresh Tomatoes (women) sold by a retailer who raised the tomatoes from her own garden in Moundou nearby. There was reasonable turnover so spoilage was not an issue.

Lettuce (women) sold by a retailer who raised the lettuce from her own garden nearby. If the lettuce is not sold by the second day it spoils and is thrown away. The women retailer did not seem concerned with the loss. She "had much more in the field where

this lettuce came from." If there were storage the price would have to be minimal for this seller to consider using it.

Fresh Fish (women) bought directly from male fishermen on the Logone river. Ten small fish sold for FCFA 100. The price was low; the market brisk; no smoked fish was seen (although there may have been some). There is a market for fresh fish in N'Djamena but this is not available during the rainy season.

Aubergine: (small boy) sold product from his mother's garden nearby. Business was not good but he could not sell for less than his mother had instructed him.

Cola Nuts: (old women) bought directly from a truck that came from Cameroon.

Processed Food (all women) such as pressed peanut oil, beignets, butter-oil, boule (sweetened snack), and ground and chopped spices.

Cottonseed Oil (boy) bought from a wholesaler who had bought it in bulk directly from COTONCHAD.

Other products sold by women who had bought sacks from the nearby wholesalers. They sold sesame at FCFA 225/coro, peanuts at FCFA 400/coro, dried peanuts for FCFA 1600/sack, millet for FCFA 200/coro, maize for FCFA 185/coro. The quality of the peanuts was different from that seen in the north and, according to our translator, much better.

Agribusiness: There was one miller in the market who had a FCFA 1,500,000 piece of equipment. He said he had bought the machine with his own cash. He charged FCFA 50/coro and was very busy. The Design Team guessed that there was a market for one more mill.

Some General Observations on the Market:

1. N'Djamena was neither a source of supply or an outlet for product - certainly not in the rainy season. Cross border trade with Cameroon/Nigeria would appear to be the more natural market.

2. There are plenty of radios around so everyone would be able to hear Radio Chad MIS broadcasts. It is difficult to predict the reaction by the small seller/buyers in the retail market. Price competition among intermediaries and transporters in the wholesale market would probably take place.

3. Women are major participants in the marketing chain. Efficiencies and benefits to almost any part of the chain will benefit women.

Other Interviews:

Visits were also made in Moundou to the local Office of the Ministry of Social Affairs, Direction for the Promotion of Women, the ONDR representative concerned with village credit, and a women transporter. Relevant comments follow from each of these interviews.

Direction for the Promotion of Women

The Design Team focused its questions not on the health and nutrition, mother and child care, or household management programs of the Direction but, instead, on agriculture and rural development. In all of these programs the Direction first creates village level groups of women known as "foyer feminine" through which to work. These village level women's groups are build upon the traditional mutual aid societies but are more formal. They have elected officers, come common funds, and often a small building provided by the Direction. Membership is voluntary; not all women in the village necessarily being part of the "foyer." The "foyer" might or might not overlap with tontines or other women's support groups.

Women in Chad seem to work well together in an environment almost totally separated from men. They care and feed any crying child; the polygamous wives of the same or other husbands seem to get along well with one another. They accept their responsibility and seek to improve their ability to take care of and feed their families and children.

The thrust of the discussion by the Direction, was their almost complete lack of funds to do anything significant for the "foyeres" that they had helped create. While some extension agents had been hired, they had no office supplies or medicines. no equipment and few vehicles, and little fuel to permit agents to visit the villages. While the women were interested in helping one another at the village level, support from the central government was token. The Director pleaded with the Design Team to include Moundou in the project. Donor projects, they complained, too often begin and end in N'Djamena. The Moundou office, for example, was unaware of the appropriate technology project being sponsored for women by UNIFEM, UNICEF and the Ministry of Social Affairs in N'Djamena. They did comment on the support from CARE.

The Direction was not sure the MIS would be useful to the producer. Even if the farmer knows the price in the next village, they said the farmer is at the mercy of the transporter. The producers, they said, had no money, no vehicles and no organization and, therefore, had little power in dealing with larger intermediaries on whom they were dependent. Producers seemed to accept the situation as one over which they had no control. (Note: The villagers in the CARE project in the Kim area

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did take advantage of appropriate technology and price information but because CARE helped the villagers take action.)

The Women Transporter

There are a number of women entrepreneurs in Moundou -- wholesalers and truck owners. The Design Team met with a women who owns and manages a fleet of two 30 ton and one 2.5 ton trucks. She hauls cases of beer from the Gala brewery and cotton for COTONCHAD. She sends her trucks to villages and village markets buying and bringing back agricultural products to the Moundou market. She carries sacks of grain from Moundou and hard goods from Cameroon to the villages. Sometimes she uses collectors at the markets but, at the village level, she deals directly with producers.

She said that commerce was good for women. Women are entrepreneurial and will do well in an environment where business is going on. She said she can handle road barriers, government officials, customs agents and tax collectors. This required appropriate payments which were added to the cost of transportation. Her last trip between Moundou and N'Djamena, for example, required an average of FCFA 2,000 at each of an estimated 50 barriers.

During an exchange on the question of who sets the price for agricultural products, she definitely said the power was with the producer. This was the opposite view from that which we had received from the Director of Promotion of Women that very morning. Indeed, the Director was with the Design Team when the women transporter was interviewed. Both women maintained their opposite opinions.

The women transporter strongly disputed the characterization that transporters who travel around all know the prices in different markets and take advantage of isolated producers or at markets where prices are not known. She listed her high costs, from purchase of the truck (FCFA 22,000,000), high maintenance costs, taxes, FCFA 100,000 in bribes on the Moundou-N'Djamena run, down time for the trucks, labor costs, her management time, etc. She argued that she did not make an exorbitant return for the entrepreneurial service she was rendering and the risk she was taking. She therefore agreed that the AMTT project's improved marketing information system would be beneficial for entrepreneurs such as herself. She was also interested in the Agribusiness Support Center and wanted to know how soon the project would begin so she could become a participant and, hopefully, a beneficiary. She repeated the complaint made by the Director of Women's Promotion that donors

worked too much in N'Djamena and should not avoid the "provinces" (her words).

The ONDR Credit Representative

The Design Team met the very dedicated ONDR official with the responsibility to help create village savings and loan associations. He was named by ONDR in N'Djamena as one of their most effective field workers. His reports indicated that he had helped create 62 such associations over the last 9 years -- mostly mens and mixed men/women's groups, but 6 were women only groups. He held the view that after 30 years of independence, Chadians should begin to understand that they must do things for themselves. The time of the handout, he said, was over.

A problem was that he had few resources with which to work. He did not even have a suitable office, but worked out of his household concession. As we talked women pounded grain around us, goats scampered onto our papers, and children came to daddy. He had few resources to get out to the villages. There was urgent need for training and extension. Women's groups needed particular help because most women were illiterate and had little management experience. As a result, the associations have a low rate of saving and limited funds for investment.

The implication for the AMTT project would appear to be that providing information and services is only a partial response. Training and extension for end users is also necessary..

5. Field visit to Dougghia

Description of Village and Market: Dougghia is 60 km. north of N'Djamena half way to Karal. It has about 600 inhabitants -- about half the number of Karal. Dougghia, however, is in a more populated area and closer to Cameroon. It is a geographic crossroads so there are people from more places buying and selling things in Dougghia then there was in Karal. Compared to Moundou, however, Dougghia is minuscule.

The village is 100 yards off a road presently being repaired. But the outside world does not yet seem to have intruded into the life of the village. Indeed, a tourist restaurant has been built near the village, frequented on weekends by Europeans from N'Djamena. As far as the Team could tell there was little interchange between the villagers and the weekend visitors. The Design Team made the required courtesy call on the village chief who, as in other villages visited, was sitting on the ground in conversation with the other men of the village. The women were working at home or in the field or were selling/buying in the market.

The "foyer feminine": The Design Team was guided in Dougghia by representatives of the Ministry of Social Affairs, Direction for the Promotion of Women. The Team was, therefore, accommodated in the "foyer feminine" where the women arranged a potluck lunch. However, for lack of resources as already described in the visit to Moundou, no training for the women was being conducted. The agent who went with the Design Team had not been to the village for a month. Funding by UNICEF and the German government is coming to an end.

During a group interview with the women the Design Team learned:

- the past two years has seen limited rain; production is down; the granaries are empty.
- as a result of the above, the price of maize is going up. It was FCFA 200/coro last month and, during the visit, it had gone to FCFA 250/coro, the highest price for maize the Team found anywhere in Chad.
- the women are concerned that they now have to buy all their maize in the market at the very high price.
- they complained they worked very hard with little result. They have no choice but to pay the price asked by the merchants.
- there is a grain mill in the village that was given to the women by a donor. The women hired someone to run the mill. Women pay FCFA 50/coro for milling.
- the women asked the team for a machine that dehusks grain before it goes to the mill,
- they asked the Design Team for pumps so that fields could be irrigated and the farmers would not be so dependent on rain.
- the women did not seem to know prices in other markets. If they did and these other markets were within reasonable walking distance, the women might go to them.
- these women said they felt more independent than women who lived in the cities. Despite their heavy burdens, these women felt comfortable, perhaps resigned, to their roles.

Description of the Tuesday Market: This is a typical weekly market with about 200-300 stalls. Grain in brought in by merchants from N'Djamena. Retailers buy from the merchants and sell to consumers. Traders on camels and donkeys make a circuit visiting towns on market days bringing maize and other agricultural products. Small traders sell their own product. Hardgoods comes across the river from Cameroon and are either sold directly or through retailers. Women buy fish from fishermen. They and the wives of the fishermen smoke the fish and retail the fish in the market. There was no fresh fish in the market.

6. Visit to Danouna

Description of Village: The purpose of this visit was to see the operations of the "foyer feminine" and to learn ways of improving the role of women in agricultural marketing. Danouna is a small village of 350 inhabitants. The Design Team made its courtesy call on the village chief and the men sitting on mats in the shade of a tree. The women were working in their homes.
The village grows millet and sorghum for consumption and tomatoes and gumbo to sell. Village men also fish and women smoke the fish for local consumption. The village chief had been able to get a tractor to level some land along the river and, for the past 3 years, the village has produced rice for consumption and this year, hopefully for sale. The village was interested in finding money to buy a pump to increase the irrigated production of rice. The village had been given a pump a year ago but it broke down and no one knows how to repair it. The Design Team made some suggestions but was essentially unable to be of any help. It was disheartening to see a village trying to exercise some initiative, but no organization or individual was available to provide the small amount of technical assistance needed to help the villagers make a potential impact.

Marketing Situation; Danouna is not a market village. Even though it was market day in Dougghia, 20 km north, none of the Danouna villagers had gone there. Most trading is done by pirogue across the river in Cameroon. Maize in Cameroon was thought to be FCFA 175/coro. This is FCFA 25-75 less than the price in Dougghia. This village seems to have little contact with other segments of Chadian economic life. It may change in the future as a nearby road is reconstructed - but the incentives to do so seem limited at the present time.

The "foyor feminine": The need to help the women is so great as to appear impossible to accomplish. Their contacts outside the village are minimal. The women use none but the simplest food processing technologies. The nursery/dispensary is locked because there is neither a nurse nor medicines. The school is in disuse and the building eaten by termites. The women are mostly illiterate and speak only the local dialect. A class put on for the Design Team during which obviously primed women repeated, by rote, two sentences in French, was somewhat pathetic. The classroom had a blackboard and a few pieces of chalk and nothing else. The representatives of the Ministry of Social Affairs can only visit once a month because they are also short of resources. Until some contact and communication is established with the outside world and until additional resources become available to the government, this village will be little effected by the AMTT project.

7. Visit to N'Gourie

Description of the Village: N'Gourie, a Tuesday market, is the site of the ORT project to improve cultural practices for vegetables and, thereby, increase production by Wadi farmers in the area. The village is about 300 km north of N'Djamena on a recently open road and about 40 km east of Lake Chad. People grow rainfed millet and sorghum, recession maize, and irrigated wheat and vegetables. Despite the poor rains which permit only about one in three years of rainfed production, the recession, Wadi, polder and irrigated agriculture still makes this a productive area. N'Gourie is a Sub-Prefecture headquarters with a population of just over 2000 -- about the size of Karal. Perhaps because there is a Sub-Prefect posted by the central government to N'Gourie, who the Design Team visited, the influence of the local village and canton chiefs has been diminished. It was not necessary, therefore, to pay courtesy calls on the traditional leaders. There were also more women in evidence and, we were told, both men and women worked in the fields, and men

Impact of the New Road: The impact of the new road is still being digested -- in N'Gourie and in villages and markets along the road. For example, it used to cost FCFA 4,000 to ship or receive a sack of product from N'Djamena. This figure is FCFA 2,000 in Karal. The present transport cost for N'Gourie is down to FCFA 1,000/sack.

Description of the Market: This is a relatively high population density area. The market is, therefore, large for the size of the village. There is a larger Thursday market (Demintchi) only 15 km away. Sellers and buyers alternate between the two markets. The pattern of trade, physical structure, gender mix, and product content of the N'Gouri market is generally as has already been described for other village markets such as Karal or Dougghia except that this market was more active and spirited. There was more price variety for the lesser traded products such as spices, beans, nuts, and boule.

Price of Grain: There was some price fluctuation on grain during the first two hours of the market but it settled, for example, at FCFA 185/coro for maize -- one seller who had come from 35 km away had started out as high as FCFA 225/coro. The final price was down from FCFA 200/coro the week before in N'Gourie and lower than the FCFA 250/coro in Dougghia the week before. This is probably the result of more recession grown maize coming into the N'Gourie market. Local wheat, not found in large amounts in other parts of the country, was selling for FCFA 275/coro. The local millet crop is a total loss this year because of the lack of rain. Any stalks remaining in the field are being sucked dry by the Striga weed. People have stopped chasing away birds. The price of millet is up to FCFA 275/coro, up from FCFA 225/coro a week before.

Other product activity noted was:

Spices of all kinds, some not seen in other markets, were much more evident. This included local salt gathered from the edges of polders and a product described as a local coffee substitute.

Onions were in surplus and could not be sold even in N'Djamena because of competition from Abece onions which were preferred and were in good supply. The situation might change if the price of N'Gourie onions were dropped, which has not yet been done. Men and women were selling onions.

Fresh Tomatoes were also in surplus. At a meeting with the ORT/Wadi Cooperative committee, the Design Team was pressed to provide technology for processing tomatoes into sauces, paste, etc. Processing technology was not part of the ORT project and the Cooperative did not know how to secure capital to purchase such appropriate equipment. Men and women were selling tomatoes.

Flour, Rice and Granola brought in from N'Djamena and Cameroon over the new road were in abundant supply. Granola is a luxury mix imported from Italy because of lower transport costs and greater local purchasing capability.

Dried Fish, Pulverized Dates, Bean Mixtures, Pressed Peanut Oil, Chopped Gumbo and a wide variety of other processed, conserved and transformed agricultural products were available in the market.

Citron was in surplus and were practically being given way. The Design Team also visited Mao, a Wednesday market two hours away, and other markets not reported on in this attachment, and found that citron was in surplus in the entire area. A full sack of citron could be purchased for FCFA 500.

Other products included a wide variety of locally grown melons, fruits, and vegetables, and cola nuts, soap and hard goods imported from Cameroon/Nigeria. There was also sugar, illegally brought in from Cameroon, underselling price controlled, Chadian parastatal sugar.

ANNEX J

DETAILED BUDGETS

BUDGET ASSUMPTIONS

This annex includes an Overall AMTT Project Budget which is the total of the four component budgets: Marketing Information System; Agribusiness Support Center; Marketing and Policy Studies; and Project Support, Audit and Evaluation. The paragraphs that follow outline the major assumptions that underlie the overall and component budgets. The component budget tables also spell out line item specific assumptions.

Inflation: the budget incorporates an annual inflation rate of 5 percent.

Exchange rate: all budget expenses calculated in FCFA are converted at a rate of $1 = FCFA 250.

The paragraphs below summarize the assumptions used to generate baseline numbers. The budget spreadsheets then multiply these baseline numbers by the appropriate inflation factor.

I. SALARIES

A. Expatriate Long-Term: budget assumes salaries for three (3) long-term advisors as follows:

Senior Policy Analyst/Chief of Party	$75,000
Agribusiness Development Specialist	60,000
Market News Coordinator	50,000

Further, budget assumes that each long-term advisor will have three dependents, including two school age children.

B. Expatriate Short-Term: except for home office backstop, budgeted at two months per year at an annual salary of $45,000, all expatriate short-term consultants budgeted at $7,100 per twenty-six day person month (pm). Budget imputes daily rate of $273.33, the average of $295, $275 and $250 per day.

C. Chadian Long-Term: salaries are set according to the requirements of the various component budgets. Long term salaries include Ministry of Agriculture/Bureau for Agricultural Statistics (BSA) personnel working on the Market Information System, a counterpart for the Agribusiness Development Specialist, and support staff for the AMTT office.

D. Chadian Short-Term: rates used for short-term Chadian consultants and enumerators vary by component, from a maximum of $4,000 per person-month for senior policy analysts to $200 per person-month for enumerators.

II. ALLOWANCES, OVERHEAD, AND FRINGE BENEFITS

A. Post Differential: budget uses current rate of 25 percent of long-term salaries.

B. COLA: figures used provided by USAID/Chad Controller's Office.

C. Other Allowances: includes a lump sum of $3,000 for pre-departure and post-assignment expenses; housing - which includes utilities is budgeted at $2,400 per household per month, education allowance assumes two school age children at post at the curretnrate of $11,500 per student, storage of $2,000 per household per year, figures for shipping household effects (HHE), unaccompanied baggage (UAB), and consumables provided by USAID/Chad Controller's Office, as was figure for household maintenance (HH Mtnce.) of $10,000 per household per year.

D. Expatriate Fringe Benefits: are calculated at 30 percent of expatriate long- and short-term and home office backstop salaries.

E. Contractor Overhead: is calculated at 110 percent of expatriate long- and short-term and home office backstop salaries.

F. DBA: budget calculates Defense Base Act (DBA) insurance at the current rate of 3.44 percent of overseas salaries.

G. SOS: budget calculates medical evacuation insurance (SOS) at current rates of $190 per person per year for long-term advisors and dependents and at $40 per month for expatriate short-term pm.

H. Chadian Fringe Benefits: budget calculates fringe benefits for Chadian nationals at 30 percent of salary. This rate includes employer's portion of C.N.P.S. (social security) contribution, thirteenth month salary, health and transportation allowances.

III. TRAVEL AND PER DIEM

A. International Travel: budget incorporates current Washington-N'Djamena round-trip airfare of $3,600 for all international travel to and from the U.S. Since N'Djamena is a two R&R post, budget provides for three (3) R&Rs and one (1) home leave per long-term advisor. Other professional travel makes a provision for airfare to regional conferences, workshops, etc. at a baseline rate of $1,500.

B. In-country: travel via air is budgeted at $300 per trip. The number of trips varies depending upon the needs of the components.

C. Per Diems: Per diem includes two days international per diem for each round-trip from the U.S. to Chad. Budget also uses $200 for regional travel. Per diem for N'Djamena is calculated at $200 per day, outside N'Djamena at $100 per day. Chad-other is the GOC's rate which averages $20. The number of days per diem varies by component.

D. Miscellaneous Travel: includes a lump-sum of $500 per international round trip to cover visas, medical, ground transportation, etc.

IV. TRAINING

A. U.S. Training: none budgeted.

B. Study Tours: third country and U.S. study tours, workshops and conferences budgeted at $10,000 per person month.

C. In-Country Training: includes workshops and roundtables hosted by MIS, ASC and POL components of the project.

V. COMMODITIES

A. Office Furnishings and Equipment: budget provides for the purchase of four 4-wheel drive vehicles, two mobylettes, two generators (one for BSA, one for the project office), 3 UPS (two for BSA, one for AMTT Project office), furnishings for eighteen offices (8 at the BSA, 10 at the AMTT Project office), 16 PCs (eight for the BSA, two each for the ASC and Policy components, and 4 for the AMTT Project office), 8 lap top computers (six for the Policy component, two for the ASC), four laser printers (one for each component, plus one for the project office), 11 dot matrix printers (seven for BSA, one for the ASC, two for Policy, and one for the project office), 3 typewriters (one for BSA, one for the ASC, and one for the project office), 3 photocopy machines (2 for BSA, one for the project office), one telephone switchboard for the project office, twelve air conditioners (two for the BSA, 10 for the project office), and four fans for the project office.

B. Residential Furnishings and Equipment: is budgeted at $25,000 per long-term advisor's household as per USAID/Chad Controller's Office guidance. Also included are generators for each of the three residences at $20,000 each.

C. Program Support: the single item included here is $100,000 for the estimated installed cost of MIS radio network.

OVERALL PROJECT BUDGET

OVERALL AMIT
PROJECT BUDGET

Line Item	Unit	Cost	FY 91 Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 USAID GOC	FY 92 Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 USAID GOC	FY 93 Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 USAID GOC	FY 94 Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 USAID GOC	FY 95 Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 USAID GOC
I. SALARIES				110.4	46.1	498.1		537.2	283.9	538.9		469.4	228.1	585.2		415.2	191.4	614.5		102.3	45.2	348.3
A. Expatriate L-T			0.75	48.6	0.0	0.0	3.00	204.0	0.0	0.0	3.00	214.2	0.0	0.0	3.00	224.9	0.0	0.0	0.75	59.0	0.0	0.0
1. MIS	py	50.0	0.25	13.1		0.0	1.00	55.1		0.0	1.00	57.9		0.0	1.00	60.8		0.0	0.25	16.0		0.0
2. ASC	py	60.0	0.25	15.8		0.0	1.00	66.2		0.0	1.00	69.5		0.0	1.00	72.9		0.0	0.25	19.1		0.0
3. Policy	py	75.0	0.25	19.7		0.0	1.00	82.7		0.0	1.00	86.8		0.0	1.00	91.2		0.0	0.25	23.9		0.0
B. Expatriate S-T			8.75	61.7	0.0	0.0	43.50	333.1	0.0	0.0	32.00	255.3	0.0	0.0	23.00	190.3	0.0	0.0	5.25	43.3	0.0	0.0
1. MIS	pm	7.1	3.75	28.0		0.0	3.00	23.5		0.0	3.00	24.7		0.0	3.00	25.9		0.0	1.25	11.3		0.0
2. ASC	pm	7.1	0.00	0.0		0.0	6.00	47.0		0.0	6.00	49.3		0.0	6.00	51.8		0.0	0.00	0.0		0.0
3. Policy	pm	7.1	4.00	29.8		0.0	32.50	254.4		0.0	17.00	139.7		0.0	8.00	69.0		0.0	3.00	27.2		0.0
4. Support	pm	3.8	1.00	3.9		0.0	2.00	8.3		0.0	2.00	8.7		0.0	2.00	9.1		0.0	1.00	4.8		0.0
	pm	7.1	0.00	0.0		0.0	0.00	0.0		0.0	4.00	32.9		0.0	4.00	34.5		0.0	0.00	0.0		0.0
C. Chadian L-T			117.25	0.0	23.4	491.8	132.00	0.0	98.2	525.7	133.00	0.0	103.1	557.4	133.00	0.0	108.2	585.3	69.05	0.0	28.4	345.7
1. MIS	py	var	113.00	0.0		491.8	115.00	0.0		525.7	116.00	0.0		557.4	116.00	0.0		585.3	64.80	0.0		345.7
2. ASC	py	var	0.50	0.0	5.4	0.0	2.00	0.0	22.5	0.0	2.00	0.0	23.6	0.0	2.00	0.0	24.8	0.0	0.50	0.0	6.5	0.0
3. Policy	py	var	0.00	0.0		0.0	0.00	0.0		0.0	0.00	0.0		0.0	0.00	0.0		0.0	0.00	0.0		0.0
4. Support	py	var	3.75	0.0	18.0	0.0	15.00	0.0	75.7	0.0	15.00	0.0	79.5	0.0	15.00	0.0	83.4	0.0	3.75	0.0	21.9	
D. Chadian S-T			35.00	0.0	22.7	6.3	119.50	0.0	185.7	13.2	81.00	0.0	125.0	27.8	54.00	0.0	83.1	29.2	10.00	0.0	16.8	2.6
1. MIS	pm	0.2	20.00		4.2	0.0	10.00		2.2	0.0	10.00		2.3	0.0	10.00		2.4	0.0	0.00		0.0	0.0
2. ASC	pm	2.6	0.00		0.0	0.0	6.00		25.8	0.0	6.00		27.1	0.0	6.00		28.4	0.0	0.00		0.0	0.0
3. Policy	pm	var	15.00		18.5	6.3	103.50		157.7	13.2	63.00		86.6	27.8	36.00		42.8	29.2	10.00		16.8	2.6
4. Support	pm	2.4	0.00		0.0	0.0	0.00		0.0	0.0	2.00		9.0	0.0	2.00		9.5	0.0	0.00		0.0	0.0

OVERALL AMTT
PROJECT BUDGET

Line Item	Unit	Cost	TOTAL Units	USAID FX	USAID LC	USAID GOC
I. SALARIES				1634.5	794.6	2585.0
A. Expatriate L-T			10.5	750.6	0.0	0.0
1. MIS	py	50.0	3.5	202.9	0.0	0.0
2. ASC	py	60.0	3.5	243.4	0.0	0.0
3. Policy	py	75.0	3.5	304.3	0.0	0.0
B. Expatriate S-T			112.5	883.7	0.0	0.0
1. MIS	pm	7.1	14.0	113.3	0.0	0.0
2. ASC	pm	7.1	18.0	148.1	0.0	0.0
3. Policy	pm	7.1	64.5	520.2	0.0	0.0
4. Support	pm	3.8	8.0	34.8	0.0	0.0
	pm	7.1	8.0	67.4	0.0	0.0
C. Chadian L-T			584.3	0.0	361.3	2505.9
1. MIS	py	var	524.8	0.0	0.0	2505.9
2. ASC	py	var	7.0	0.0	82.8	0.0
3. Policy	py	var	0.0	0.0	0.0	0.0
4. Support	py	var	52.5	0.0	278.5	0.0
D. Chadian S-T			299.5	0.0	433.4	79.1
1. MIS	pm	0.2	50.0	0.0	11.2	0.0
2. ASC	pm	2.6	18.0	0.0	81.3	0.0
3. Policy	pm	var	227.5	0.0	322.4	79.0
4. Support	pm	2.4	4.0	0.0	18.5	0.0

OVERALL AMIT
PROJECT BUDGET

Line Item	Unit Cost	FY 91 USAID Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 USAID GOC	FY 92 USAID Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 USAID GOC	FY 93 USAID Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 USAID GOC	FY 94 USAID Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 USAID GOC	FY 95 USAID Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 USAID GOC
II. ALLOW,O'HEAD,FRIN			311.2	13.8	149.4		1080.5	77.4	161.7		1021.3	60.3	175.5		932.7	48.8	184.4		306.9	13.7	103.7
A. Post Diff	% sal25%		12.1	0.0	0.0		51.0	0.0	0.0		53.6	0.0	0.0		56.2	0.0	0.0		14.8	0.0	0.0
l-t exp. only																					
1. MIS			3.3		0.0		13.8		0.0		14.5		0.0		15.2		0.0		4.0		0.0
2. ASC			3.9		0.0		16.5		0.0		17.4		0.0		18.2		0.0		4.8		0.0
3. Policy			4.9		0.0		20.7		0.0		21.7		0.0		22.8		0.0		6.0		0.0
4. Support																					
B. COLA	lump-sum		9.3	0.0	0.0		37.4	0.0	0.0		37.4	0.0	0.0		37.5	0.0	0.0		9.3	0.0	0.0
1. MIS			3.1		0.0		12.5		0.0		12.5		0.0		12.5		0.0		3.1		0.0
2. ASC			3.1		0.0		12.5		0.0		12.5		0.0		12.5		0.0		3.1		0.0
3. Policy			3.1		0.0		12.5		0.0		12.5		0.0		12.5		0.0		3.1		0.0
4. Support																					
C. Other All.	lump-sum		130.8	0.0	0.0		217.8	0.0	0.0		253.2	0.0	0.0		240.0	0.0	0.0		135.3	0.0	0.0
l-t exp. only																					
1. MIS			43.6		0.0		72.6		0.0		84.4		0.0		80.0		0.0		45.1		
2. ASC			43.6		0.0		72.6		0.0		84.4		0.0		80.0		0.0		45.1		
3. Policy			43.6		0.0		72.6		0.0		84.4		0.0		80.0		0.0		45.1		
4. Support																					
D. Exp. Fringe	% sal30%		33.1	0.0	0.0		161.1	0.0	0.0		140.9	0.0	0.0		124.6	0.0	0.0		30.6	0.0	0.0
	lt&st																				
1. MIS			12.3		0.0		23.6		0.0		24.8		0.0		26.0		0.0		8.2		0.0
2. ASC			4.7		0.0		33.9		0.0		35.6		0.0		37.4		0.0		5.7		0.0
3. Policy			14.9		0.0		101.1		0.0		68.0		0.0		48.1		0.0		15.3		0.0
4. Support			1.2		0.0		2.5		0.0		12.5		0.0		13.1		0.0		1.4		0.0

OVERALL AMTT
PROJECT BUDGET

Line Item	Unit Cost	FY 91 USAID Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 USAID GOC	FY 92 USAID Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 USAID GOC	FY 93 USAID Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 USAID GOC	FY 94 USAID Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 USAID GOC	FY 95 USAID Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 USAID GOC
E. Cont. O'Head	% sal110% lt&st		121.3	0.0	0.0		590.8	0.0	0.0		516.3	0.0	0.0		456.7	0.0	0.0		112.6	0.0	0.0
1. MIS			45.2		0.0		86.5		0.0		90.8		0.0		95.3		0.0		30.0		0.0
2. ASC			17.3		0.0		124.4		0.0		130.6		0.0		137.2		0.0		21.1		0.0
3. Policy			54.5		0.0		370.8		0.0		249.2		0.0		176.2		0.0		56.2		0.0
4. Support			4.3		0.0		9.1		0.0		45.7		0.0		48.0		0.0		5.3		0.0
F. DBA	% sal3.44% lt&st		3.6	0.0	0.0		18.2	0.0	0.0		15.8	0.0	0.0		14.0	0.0	0.0		3.4	0.0	0.0
1. MIS			1.4		0.0		2.7		0.0		2.8		0.0		3.0		0.0		0.9		0.0
2. ASC			0.5		0.0		3.9		0.0		4.1		0.0		4.3		0.0		0.7		0.0
3. Policy			1.7		0.0		11.6		0.0		7.8		0.0		5.5		0.0		1.8		0.0
4. Support			0.0		0.0		0.0		0.0		1.1		0.0		1.2		0.0		0.0		0.0
G. SOS	var		1.0	0.0	0.0		4.2	0.0	0.0		4.1	0.0	0.0		3.7	0.0	0.0		0.9	0.0	0.0
1. MIS			0.4		0.0		0.9		0.0		1.0		0.0		1.0		0.0		0.3		0.0
2. ASC			0.2		0.0		1.1		0.0		1.2		0.0		1.2		0.0		0.2		0.0
3. Policy			0.4		0.0		2.2		0.0		1.7		0.0		1.3		0.0		0.4		0.0
4. Support			0.0		0.0		0.0		0.0		0.2		0.0		0.2		0.0		0.0		0.0
H. Chad Fringe	30% salary long-term o		0.0	13.8	149.4		0.0	77.4	161.7		0.0	60.3	175.5		0.0	48.8	184.4		0.0	13.7	103.7
1. MIS				1.3	147.5			0.7	157.7			0.7	167.2			0.7	175.6			0.0	103.7
2. ASC				1.6	0.0			6.7	0.0			7.1	0.0			7.4	0.0			2.0	0.0
3. Policy				5.5	1.9			47.3	4.0			26.0	8.3			12.8	8.8			5.1	0.0
4. Support				5.4	0.0			22.7	0.0			26.5	0.0			27.9	0.0			6.6	0.0

OVERALL AMIT
PROJECT BUDGET

Line Item	Unit Cost	TOTAL USAID Units	FX	LC	GOC
II. ALLOW,O'HEAD,FRIN			3652.6	214.0	774.7
A. Post Diff	% sal25%		187.7	0.0	0.0
l-t exp. only					
1. MIS			50.7	0.0	0.0
2. ASC			60.9	0.0	0.0
3. Policy			76.1	0.0	0.0
4. Support			0.0	0.0	0.0
B. COLA	lump-sum		130.8	0.0	0.0
1. MIS			43.6	0.0	0.0
2. ASC			43.6	0.0	0.0
3. Policy			43.6	0.0	0.0
4. Support			0.0	0.0	0.0
C. Other All.	lump-sum		977.1	0.0	0.0
l-t exp. only					
1. MIS			325.8	0.0	0.0
2. ASC			325.8	0.0	0.0
3. Policy			325.8	0.0	0.0
4. Support			0.0	0.0	0.0
D. Exp. Fringe	% sal30% lt&st		490.3	0.0	0.0
1. MIS			94.9	0.0	0.0
2. ASC			117.4	0.0	0.0
3. Policy			247.3	0.0	0.0
4. Support			30.7	0.0	0.0

OVERALL AMIT
PROJECT BUDGET

Line Item	Unit Cost	TOTAL USAID Units	FX	LC	GOC
E. Cont. O'Head	% sal110% lt&st		1797.7	0.0	0.0
1. MIS			347.8	0.0	0.0
2. ASC			430.6	0.0	0.0
3. Policy			906.9	0.0	0.0
4. Support			112.4	0.0	0.0
F. DBA	% sal3.44% lt&st		55.0	0.0	0.0
1. MIS			10.9	0.0	0.0
2. ASC			13.5	0.0	0.0
3. Policy			28.4	0.0	0.0
4. Support			2.3	0.0	0.0
G. SOS	var		13.9	0.0	0.0
1. MIS			3.7	0.0	0.0
2. ASC			3.9	0.0	0.0
3. Policy			6.0	0.0	0.0
4. Support			0.4	0.0	0.0
H. Chad Fringe	30% salary long-term o		0.0	214.0	774.7
1. MIS			0.0	3.3	751.8
2. ASC			0.0	24.8	0.0
3. Policy			0.0	96.7	22.9
4. Support			0.0	89.1	0.0

OVERALL AMTT
PROJECT BUDGET

Line Item	Unit Cost	FY 91 USAID Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 USAID GOC	FY 92 USAID Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 USAID GOC	FY 93 USAID Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 USAID GOC	FY 94 USAID Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 USAID GOC	FY 95 USAID Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 USAID GOC
III.TRAVEL/PER DIEM			113.7	22.0	0.0		402.7	79.3	0.0		414.8	53.8	0.0		304.5	38.4	0.0		91.1	9.0	0.0
1. MIS			48.2	1.9	0.0		56.7	2.0	0.0		61.0	2.1	0.0		60.7	2.2	0.0		35.8	1.1	0.0
2. ASC			13.2	0.6	0.0		92.5	5.3	0.0		115.8	5.6	0.0		96.6	5.8	0.0		13.6	0.8	0.0
3. Policy			52.3	19.5	0.0		253.5	72.0	0.0		194.6	46.1	0.0		101.6	30.4	0.0		41.7	7.1	0.0
4. Support			0.0	0.0	0.0		0.0	0.0	0.0		43.4	0.0	0.0		45.6	0.0	0.0		0.0	0.0	0.0
IV. TRAINING			31.5	22.6	2.6		220.6	46.3	3.7		231.4	48.1	3.7		242.9	49.9	3.7		0.0	10.5	2.6
B. Study Tours			31.5	0.0	0.0	20.00	220.6	0.0	0.0	20.00	231.4	0.0	0.0	20.00	242.9	0.0	0.0		0.0	0.0	0.0
1. MIS			0.0		0.0	6.00	66.2		0.0	6.00	69.4		0.0	6.00	72.8		0.0		0.0		0.0
2. ASC		3.00	31.5		0.0	8.00	88.2		0.0	8.00	92.6		0.0	8.00	97.2		0.0		0.0		0.0
3. Policy			0.0		0.0	6.00	66.2		0.0	6.00	69.4		0.0	6.00	72.9		0.0		0.0		0.0
4. Support			0.0		0.0				0.0				0.0				0.0		0.0		0.0
C. In-Country			0.0	22.6	2.6		0.0	46.3	3.7		0.0	48.1	3.7		0.0	49.9	3.7		0.0	10.5	2.6
1. MIS				7.9	2.6			11.0	3.7			11.0	3.7			11.0	3.7			7.9	2.6
2. ASC		1.00		4.2	0.0	2.00		8.8	0.0	2.00		9.3	0.0	2.00		9.7	0.0				0.0
3. Policy				10.5	0.0			26.5	0.0			27.8	0.0			29.2	0.0			2.6	0.0
4. Support					0.0				0.0				0.0				0.0				0.0
::																					
V. COMMODITIES			693.8	10.5	0.0		24.3	5.5	0.0		0.0	5.8	0.0		0.0	0.0	0.0		0.0	0.0	0.0
1. MIS			302.3	10.5	0.0		24.3	5.5	0.0		0.0	5.8	0.0		0.0		0.0				0.0
2. ASC			104.2		0.0				0.0				0.0				0.0				0.0
3. Policy			118.7		0.0				0.0				0.0				0.0				0.0
4. Support			168.6		0.0				0.0				0.0				0.0				0.0

OVERALL AMTT
PROJECT BUDGET

Line Item	Unit Cost	TOTAL USAID Units	FX	LC	GOC
III.TRAVEL/PER DIEM			1326.8	202.5	0.0
1. MIS			262.4	9.3	0.0
2. ASC			331.6	18.1	0.0
3. Policy			643.7	175.2	0.0
4. Support			89.0	0.0	0.0
IV. TRAINING			726.4	177.4	16.3
B. Study Tours		60.0	726.4	0.0	0.0
1. MIS		18.0	208.4	0.0	0.0
2. ASC		27.0	309.5	0.0	0.0
3. Policy		18.0	208.5	0.0	0.0
4. Support			0.0	0.0	0.0
C. In-Country			0.0	177.4	16.3
1. MIS			0.0	48.8	16.3
2. ASC			0.0	32.0	0.0
3. Policy			0.0	96.6	0.0
4. Support				0.0	0.0
::					
V. COMMODITIES			718.1	21.8	0.0
1. MIS			326.6	21.8	0.0
2. ASC			104.2	0.0	0.0
3. Policy			118.7	0.0	0.0
4. Support			168.6	0.0	0.0

OVERALL AMIT
PROJECT BUDGET

Line Item	Unit Cost	FY 91 USAID Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 USAID GOC	FY 92 USAID Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 USAID GOC	FY 93 USAID Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 USAID GOC	FY 94 USAID Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 USAID GOC	FY 95 USAID Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 USAID GOC
VI. OTHER COSTS			114.2	55.1	71.4		242.0	71.2	75.0		277.4	74.8	78.7		291.2	78.5	82.7		82.6	60.4	21.7
1. MIS			31.5	7.8	71.4		29.7	21.6	75.0		31.3	22.7	78.7		32.8	23.8	82.7		11.5	3.0	21.7
2. ASC			13.7		0.0		29.8		0.0		31.3		0.0		32.8		0.0		11.5		0.0
3. Policy			13.7		0.0		19.8		0.0		20.8		0.0		21.9		0.0		11.5		0.0
4. Support			55.3	47.3	0.0		162.7	49.6	0.0		194.0	52.1	0.0		203.7	54.7	0.0		48.1	57.4	0.0
T O T A L S			1374.8	170.1	721.5		2507.3	563.6	779.3		2414.3	470.9	843.1		2186.5	407.0	885.3		582.9	138.8	476.3

OVERALL AMTT
PROJECT BUDGET

Line Item	Unit Cost	TOTAL USAID Units	FX	LC	GOC
VI. OTHER COSTS			1007.4	340.1	329.5
1. MIS			136.8	78.9	329.4
2. ASC			119.0	0.0	
3. Policy			87.7	0.0	
4. Support			663.8	261.2	0.0
T O T A L S			9065.8	1750.4	3705.5

TABLE 4

AMIT OVERALL PROJECT BUDGET
BY FISCAL YEAR

($ 000)

OVERALL AMIT PROJECT BUDGET	FY 91			FY 92			FY 93			FY 94			FY 95			TOTAL		
	USAID			USAID			USAID			USAID			USAID			USAID		
Line Item	FX	LC	GOC	FX	LC	GOC	FX	LC	GOC	FX	LC	GOC	FX	LC	GOC	FX	LC	GOC
I. SALARIES	110.4	46.1	498.1	537.2	283.9	538.9	469.4	228.1	585.2	415.2	191.4	614.5	102.3	45.2	348.3	1634.5	794.6	2585.0
II. ALLOW,O'HEAD,FR	311.2	13.8	149.4	1080.5	77.4	161.7	1021.3	60.3	175.5	932.7	48.8	184.4	306.9	13.7	103.7	3652.6	214.0	774.7
III.TRAVEL/PER DIEM	113.7	22.0	0.0	402.7	79.3	0.0	414.8	53.8	0.0	304.5	38.4	0.0	91.1	9.0	0.0	1326.8	202.5	0.0
IV. TRAINING	31.5	22.6	2.6	220.6	46.3	3.7	231.4	48.1	3.7	242.9	49.9	3.7	0.0	10.5	2.6	726.4	177.4	16.3
V. COMMODITIES	693.8	10.5	0.0	24.3	5.5	0.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	718.1	21.8	0.0
VI. OTHER COSTS	114.2	55.1	71.4	242.0	71.2	75.0	277.4	74.8	78.7	291.2	78.5	82.7	82.6	60.4	21.7	1007.4	340.1	329.5
T O T A L S	1374.8	170.1	721.5	2507.3	563.6	779.3	2414.3	470.9	843.1	2186.5	407.0	885.3	582.9	138.8	476.3	9065.8	1750.4	3705.5

MARKETING INFORMATION SYSTEM

Line Item	Units	USAID FX	USAID LC	GOC LC	Units	USAID FX	USAID LC	GOC LC	Units	USAID FX	USAID LC	GOC LC	Units	USAID FX	USAID LC	GOC LC	Units	USAID FX	USAID LC	GOC LC
I. SALARIES		41.1	4.2	491.8		78.6	2.2	525.7		82.5	2.3	557.4		86.7	2.4	585.3		27.3	0.0	345.7
A. Expatriate L-T	0.25	13.1	0.0	0.0	1.00	55.1		0.0	1.00	57.9		0.0	1.00	60.8		0.0	0.25	16.0	0.0	0.0
Policy Analyst	0.25	13.1			1.00	55.1		0.0	1.00	57.9		0.0	1.00	60.8		0.0	0.25	16.0	0.0	0.0
B. Expatriate S-T	3.8	28.0	0.0	0.0	3.0	23.5	0.0	0.0	3.0	24.7	0.0	0.0	3.0	25.9	0.0	0.0	1.3	11.3	0.0	0.0
User Survey	1.00	7.5			0.75	5.9			0.75	6.2			0.75	6.5			0.75	6.8		
Computer Prog.	2.00	14.9			0.75	5.9			0.75	6.2			0.75	6.5						
Annual Eval.					1.00	7.8			1.00	8.2			1.00	8.6						
Training	0.75	5.6			0.50	3.9			0.50	4.1			0.50	4.3			0.50	4.5		
C. Chadian L-T	113.00	0.00	0.00	491.82	115.00	0.00	0.00	525.67	116.00	0.00	0.00	557.40	116.00	0.00	0.00	585.27	64.85	0.00	0.00	345.72
BSA																				
Director	1.0			7.8	1.0			8.2	1.0			8.6	1.0			9.0	0.3			2.8
Hdqtrs. Staff	9.0			39.7	11.0			50.9	11.0			53.5	11.0			56.2	3.3			17.7
Supervisors	12.0			59.2	12.0			62.2	13.0			70.7	13.0			74.3	13.0			78.0
Enumerators	38.0			159.6	38.0			167.6	38.0			176.0	38.0			184.8	9.5			48.5
Drivers	2.0			4.4	2.0			4.6	2.0			4.9	2.0			5.1	0.5			1.3
ONC																				
Commercial Dir.	1.0			6.2	1.0			6.5	1.0			6.8	1.0			7.2	0.3			1.9
Dir. of Pricing	1.0			5.6	1.0			5.8	1.0			6.1	1.0			6.4	0.3			1.7
Enumerators	14.0			58.8	14.0			61.7	14.0			64.8	14.0			68.1	3.5			17.9
SAP																				
Director	1.0			7.8	1.0			8.2	1.0			8.6	1.0			9.0	0.3			2.4
Enumerators	34.0			142.8	34.0			149.9	34.0			157.4	34.0			165.3	34.0			173.6
D. Chadian S-T																				
User-needs srvy	20.0		4.2		10.0		2.2		10.0		2.3		10.0		2.4					

MARKETING INFORMATION SYSTEM

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	Unit	Cost/ Unit	ASSUMPTIONS
I. SALARIES		316.2	11.2	2505.9			
A. Expatriate L-T	3.50	202.9		0.0			
Policy Analyst	3.50	202.9		0.0	py	50.0	Recent Ph.D or post-doc.
B. Expatriate S-T	14.0	113.3	0.0	0.0			
User Survey	4.00	32.8			pm	7.1	Same as Market and Policy Studies component.
Computer Prog.	4.25	33.4			pm	7.1	
Annual Eval.	3.00	24.7			pm	7.1	
Training	2.75	22.5			pm	7.1	
C. Chadian L-T	524.85	0.0	0.0	2505.9			
BSA							
Director	4.30	0.0	0.0	36.3	py	7.4	
Hdqtrs. Staff	45.30	0.0	0.0	218.0	py	4.2	
Supervisors	63.00	0.0	0.0	344.4	py	4.7	
Enumerators	161.50	0.0	0.0	736.4	py	4.0	
Drivers	8.50	0.0	0.0	20.3	py	2.1	
ONC							
Commercial Dir.	4.25	0.0	0.0	28.6	py	5.9	
Dir. of Pricing	4.25	0.0	0.0	25.7	py	5.3	
Enumerators	59.50	0.0	0.0	271.3	py	4.0	
SAP							
Director	4.25	0.0	0.0	35.9	py	7.4	
Enumerators	170.00	0.0	0.0	789.1	py	4.0	
D. Chadian S-T							
User-needs srvy	50.00	0.00	11.15	0.00	pm	0.2	

MARKETING INFORMATION SYSTEM

Line Item	FY 91 Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 GOC LC	FY 92 Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 GOC LC	FY 93 Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 GOC LC	FY 94 Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 GOC LC	FY 95 Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 GOC LC
II. ALLOW, OVERHEAD FRINGE BENEFITS		109.2	1.3	147.5		212.5	0.7	157.7		230.8	0.7	167.2		233.0	0.7	175.6		91.8	0.0	103.7
A. Post Diff.		3.3	0.0	0.0		13.8	0.0	0.0		14.5	0.0	0.0		15.2	0.0	0.0		4.0	0.0	0.0
B. COLA		3.1	0.0	0.0		12.5	0.0	0.0		12.5	0.0	0.0		12.5	0.0	0.0		3.1	0.0	0.0
C. Other All.																				
Pre/Post Assign	1.00	3.2																		
Housing	3.00	7.6			12.00	31.8			12.00	33.3			12.00	35.0			1.00	3.8		
Education	0.25	6.0			1.00	25.4			1.00	26.6			1.00	28.0			3.00	9.2		
Storage	0.25	0.5			1.00	2.2			1.00	2.3			1.00	2.4			0.25	7.3		
HHE/UAB/Cons.	1.00	23.1							1.00	8.3							0.25	0.6		
HH Mtnce	0.25	2.6			1.00	11.0			1.00	11.6			1.00	12.2			1.00	20.4		
Misc.	0.25	0.5			1.00	2.2			1.00	2.3			1.00	2.4			0.25	3.2		
Temp.Hous		0.0				0.0				0.0				0.0			0.25	0.6		
D. Exp. Fringe		12.3		0.0		23.6		0.0		24.8		0.0		26.0		0.0		0.0		
E. Cont. O'Head		45.2		0.0		86.5		0.0		90.8		0.0		95.3		0.0		8.2	0.0	0.0
F. DBA		1.4		0.0		2.7		0.0		2.8		0.0		3.0		0.0		30.0		0.0
G. SOS	0.25	0.2		0.0	1.00	0.8		0.0	1.00	0.9		0.0	1.00	0.9		0.0		0.9	0.0	0.0
	3.75	0.2		0.0	3.00	0.1		0.0	3.00	0.1		0.0	3.00	0.1		0.0	0.25	0.2		
H. Chad Fringe			1.3	147.5			0.7	157.7			0.7	167.2			0.7	175.6	1.25	0.1	0.0	103.7

MARKETING INFORMATION SYSTEM

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	Unit	Cost/ Unit	ASSUMPTIONS
II. ALLOW, OVERHEAD FRINGE BENEFITS		877.3	3.3	751.8			
A. Post Diff.		50.7	0.0	0.0	% sal	25.00%	Post differential currently 25%.
B. COLA		43.6	0.0	0.0	lump-sum	$12,450	Based on figures provided by USAID/Chad Controller's Office.
C. Other All.							
Pre/Post Assign	2.00	7.0		0.0	family	3.0	
Housing	42.00	116.8		0.0	fam/mo	2.4	$1,200/mo. rent plus $1,200/mo. for utilities.
Education	3.50	93.3		0.0	fam/yr	23.0	Two children @ $11,500 per year.
Storage	3.50	8.1		0.0	fam/yr	2.0	
HHE/UAB/Cons.	3.00	51.9		0.0	lump-sum		Based on figures provided by USAID/Chad Controller's Office.
HH Mtnce	3.50	40.6		0.0	fam/yr	10.0	
Misc.	3.50	8.1		0.0	fam/yr	2.0	
Temp.Hous							
D. Exp. Fringe		94.9		0.0	% sal lt&st	30.00%	Assumes contractor fringe rate of 30%.
E. Cont. O'Head		347.8		0.0	% sal lt&st	110.00%	Assumes overhead @ 110% of salaries, long- and short-term.
F. DBA		10.9		0.0	% sal lt&st	0.0	
G. SOS	3.50	3.1		0.0	fam/yr	0.8	Same as MIS, ASC components.
	14.00	0.6		0.0	st pm	0.0	
H. Chad Fringe			3.3	751.8	% sal	30.00%	

MARKETING INFORMATION SYSTEM

Line Item	FY 91 Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 GOC LC	FY 92 Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 GOC LC	FY 93 Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 GOC LC	FY 94 Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 GOC LC	FY 95 Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 GOC LC
III.TRAVEL/PER DIEM		48.2	1.9	0.0		56.6	2.0	0.0		61.0	2.1	0.0		60.7	2.2	0.0		35.8	1.1	0.0
A. Internat'l Travel																				
1. Exp.L-T	4.00	7.6		0.0	5.00	17.5		0.0	5.00	18.4		0.0	5.00	19.3		0.0	4.00	9.2	0.0	0.0
Assign/Return	4.00	7.6																		
HLRTP																	4.00	9.2		
R&Rs									4.00	16.7										
Other Prof.					4.00	15.9							4.00	17.5						
					1.00	1.7			1.00	1.7			1.00	1.8						
2. Exp.S-T	3.00	11.3			4.00	15.9			4.00	16.7			4.00	17.5			3.00	13.8		
B. In-Country																				
Via air	6.00		1.9		6.00		2.0		6.00		2.1		6.00		2.2		3.00		1.1	
C. Per Diems																				
International	24.00	5.0			18.00	4.0			18.00	4.2			18.00	4.4			14.00	2.8		
Chad-TDYs	93.75	19.7			75.00	15.0			75.00	15.0			75.00	15.0			31.25	6.3		
Chad-internal	18.75	2.0			15.00	1.5			15.00	1.5			15.00	1.5			6.25	0.6		
Chad - other	0.00		0.0		0.00		0.0		0.00		0.0		0.00		0.0		0.00		0.0	
D. Misc. Trvl	5.00	2.6	0.0	0.0	5.00	2.8	0.0	0.0	9.00	5.2	0.0	0.0	5.00	3.0	0.0	0.0	5.00	3.2		0.0

MARKETING INFORMATION SYSTEM

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	Unit	Cost/ Unit	ASSUMPTIONS
III.TRAVEL/PER DIEM		262.4	9.3	0.0			
A. Internat'l Travel							
1. Exp.L-T	23.00	72.0	0.0	0.0			
Assign/Return	8.00	16.7			trip	1.8	
HLRIP	4.00	16.7			r-trip	3.6	
R&Rs	8.00	33.4			r-trip	3.6	Two R&R post.
Other Prof.	3.00	5.2			r-trip	1.5	
2. Exp.S-T	18.00	75.2	0.0	0.0	r-trip	3.6	
B. In-Country							
Via air	27.00		9.3	0.0	r-trip	0.3	$300 NDJ-Moundou, Sarh or Abeche, round trip, for supervisors.
C. Per Diems							
International	92.00	20.4			$ day	200.0	2 days per international trip
Chad-TDYs	350.00	70.9			$ day	200.0	25 days per s-t ta pm in NDJ
Chad-internal	70.00	7.1			$ day	100.0	5 days per s-t ta pm outside NDJ
Chad - other	0.00		0.0		$ day	20.0	Per diem for GOC employees
D. Misc. Trvl	29.00	16.8		0.0	int.trp	0.5	

ARKETING INFORMA-ION SYSTEM	FY 91				FY 92				FY 93				FY 94				FY 95			
		USAID		GOC		USAID		GOC		USAID		GOC		USAID		GOC		USAID		GOC
ine Item	Units	FX	LC	LC	Units	FX	LC	LC	Units	FX	LC	LC	Units	FX	LC	LC	Units	FX	LC	LC
V. TRAINING		0.0	7.9	2.6		66.2	11.0	3.7		69.5	11.0	3.7		72.9	11.0	3.7		0.0	7.9	2.6
. Study Tours																				
3rd Country					6.00	66.2			6.00	69.5			6.00	72.9						
. In-Country																				
BSA Workshops	2.00		6.3	2.1	3.00		9.5	3.2	3.00		9.5	3.2	3.00		9.5	3.2	2.00		6.3	2.1
MIS Roundtables	1.00		1.6	0.5	1.00		1.6	0.5	1.00		1.6	0.5	1.00		1.6	0.5	1.00		1.6	0.5
. COMMODITIES		302.3	10.5	0.0		24.3	5.5	0.0		0.0	5.8	0.0		0.0	0.0	0.0		0.0	0.0	0.0
. Office F&E																				
Vehicle	1.00	35.7																		
Generator	1.00	21.0																		
Basic Furn.	4.00		10.5		2.0		5.5		2.0		5.8									
PC Computer	4.00	21.0			4.00	22.1														
Dot Mat Printer	3.00	1.6			4.00	2.2														
Graphics Printer	1.00	5.3																		
UPS for BSA	2.00	54.6																		
Typewriters	1.00	1.3																		
Photocopiers	2.00	10.5																		
A/C	2.00	4.2																		
. Res. F&E	1.00	26.3																		
Generator	1.0	21.0																		
. Prog. Support																				
SSB Radios		100.0																		

MARKETING INFORMATION SYSTEM

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	Unit	Cost/ Unit	ASSUMPTIONS
IV. TRAINING	0.00	208.5	48.8	16.3			
B. Study Tours							
3rd Country	18.00	208.5			pm	10.0	
C. In-Country							
BSA Workshops	13.00		41.0	13.7		4.0	
MIS Roundtables	5.00		7.9	2.6		2.0	
V. COMMODITIES		326.6	21.8	0.0			
A. Office F&E							
Vehicle	1.00	35.7			vehicle	34.0	
Generator	1.00	21.0			gen	20.0	
Basic Furn.	8.00		21.8		office	2.5	
PC Computer	8.00	43.1			computer	5.0	
Dot Mat Printer	7.00	3.8			printer	0.5	
Graphics Printer	1.00	5.3			printer	5.0	
UPS for BSA	2.00	54.6			ups	26.0	Per discussions with USAID/Chad Controller's Office.
Typewriters	1.00	1.3			typwrtr	1.2	
Photocopiers	2.00	10.5			copier	5.0	
A/C	2.00	4.2			each	2.0	
B. Res. F&E	1.00	26.3			hsld.	25.0	
Generator	1.00	21.0					
C. Prog. Support							
SSB Radios		100.0					Installed cost of radio system estimated @ $100,000.

MARKETING INFORMATION SYSTEM

Line Item	FY 91 Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 GOC LC	FY 92 Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 GOC LC	FY 93 Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 GOC LC	FY 94 Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 GOC LC	FY 95 Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 GOC LC
VI. OTHER COSTS		31.5	7.8	71.4		29.8	21.6	75.0		31.3	22.7	78.7		32.8	23.8	82.7		11.5	3.1	21.7
Radio Chad Prog.	1.0		5.3		2.0		11.0		2.0		11.6		2.0		12.2					
Veh. O&M - MNC	0.25	3.2			1.00	13.2			1.00	13.9			1.00	14.6			0.25	3.8		
Veh. O&M - BSA	4.00			50.4	4.00			52.9	4.00			55.6	4.00			58.3	1.00			15.3
BAS Office O&M				21.0				22.1				23.2				24.3				6.4
Generator O&M	3.0		1.6		12.0		6.6		12.0		6.9		12.0		7.3		3.0		1.9	
Equip. O&M	3.0		0.9		12.0		4.0		12.0		4.2		12.0		4.4		3.0		1.1	
Software		5.3				1.1				1.2		0.0		1.2		0.0		1.3		0.0
Expendabele Equip.		10.5				2.2				2.3		0.0		2.4		0.0		2.6		0.0
Misc. Supplies		12.6				13.2				13.9		0.0		14.6		0.0		3.8		0.0
TOTAL		532.3	33.5	713.4		467.9	43.0	762.0		475.0	44.6	807.0		486.2	40.2	847.2		166.4	12.1	473.8

TION SYSTEM

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	Unit	Cost/ Unit	ASSUMPTIONS
VI. OTHER COSTS		136.8	79.0	329.4			
Radio Chad Prog.			40.0		program	5.0	
Veh. O&M - HMC		48.7			veh/yr	12.0	Market News Coordinator's project vehicle.
Veh. O&M - BSA		0.0		232.5	veh/yr	12.0	BSA will operate four (4) vehicles.
BAS Office O&M		0.0	0.0	96.9	lump-sum	20.0	Assumes BSA baseline office operating expenses of $20,000 per year.
Generator O&M		0.0	24.3	0.0	gen/mo	0.5	
Equip. O&M		0.0	14.6	0.0	$/mo	0.3	
Software	0.00	10.0		0.0	lump-sum		
Expendabale Equip.	0.00	20.0		0.0	lump-sum		
Misc. Supplies	0.00	58.1		0.0	lump-sum		
TOTAL		2127.6	173.4	3603.4			

AGRIBUSINESS SUPPORT CENTER

AGRIBUSINESS SUPPORT CENTER

Line Item	FY 91 Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 GOC LC	FY 92 Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 GOC LC	FY 93 Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 GOC LC	FY 94 Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 GOC LC	FY 95 Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 GOC LC
I. SALARIES		15.8	5.4	0.0		113.1	48.3	0.0		118.8	50.7	0.0		124.7	53.2	0.0		19.1	6.5	0.0
A. Expatriate L-T	0.25	15.8	0.0	0.0	1.00	66.2		0.0	1.00	69.5		0.0	1.00	72.9		0.0	0.25	19.1	0.0	0.0
Agribus. Spec.	0.25	15.8			1.00	66.2		0.0	1.00	69.5		0.0	1.00	72.9		0.0	0.25	19.1	0.0	0.0
B. Expatriate S-T	0.0	0.0	0.0	0.0	6.0	47.0	0.0	0.0	6.0	49.3	0.0	0.0	6.0	51.8	0.0	0.0	0.0	0.0	0.0	0.0
Consultants					6.00	47.0			6.00	49.3			6.00	51.8						
C. Chadian L-T	0.50	0.00	5.36	0.00	2.00	0.00	22.49	0.00	2.00	0.00	23.62	0.00	2.00	0.00	24.80	0.00	0.50	0.00	6.51	0.00
Prof. Cntrprt.	0.25		3.8		1.00		15.9		1.00		16.7		1.00		17.5		0.25		4.6	
Sec'y/Ad. Asst.	0.25		1.6		1.00		6.6		1.00		6.9		1.00		7.3		0.25		1.9	
D. Chadian S-T																				
Consultants			0.0		6.0		25.8		6.0		27.1		6.0		28.4					

AGRIBUSINESS SUPPORT CENTER

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	Unit	Cost/ Unit	ASSUMPTIONS
I. SALARIES		391.5	164.1	0.0			
A. Expatriate L-T	3.50	243.4		0.0			
Agribus. Spec.	3.50	243.4		0.0	py	60.0	Base salary of: $60,000
B. Expatriate S-T	18.00	148.1	0.0	0.0			
Consultants	18.00	148.1			pm	7.1	1.5 PM S-T TA per study/plan; rate = $273.33 Assumes 1/3 TA @ $295/day, 1/3 @ $275, and 1/3 @ $250/day.
C. Chadian L-T	7.00	0.00	82.77	0.00			
Prof. Cntrprt.	3.50		58.42	0.00		14.4	Base salary of: 300,000 FCFA/month
Sec'y/Ad. Asst.	3.50		24.34	0.00	py	6.0	Base salary of: 125,000 FCFA/month
D. Chadian S-T							
Consultants	18.00	0.00	81.33	0.00	pm	3.9	Local consultants $150 per day, i.e. $3,900 per 26 day pm.

II. ALLOW, OVERHEAD FRINGE BENEFITS		73.4	1.6	0.0		264.9	6.7	0.0		285.8	7.1	0.0		290.8	7.4	0.0		80.8	2.0	0.0
A. Post Diff.		3.9	0.0	0.0		16.5	0.0	0.0		17.4	0.0	0.0		18.2	0.0	0.0		4.8	0.0	0.0
B. COLA		3.1	0.0	0.0		12.5	0.0	0.0		12.5	0.0	0.0		12.5	0.0	0.0		3.1	0.0	0.0
C. Other All.																				
Pre/Post Assign	1.00	3.2																		
Housing	3.00	7.6			12.00	31.8			12.00	33.3			12.00	35.0			1.00	3.8		
Education	0.25	6.0			1.00	25.4			1.00	26.6			1.00	28.0			3.00	9.2		
Storage	0.25	0.5			1.00	2.2			1.00	2.3			1.00	2.4			0.25	7.3		
MHE/UAB/Cons.	1.00	23.1							1.00	8.3							0.25	0.6		
HH Mtnce	0.25	2.6			1.00	11.0			1.00	11.6			1.00	12.2			1.00	20.4		
Misc.	0.25	0.5			1.00	2.2			1.00	2.3			1.00	2.4			0.25	3.2		
Temp.Hous		0.0				0.0				0.0				0.0			0.25	0.6		
																		0.0		
D. Exp. Fringe		4.7				33.9		0.0		35.6		0.0		37.4		0.0		5.7	0.0	0.0
E. Cont. O'Head		17.3				124.4		0.0		130.6		0.0		137.2		0.0		21.1		0.0
F. DBA		0.5				3.9		0.0		4.1		0.0		4.3		0.0		0.7	0.0	0.0
G. SOS	0.25	0.2			1.00	0.8		0.0	1.00	0.9		0.0	1.00	0.9		0.0	0.25	0.2		0.0
	0.00	0.0			6.00	0.3		0.0	6.00	0.3		0.0	6.00	0.3		0.0	0.00	0.0		0.0
H. Chad Fringe			1.6				6.7	0.0			7.1	0.0			7.4	0.0			2.0	0.0

AGRIBUSINESS SUPPORT CENTER

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	Unit	Cost/ Unit	ASSUMPTIONS
II. ALLOW, OVERHEAD FRINGE BENEFITS		995.7	24.8	0.0			
A. Post Diff.		60.9	0.0	0.0	% sal	25.00%	Current Chad rate of 25%.
B. COLA		43.6	0.0	0.0	lump-sum	$12,450	Based on figures supplied by Mission controller.
C. Other All.							Based on figures provided by USAID/Chad Controller's Office.
Pre/Post Assign	2.00	7.0		0.0	family	3.0	
Housing	42.00	116.8		0.0	fam/mo	2.4	$1,200/mo. rent plus $1,200/mo. for utilities.
Education	3.50	93.3		0.0	fam/yr	23.0	Assumes two school age children @ post.
Storage	3.50	8.1		0.0	fam/yr	2.0	
HHE/UAB/Cons.	3.00	51.9		0.0	lump-sum		Based on figures provided by USAID/Chad Controller's Office.
HH Mtnce	3.50	40.6		0.0	fam/yr	10.0	Based on figures provided by USAID/Chad Controller's Office.
Misc.	3.50	8.1		0.0	fam/yr	2.0	
Temp.Hous							Budget assumes l-t expat. will in immediately upon arrival.
D. Exp. Fringe		117.4		0.0	% sal lt&st	30.00%	Fringe benefits * 30.0% of base salary.
E. Cont. O'Head		430.6		0.0	% sal lt&st	110.00%	Assumes contractor overhead rate of 110% of salaries only.
F. DBA		13.5		0.0	% sal lt&st	3.44%	Current DBA rate if 3.44%.
G. SOS	3.50	3.1		0.0	fam/yr	0.8	$190 per long term coverage.
	18.00	0.8		0.0	st pm	0.0	$40 per s-t ta pm
H. Chad Fringe			24.8	0.0	% sal	30.00%	Includes social security, 13th month, premiums for health, transport.

AGRIBUSINESS SUPPORT CENTER

Line Item	FY 91 Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 GOC LC	FY 92 Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 GOC LC	FY 93 Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 GOC LC	FY 94 Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 GOC LC	FY 95 Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 GOC LC
III.TRAVEL/PER DIEM		13.2	0.6	0.0		92.5	5.3	0.0		115.8	5.6	0.0		96.6	5.8	0.0		13.6	0.8	0.0
A. Internat'l Travel																				
1. Exp.L-T	4.00	7.6		0.0	4.00	15.9		0.0	8.00	33.3		0.0	4.00	17.5		0.0	4.00	9.2	0.0	0.0
Assign/Return	4.00	7.6																		
HLRTP									4.00	16.7							4.00	9.2		
R&Rs					4.00	15.9			4.00	16.7			4.00	17.5						
Other Prof.																				
2. Exp.S-T	0.00	0.0			4.00	15.9			4.00	16.7			4.00	17.5			0.00	0.0		
B. In-Country																				
Via air	2.00		0.6		16.00		5.3		16.00		5.6		16.00		5.8		2.00		0.8	
C. Per Diems																				
International	8.00	1.7			16.00	3.5			16.00	3.7			16.00	3.9			8.00	1.6		
Chad-TDYs	0.00	0.0			90.00	18.0			90.00	18.0			90.00	18.0			0.00	0.0		
Chad-internal	28.00	2.9			348.00	34.8			348.00	34.8			348.00	34.8			28.00	2.8		
Chad - other	0.00		0.0		0.00		0.0		0.00		0.0		0.00		0.0		0.00		0.0	
D. Misc. Trvl	2.00	1.1	0.0	0.0	8.00	4.4	0.0	0.0	16.00	9.3	0.0	0.0	8.00	4.9	0.0	0.0		0.0		0.0

AGRIBUSINESS SUPPORT CENTER

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	Unit	Cost/ Unit	ASSUMPTIONS
III.TRAVEL/PER DIEM		331.6	18.1	0.0			
A. Internat'l Travel							
1. Exp.L-T	24.00	83.5	0.0	0.0			
Assign/Return	8.00	16.7			trip	1.8	
HLRTP	4.00	16.7			r-trip	3.6	All airfares approximate current Washington-N;Djamena rates.
R&Rs	12.00	50.0			r-trip	3.6	
Other Prof.	0.00	0.0			r-trip	1.5	None budgeted.
2. Exp.S-T	12.00	50.0	0.0	0.0	r-trip	3.6	One trip per expat. local s-t assignment; 1 per qtr. l-t staff.
B. In-Country							Assumes one (1) trip/qrtr. spec. and counterpart, plus one (1) trip per expatriate and local consultant.
Via air	52.00		18.1	0.0	r-trip	0.3	$300 NDJ-Moundou, Sarh or Abeche, round trip.
C. Per Diems							
International	64.00	14.4			$ day	200.0	Two (2) days per trip.
Chad-TDYs	270.00	54.0			$ day	200.0	Expat. consultants spend 1/2 time N'Djamena.
Chad-internal	1100.00	110.1			$ day	100.0	Expat. and local consultants spend half time in field; plus
Chad - other	0.00				$ day	20.0	ASC professional staff averages 7 days in field/month.
D. Misc. Trvl	34.00	19.6		0.0	int.trp	0.5	Budgetd @ $500 international trip.

SUPPORT CENTER

Line Item	FY 91 Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 GOC LC	FY 92 Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 GOC LC	FY 93 Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 GOC LC	FY 94 Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 GOC LC	FY 95 Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 GOC LC
IV. TRAINING		31.5	4.2	0.0		88.2	8.8	0.0		92.6	9.3	0.0		97.2	9.7	0.0		0.0	0.0	0.0
B. Study Tours	3.00	31.50			8.00	88.20			8.00	92.61			8.00	97.24			0.00	0.00		
U.S.	3.0	31.5			2.0	22.1			2.0	23.2			2.0	24.3				0.0		
3rd Country		0.0			6.00	66.2			6.00	69.5			6.00	72.9				0.0		
C. In-Country	1.00		4.2		2.00		8.8		2.00		9.3		2.00		9.7				0.0	
V. COMMODITIES		104.2	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
A. Office F&E																				
Vehicle	1.00	35.7																		
PC Computer	2.00	10.5																		
Laptop Comp.	2.0	7.4																		
Laser Printer	1.0	1.6																		
Dot Mat Printer	1.00	0.5																		
Typewriters	1.0	1.3																		
B. Res. F&E	1.00	26.3																		
Generator	1.0	21.0																		
C. Prog. Support																				
VI. OTHER COSTS		13.7	0.0	0.0		29.8	0.0	0.0		31.3	0.0	0.0		32.8	0.0	0.0		11.5	0.0	0.0
Veh. O&M	0.25	3.2			1.00	13.2			1.00	13.9		0.0	1.00	14.6		0.0	0.25	3.8		0.0
Software		5.3				1.1				1.2		0.0		1.2		0.0		1.3		0.0
Expendabale Equip.		2.1				2.2				2.3		0.0		2.4		0.0		2.6		0.0
Misc. Supplies		3.2				13.2				13.9		0.0		14.6		0.0		3.8		0.0
TOTAL		251.7	11.8	0.0		588.5	69.1	0.0		644.3	72.6	0.0		642.1	76.2	0.0		125.1	9.2	0.0

AGRIBUSINESS SUPPORT CENTER

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	Unit	Cost/ Unit	ASSUMPTIONS
IV. TRAINING	0.00	309.6	32.0	0.0			
B. Study Tours		309.6					
U.S.		101.0			pm	10.0	
3rd Country		208.5			pm	10.0	
C. In-Country			32.0		ea session	4.0	
V. COMMODITIES		104.2	0.0	0.0			
A. Office F&E							
Vehicle	1.00	35.7			vehicle	34.0	ASC will require one 4-wheel drive vehicle.
PC Computer	2.00	10.5			computer	5.0	
Laptop Comp.	2.00	7.4			computer	3.5	ASC will oufit expat. s-t ta.
Laser Printer	1.00	1.6			printer	1.5	
Dot Mat Printer	1.00	0.5			printer	0.5	
Typewriters	1.00	1.3			typwrtr	1.2	
B. Res. F&E	1.00	26.3			hsld.	25.0	Figures governed by USAID policy.
Generator	1.00	21.0				20.0	
C. Prog. Support							
VI. OTHER COSTS		119.0	0.0	0.0			
Veh. O&M		48.7		0.0	veh/yr	12.0	$1,000 per month to operate vehicle.
Software	0.00	10.0		0.0	lump-sum		
Expendabale Equip.	0.00	11.6		0.0	lump-sum		Books, periodicals and other publications.
Misc. Supplies	0.00	48.7		0.0	lump-sum		Miscellaneous office supplies
TOTAL		2251.5	239.0	0.0	2490.5		

MARKETING AND POLICY STUDIES

MARKETING AND POLICY STUDIES

Line Item	FY 91 Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 GOC LC	FY 92 Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 GOC LC	FY 93 Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 GOC LC	FY 94 Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 GOC LC	FY 95 Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 GOC LC
I. SALARIES		49.5	18.5	6.3		337.1	157.7	13.2		226.5	86.6	27.8		160.2	42.8	29.2		51.1	16.8	2.6
A. Expatriate L-T	0.25	19.7	0.0	0.0	1.00	82.7		0.0	1.00	86.8		0.0	1.00	91.2		0.0	0.25	23.9	0.0	0.0
Policy Analyst	0.25	19.7		0.0	1.00	82.7		0.0	1.00	86.8		0.0	1.00	91.2		0.0	0.25	23.9	0.0	0.0
B. Expatriate S-T	4.00	29.8	0.0	0.0	32.50	254.4		0.0	17.00	139.7		0.0	8.00	69.0		0.0	3.00	27.2	0.0	0.0
Bus.Reg.Proc.	1.00	7.5																		
Patent Anal					2.00	15.7														
Tariffs									1.00	8.2										
Veg. RA									4.00	32.9			4.00	34.5						
Other RAs TBD					7.50	58.7														
Transport					4.00	31.3			1.00	8.2										
Finan Serv					4.00	31.3			2.00	16.4										
Women									6.00	49.3			1.00	8.6						
Mil/Sorghum					12.00	93.9														
Other	3.00	22.4			3.00	23.5			3.00	24.7			3.00	25.9			3.00	27.2		
C. Chadian L-T																				
D. Chadian S-T	15.0	0.0	18.5	6.3	103.5		157.7	13.2	63.0		86.6	27.8	36.0		42.8	29.2	10.0		16.8	2.6
Professional	4.00		16.8		32.50		143.3		17.00		78.7		8.00		38.9		3.00		15.3	
Professional	3.00			6 3	6.00			13.2	12.00			27.8	12.00			29.2	1.00			2.6
Enumerator	8.00		1.7		65.00		14.3	0.0	34.00		7.9	0.0	16.00		3.9	0.0	6.00		1.5	0.0

MARKETING AND POLICY STUDIES

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	Unit	Cost/ Unit	ASSUMPTIONS
I. SALARIES		824.5	322.4	79.0			
A. Expatriate L-T	3.50	304.3		0.0			
Policy Analyst	3.50	304.3		0.0	py	75.0	Chief of Party, experienced policy analyst.
B. Expatriate S-T	64.50	520.2		0.0			
Bus.Reg.Proc.	1.00	7.5			pm	7.1	Rate same as MIS, ASC calculations
Patent Anal	2.00	15.7			pm	7.1	
Tariffs	1.00	8.2			pm	7.1	
Veg. RA	8.00	67.4			pm	7.1	
Other RAs TBD	7.50	58.7			pm	7.1	
Transport	5.00	39.5			pm	7.1	
Finan Serv	6.00	47.7			pm	7.1	
Women	7.00	57.9			pm	7.1	
Mil/Sorghum	12.00	93.9			pm	7.1	
Other	15.00	123.6			pm	7.1	
C. Chadian L-T	0.00	0.0	0.0	0.0			
D. Chadian S-T	227.50		322.4	79.0			
Professional	64.50		254.2	0.0	pm	4.0	$4,000 per PM for senior consultants is USAID/Chad Controller's Office estimate.
Professional				79.0		2.0	$2,000 is PP Team's estimate of what GOC will pay for consultants.
Enumerator	129.00		25.4	0.0	pm	0.2	$200/mo. for enumerators.

MARKETING AND POLICY STUDIES

Line Item	FY 91 Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 GOC LC	FY 92 Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 GOC LC	FY 93 Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 GOC LC	FY 94 Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 GOC LC	FY 95 Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 GOC LC
II. ALLOW, OVERHEAD FRINGE BENEFITS		122.9	5.5	1.9		591.5	47.3	4.0		445.3	26.0	8.3		346.3	12.8	8.8		128.1	5.1	0.0
A. Post Diff.		4.9	0.0	0.0		20.7	0.0	0.0		21.7	0.0	0.0		22.8	0.0	0.0		6.0	0.0	
B. COLA		3.1	0.0	0.0		12.5	0.0	0.0		12.5	0.0	0.0		12.5	0.0	0.0		3.1	0.0	
C. Other All.																				
Pre/Post Assign	1.00	3.2															1.00	3.8		
Housing	3.00	7.6			12.00	31.8			12.00	33.3			12.00	35.0			3.00	9.2		
Education	0.25	6.0			1.00	25.4			1.00	26.6			1.00	28.0			0.25	7.3		
Storage	0.25	0.5			1.00	2.2			1.00	2.3			1.00	2.4			0.25	0.6		
HHE/UAB/Cons.	1.00	23.1							1.00	8.3							1.00	20.4		
HH Mtnce	0.25	2.6			1.00	11.0			1.00	11.6			1.00	12.2			0.25	3.2		
Misc.	0.25	0.5			1.00	2.2			1.00	2.3			1.00	2.4			0.25	0.6		
Temp.Hous		0.0				0.0				0.0				0.0				0.0		
D. Exp. Fringe		14.9		0.0		101.1		0.0		68.0		0.0		48.1		0.0		15.3		
E. Cont. O'Head		54.5		0.0		370.8		0.0		249.2		0.0		176.2		0.0		56.2		
F. DBA		1.7		0.0		11.6		0.0		7.8		0.0		5.5		0.0		1.8	0.0	
G. SOS	0.25	0.2		0.0	1.00	0.8		0.0	1.00	0.9		0.0	1.00	0.9		0.0	0.25	0.2		
	4.00	0.2		0.0	32.50	1.4		0.0	17.00	0.8		0.0	8.00	0.4		0.0	3.00	0.2		
H. Chad Fringe			5.5	1.9			47.3	4.0			26.0	8.3			12.8	8.8			5.1	

MARKETING AND POLICY STUDIES

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	ASSUMPTIONS Unit	Cost/ Unit	
II. ALLOW, OVERHEAD FRINGE BENEFITS		1634.1	96.7	22.9			
A. Post Diff.		76.1	0.0	0.0	% sal	25.00%	
B. COLA		43.6	0.0	0.0	lump-sum	$12,450	Based on figures provided by USAID/Chad Controller's Office.
C. Other All.							
Pre/Post Assign	2.00	7.0		0.0	family	3.0	
Housing	42.00	116.8		0.0	fam/mo	2.4	$1,200/mo. rent plus $1,200/mo. for utilities.
Education	3.50	93.3		0.0	fam/yr	23.0	Two children @ $11,500 per year.
Storage	3.50	8.1		0.0	fam/yr	2.0	
HHE/UAB/Cons.	3.00	51.9		0.0	lump-sum		Based on figures provided by USAID/Chad Controller's Office.
HH Mtnce	3.50	40.6		0.0	fam/yr	10.0	
Misc.	3.50	8.1		0.0	fam/yr	2.0	
Temp.Hous							
D. Exp. Fringe		247.3		0.0	% sal	30.00%	
					lt&st		
E. Cont. O'Head		906.9		0.0	% sal	110.00%	
					lt&st		
F. DBA		28.4		0.0	% sal	3.44%	
					lt&st		
G. SOS	3.50	3.1		0.0	fam/yr	0.8	Same as MIS, ASC components.
	64.50	2.9		0.0	st pm	0.0	
H. Chad Fringe			96.7	22.9	% sal	30.00%	

MARKETING AND POLICY STUDIES

Line Item	FY 91 Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 GOC LC	FY 92 Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 GOC LC	FY 93 Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 GOC LC	FY 94 Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 GOC LC	FY 95 Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 GOC LC
III.TRAVEL/PER DIEM		52.3	19.5	0.0		253.5	72.0	0.0		194.6	46.1	0.0		101.6	30.4	0.0		41.7	7.1	0.0
A. Internat'l Trave		22.7	0.0	0.0		65.2	0.0	0.0		85.1	0.0	0.0		45.6	0.0	0.0		20.0	0.0	0.0
1. Exp.L-T	4.00	7.6			5.00	17.5			9.00	35.1			5.00	19.3			4.00	9.2		
Assign/Return	4.00	7.6															4.00	9.2		
HLRTP									4.00	16.7										
R&Rs					4.00	15.9			4.00	16.7			4.00	17.5						
Other Prof.					1.00	1.7			1.00	1.7			1.00	1.8						
2. Exp.S-T	4.00	15.1	0.0	0.0	12.00	47.6	0.0	0.0	12.00	50.0	0.0	0.0	6.00	26.3	0.0	0.0	3.00	10.8	0.0	0.0
Bus.Reg.Proc.	1.00	3.8																		
Patent Anal					1.00	4.0														
Tariffs									1.00	4.2										
Veg. RA									2.00	8.3			2.00	8.8						
Other RAs TBD					3.00	11.9														
Transport					2.00	7.9			1.00	4.2										
Finan Serv					2.00	7.9			2.00	8.3										
Women									3.00	12.5			1.00	4.4						
Mil/Sorghum					1.00	4.0														
Other	3.00	11.3			3.00	11.9			3.00	12.5			3.00	13.1			3.00	10.8		
B. In-Country																				
Via air	32.00		10.1		30.00		9.9		24.00		8.3		24.00		8.8		3.00		1.1	
C. Per Diems		26.5	9.5	0.0		181.2	62.1	0.0		99.7	37.8	0.0		51.8	21.6	0.0		18.5	6.0	0.0
International	16.00	3.4			12.00	2.4			31.00	6.2			39.00	7.8			10.00	2.0		
Chad-TDYs	100.00	21.0			812.50	162.5			425.00	85.0			200.00	40.0			75.00	15.0		
Chad-internal	20.00	2.1			162.50	16.3			85.00	8.5			40.00	4.0			15.00	1.5		
Chad - other	450.00		9.5		3105.00		62.1		1890.00		37.8		1080.00		21.6		300.00		6.0	
D. Misc. Trvl	6.00	3.2	0.0	0.0	13.00	7.2	0.0	0.0	17.00	9.8	0.0	0.0	7.00	4.3	0.0	0.0	5.00	3.2		

MARKETING AND POLICY STUDIES

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	Unit	Cost/ Unit	ASSUMPTIONS
III.TRAVEL/PER DIEM		643.7	175.2	0.0			
A. Internat'l Trave		238.5	0.0	0.0			
1. Exp.L-T	27.00	88.7	0.0	0.0			
Assign/Return	8.00	16.7			trip	1.8	
HLRTP	4.00	16.7			r-trip	3.6	
R&Rs	12.00	50.0			r-trip	3.6	Two R&R post.
Other Prof.	3.00	5.2			r-trip	1.5	
2. Exp.S-T	37.00	149.8	0.0	0.0			
Bus.Reg.Proc.	1.00	3.8			r-trip	3.6	Airfares @ current WAS-NDJ round-trip fares.
Patent Anal	1.00	4.0			r-trip	3.6	
Tariffs	1.00	4.2			r-trip	3.6	
Veg. RA	4.00	17.1			r-trip	3.6	
Other RAs TBD	3.00	11.9			r-trip	3.6	
Transport	3.00	12.1			r-trip	3.6	
Finan Serv	4.00	16.3			r-trip	3.6	
Women	4.00	16.9			r-trip	3.6	
Mil/Sorghum	1.00	4.0			r-trip	3.6	
Other	15.00	59.7			r-trip	3.6	
B. In-Country							
Via air	113.00	0.0	38.2	0.0	r-trip	0.3	$300 NDJ-Moundou, Sarh or Abeche, round trip.
C. Per Diems		377.6	137.0	0.0			
International	108.00	21.8			$ day	200.0	2 days per international trip, plus seven days for other prof. travel.
Chad-TDYs	1612.50	323.5			$ day	200.0	25 days per s-t ta pm in NDJ
Chad-internal	322.50	32.4			$ day	100.0	5 days per s-t ta pm outside NDJ
Chad - other	6825.00		137.0		$ day	20.0	Per diem for GOC employees
D. Misc. Trvl	48.00	27.6		0.0	int.trp	0.5	

MARKETING AND POLICY STUDIES

Line Item	FY 91 Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 GOC LC	FY 92 Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 GOC LC	FY 93 Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 GOC LC	FY 94 Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 GOC LC	FY 95 Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 GOC LC
IV. TRAINING		0.0	10.5	0.0		66.2	26.5	0.0		69.5	27.8	0.0		72.9	29.2	0.0		0.0	2.6	0.0
B. Study Tours																				
US					3.00	33.1			3.00	34.7			3.00	36.5						
3rd Country					3.00	33.1			3.00	34.7			3.00	36.5						
C. In-Country																				
Methods Workshops	1.00		4.2		4.00		17.6		4.00		18.5		4.00		19.4					
Topic Roundtables	3.00		6.3		4.00		8.8		4.00		9.3		4.00		9.7		1.00		2.6	
V. COMMODITIES		118.7	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
A. Office F&E																				
Vehicle	1.00	35.7																		
PC Computer	2.00	10.5																		
Laptop Comp.	6.00	18.9																		
Dot Mat Printer	2.00	1.1																		
Graphics Printer	1.00	5.3																		
B. Res. F&E	1.00	26.3																		
Generator	1.00	21.0																		
VI. OTHER COSTS		13.7	0.0	0.0		19.8	0.0	0.0		20.8	0.0	0.0		21.9	0.0	0.0		11.5	0.0	0.0
Veh. O&M	0.25	3.2			1.00	13.2			1.00	13.9		0.0	1.00	14.6		0.0	0.25	3.8		0.0
Software		5.3				1.1				1.2		0.0		1.2		0.0		1.3		0.0
Expendabale Equip.		2.1				2.2				2.3		0.0		2.4		0.0		2.6		0.0
Misc. Supplies		3.2				3.3				3.5		0.0		3.6		0.0		3.8		0.0
T O T A L		357.0	54.1	8.2		1268.0	303.4	17.2		956.8	186.5	36.1		703.0	115.1	37.9		232.3	31.6	2.6

MARKETING AND POLICY STUDIES

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	ASSUMPTIONS Unit	Cost/ Unit
IV. TRAINING	0.00	208.5	96.5	0.0		
B. Study Tours						
US	9.00	104.3			pm	10.0
3rd Country	9.00	104.3			pm	10.0
C. In-Country						
Methods Workshops	13.00		59.8			4.0
Topic Roundtables	16.00		36.7			2.0
V. COMMODITIES		118.7	0.0	0.0		
A. Office F&E						
Vehicle	1.00	35.7			veh	34.0
PC Computer	2.00	10.5			com	5.0
Laptop Comp.	6.00	18.9			com	3.0
Dot Mat Printer	2.00	1.1			prn	0.5
Graphics Printer	1.00	5.3			prn	5.0
B. Res. F&E	1.00	26.3			hsld.	25.0
Generator	1.00	21.0				
VI. OTHER COSTS		87.7	0.0	0.0		
Veh. O&M		48.7		0.0	veh/yr	12.0
Software	0.00	10.0		0.0	lump-sum	
Expendabale Equip.	0.00	11.6		0.0	lump-sum	
Misc. Supplies	0.00	17.4		0.0	lump-sum	
TOTAL		3517.1	690.7	102.0		

PROJECT SUPPORT, AUDIT AND EVALUATION

AUDIT, EVALUATION AND PROJECT SUPPORT

Line Item	FY 91 Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 GOC LC	FY 92 Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 GOC LC	FY 93 Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 GOC LC	FY 94 Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 GOC LC	FY 95 Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 GOC LC
I. SALARIES		3.9	18.0	0.0		8.3	75.7	0.0		41.6	88.5	0.0		43.6	92.9	0.0		4.8	21.9	0.0
A. U.S. Home Office	1.0	3.9	0.0	0.0	2.00	8.3		0.0	2.00	8.7		0.0	2.00	9.1		0.0	1.00	4.8	0.0	0.0
Proj. Backstop	1.00	3.9			2.00	8.3		0.0	2.00	8.7		0.0	2.00	9.1		0.0	1.00	4.8	0.0	0.0
B. Expatriate S-T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	32.9	0.0	0.0	4.0	34.5	0.0	0.0	0.0	0.0	0.0	0.0
Audit									2.00	16.4			2.00	17.3						
Evaluation									2.00	16.4			2.00	17.3						
C. Chadian L-T	3.75	0.00	18.02	0.00	15.00	0.00	75.68	0.00	15.00	0.00	79.46	0.00	15.00	0.00	83.43	0.00	3.75	0.00	21.90	0.00
AMTT Office																				
Administrator	0.25		2.5		1.0		10.6		1.0		11.1		1.0		11.7		0.25		3.1	
Accountant	0.25		2.5		1.0		10.6		1.0		11.1		1.0		11.7		0.25		3.1	
Bookkeeper	0.25		1.6		1.0		6.6		1.0		6.9		1.0		7.3		0.25		1.9	
Admin. Asst.	0.25		1.9		1.0		7.9		1.0		8.3		1.0		8.8		0.25		2.3	
Doc. Data Anal.	0.25		1.6		1.0		6.6		1.0		6.9		1.0		7.3		0.25		1.9	
Sec'y/Recept.	0.25		1.3		1.0		5.3		1.0		5.6		1.0		5.8		0.25		1.5	
Drivers	1.00		3.8		4.0		15.9		4.0		16.7		4.0		17.5		1.00		4.6	
Guards	0.75		1.9		3.0		7.9		3.0		8.3		3.0		8.8		0.75		2.3	
Messanger/Janitor	0.50		1.0		2.0		4.2		2.0		4.4		2.0		4.7		0.50		1.2	
D. Chadian S-T									2.0	0.0	9.0	0.0	2.0	0.0	9.5	0.0				
Evaluation									2.0		9.0		2.0		9.5					

AUDIT, EVALUATION AND PROJECT SUPPORT

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	Unit	Cost/ Unit	ASSUMPTIONS
I. SALARIES		102.2	297.0	0.0			
A. U.S. Home Office	8.00	34.8		0.0			
Proj. Backstop	8.00	34.8		0.0	pm	3.75	Base salary of: $45,000 1/3 time first, last qrtr; 2 mo./yr. otherwise.
B. Expatriate S-T	8.00	67.4	0.0	0.0			Evaluation and audit scheduled for Q2 FY93 and Q4 FY94.
Audit	4.00	33.7			pm	7.1	One auditor for 2 PM, one trip, each $273.33
Evaluation	4.00	33.7			pm	7.1	Two evaluators, 1 PM each, each evaluation.
C. Chadian L-T	52.50	0.00	278.5	0.00			
AMIT Office							Assumes one person per position, unless noted otherwise.
Administrator	3.50		38.9		py	9.6	Assumes local salary of 200,000 FCFA/mo.
Accountant	3.50		38.9		py	9.6	Assumes local salary of 200,000 FCFA/mo.
Bookkeeper	3.50		24.3		py	6.0	Assumes local salary of 125,000 FCFA/mo.
Admin. Asst.	3.50		29.2		py	7.2	Assumes local salary of 150,000 FCFA/mo.
Doc. Data Anal.	3.50		24.3		py	6.0	Assumes local salary of 125,000 FCFA/mo.
Sec'y/Recept.	3.50		19.5		py	4.8	Assumes local salary of 100,000 FCFA/mo.
Drivers	14.00		58.4		py	3.6	Assumes local salary of 75,000 FCFA/mo. Four (4) drivers
Guards	10.50		29.2		py	2.4	Assumes local salary of 50,000 FCFA/mo. Three (3) guards
Messanger/Janitor	7.00		15.6		py	1.9	Assumes local salary of 40,000 FCFA/mo. Two (2) messanger/janitors.
D. Chadian S-T							Two local counterparts for evaluation team.
Evaluation	4.00	0.00	18.51	0.00	pm	3.9	Local consultants $150 per day, i.e. $3,900 per 26 day pm

AUDIT, EVALUATION AND PROJECT SUPPORT

Line Item	FY 91 Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 GOC LC	FY 92 Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 GOC LC	FY 93 Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 GOC LC	FY 94 Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 GOC LC	FY 95 Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 GOC LC
II. ALLOW, OVERHEAD FRINGE BENEFITS		5.5	5.4	0.0		11.6	22.7	0.0		59.5	26.5	0.0		62.5	27.9	0.0		6.7	6.6	0.0
A. Post Diff.																				
B. COLA																				
C. Other All.																				
Pre/Post Assign																				
Housing																				
Education																				
Storage																				
HHE/UAB/Cons.																				
HH Mtnce																				
Misc.																				
Temp.Hous																				
D. Exp. Fringe		1.2				2.5				12.5				13.1				1.4		
E. Cont. O'Head		4.3				9.1		0.0		45.7		0.0		48.0		0.0		5.3		0.0
F. DBA		0.0				0.0		0.0		1.1		0.0		1.2		0.0		0.0	0.0	0.0
G. SOS	0.00	0.0			0.00	0.0		0.0	4.00	0.2		0.0	4.00	0.2		0.0	0.00	0.0	0.0	0.0
H. Chad Fringe			5.4				22.7	0.0			26.5	0.0			27.9	0.0			6.6	0.0

AUDIT, EVALUATION AND PROJECT SUPPORT

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	Unit	Cost/ Unit	ASSUMPTIONS
II. ALLOW, OVERHEAD FRINGE BENEFITS		145.8	89.1	0.0			
A. Post Diff.		0.0	0.0	0.0	% sal	25.00%	
B. COLA		0.0	0.0	0.0	lump-sum	$12,500	
C. Other All.							
Pre/Post Assign	0.00	0.0		0.0	family	3.0	
Housing	0.00	0.0		0.0	fam/mo	2.4	
Education	0.00	0.0		0.0	fam/yr	23.0	
Storage	0.00	0.0		0.0	fam/yr	2.0	
HHE/UAB/Cons.	0.00	0.0		0.0	lump-sum		
HH Mtnce	0.00	0.0		0.0	fam/yr	10.0	
Misc.	0.00	0.0		0.0	fam/yr	2.0	
Temp.Hous							
D. Exp. Fringe		30.7		0.0	% sal lt&st	30.00%	Fringe benefits = 30.0% of base salary.
E. Cont. O'Head		112.4		0.0	% sal lt&st	110.00%	Assumes contractor overhead rate of 110% of salaries only.
F. DBA		2.3		0.0	% sal lt&st	0.0	Current DBA rate if 3.44%.
G. SOS	0.00	0.0	0.0	0.0	fam/yr	0.8	
	8.00	0.4		0.0	st pm	0.0	$40 per s-t ta pm
H. Chad Fringe			89.1	0.0	% sal	30.00%	Includes social security, 13th month, premiums for health, transport.

AUDIT, EVALUATION AND PROJECT SUPPORT

Line Item	FY 91 Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 GOC LC	FY 92 Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 GOC LC	FY 93 Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 GOC LC	FY 94 Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 GOC LC	FY 95 Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 GOC LC
III.TRAVEL/PER DIEM		0.0	0.0	0.0		0.0	0.0	0.0		43.4	0.0	0.0		45.6	0.0	0.0		0.0	0.0	0.0
A. Internat'l Travel																				
1. Exp.L-T	0.0	0.0		0.0	0.00	0.0		0.0	0.00	0.0		0.0	0.00	0.0		0.0	0.00	0.0	0.0	0.0
Assign/Return																				
HLRTP																				
R&Rs																				
Other Prof.																				
2. Exp.S-T	0.00	0.0			0.00	0.0			3.00	12.5			3.00	13.1			0.00	0.0		
B. In-Country																				
Via air	0.00		0.0		0.00		0.0		0.00		0.0		0.00		0.0		0.00		0.0	
C. Per Diems																				
International									6.00	1.4			6.00	1.5						
Chad-TDYs									120.00	27.8			120.00	29.2						
Chad-internal																				
Chad - other																				
D. Misc. Trvl	0.00	0.0	0.0	0.0	0.00	0.0	0.0	0.0	3.00	1.7	0.0	0.0	3.00	1.8	0.0	0.0	0.00	0.0		0.0

AUDIT, EVALUATION AND PROJECT SUPPORT

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	Unit	Cost/ Unit	ASSUMPTIONS
III.TRAVEL/PER DIEM		89.0	0.0	0.0			
A. Internat'l Travel							
1. Exp.L-T	0.00	0.0	0.0	0.0			
Assign/Return	0.00	0.0			trip	1.8	
HLRTP	0.00	0.0			r-trip	3.6	
R&Rs	0.00	0.0			r-trip	3.6	
Other Prof.	0.00	0.0			r-trip	1.5	
2. Exp.S-T	6.00	25.6	0.0	0.0	r-trip	3.6	One trip per audit, two per evaluation.
B. In-Country							
Via air	0.00	0.00	0.0	0.0	r-trip	0.3	
C. Per Diems							
International	12.00	2.8			$ day	200.0	Two (2) days per trip.
Chad-TDYs	240.00	57.0			$ day	200.0	Assumes evaluators, auditors spend entire time in NDJ.
Chad-internal					$ day	100.0	
Chad - other	0.00				$ day	20.0	
D. Misc. Trvl	6.00	3.6			int.trp	0.5	Budgeted @ $500 international trip.

AUDIT, EVALUATION AND PROJECT SUPPORT	FY 91				FY 92				FY 93				FY 94				FY 95			
		USAID		GOC		USAID		GOC		USAID		GOC		USAID		GOC		USAID		GOC
Line Item	Units	FX	LC	LC	Units	FX	LC	LC	Units	FX	LC	LC	Units	FX	LC	LC	Units	FX	LC	LC
IV. TRAINING		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
B. Study Tours																				
U.S.																				
3rd Country																				
C. In-Country																				
V. COMMODITIES		168.6	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
A. Office F&E																				
Vehicle	1.00	35.7																		
Motorcycles	2.00	1.9																		
Basic Furn.	10.00	26.3																		
Generator	1.0	21.0																		
PC Computers	4.0	21.0																		
Lap Tops	0.00	0.0																		
Laser Printer	1.0	1.6																		
Dot. Mat. Printer	1.00	0.5																		
UPS	1.0	27.3																		
Typewriters	1.0	1.3																		
Photocopiers	1.0	5.3																		
Tel. Switchbrd.	1.0	5.3																		
Fax		0.0																		
A/C	10.0	21.0																		
Fans	4.0	0.6																		

AUDIT, EVALUATION AND PROJECT SUPPORT

Line Item	TOTALS Units	USAID FX	USAID LC	GOC LC	Unit	Cost/ Unit	ASSUMPTIONS
IV. TRAINING	0.00	0.0	0.0	0.0			
B. Study Tours							
U.S.							
3rd Country							
C. In-Country							
V. COMMODITIES		168.6	0.0	0.0			
A. Office F&E							
Vehicle	1.00	35.7			Vehicle	34.0	One (1) 4-wheel drive vehicle for general AMTT use.
Motorcycles	2.00	1.9			50 c.c.	0.9	Two mobylettes for office staff use.
Basic Furn.	10.00	26.3			office	2.5	AMTT Project Hdqtrs. will need 10 offices.
Generator	1.00	21.0			generator	20.0	Per K. Guild recommendation.
PC Computers	4.00	21.0			computer	5.0	Desktop with accessories for administrator, acctnt & bkkpr, doc., & sec'y/recpt
Lap Tops	0.00	0.0			computer	3.0	
Laser Printer	1.00	1.6			printer	1.5	
Dot. Mat. Printer		0.5			printer	0.5	
UPS		27.3			per unit	26.0	One unit costing $26,000 should meet needs of AMTT office.
Typewriters		1.3			typwrtr	1.2	
Photocopiers		5.3			copier	5.0	
Tel. Swtchbrd.		5.3			swtchbrd	5.0	POL and ASC will have separate lines, share receptionist.
Fax		0.0					Rent from O.N.P.T., included in Other Costs
A/C		21.0			split	2.0	One per office.
Fans		0.6			fan	0.2	

AUDIT, EVALUATION AND PROJECT SUPPORT

Line Item	FY 91 Units	FY 91 USAID FX	FY 91 USAID LC	FY 91 GOC LC	FY 92 Units	FY 92 USAID FX	FY 92 USAID LC	FY 92 GOC LC	FY 93 Units	FY 93 USAID FX	FY 93 USAID LC	FY 93 GOC LC	FY 94 Units	FY 94 USAID FX	FY 94 USAID LC	FY 94 GOC LC	FY 95 Units	FY 95 USAID FX	FY 95 USAID LC	FY 95 GOC LC
VI. OTHER COSTS		55.3	47.3	0.0		162.7	49.6	0.0		194.0	52.1	0.0		203.7	54.7	0.0		48.1	57.4	0.0
Rental	3.00	7.6			12.00	31.8			12.00	33.3		0.0	12.00	35.0		0.0	3.00	9.2		0.0
Utilities	3.00	7.6			12.00	31.8			12.00	33.3		0.0	12.00	35.0		0.0	3.00	9.2		0.0
O&M Vehicle	3.00	3.2			12.00	13.2			12.00	13.9		0.0	12.00	14.6		0.0	3.00	3.8		0.0
O&M Motorbike	3.00	2.1			12.00	2.2			12.00	2.3		0.0	12.00	2.4		0.0	3.00	2.6		0.0
Office Maint.	3.00	3.4			12.00	14.3			12.00	15.0		0.0	12.00	15.8		0.0	3.00	4.1		0.0
Off. Oper. Exp.	3.00	7.9			12.00	33.1			12.00	34.7		0.0	12.00	36.5		0.0	3.00	9.6		0.0
Software		5.3				1.1				1.2				1.2						
Expend. Supplies	3.0	7.9			12.0	33.1			12.0	34.7			12.0	36.5			3.0	9.6		
Guards Res.	3.0		47.3		3.0		49.6		3.0		52.1		3.0		54.7		3.0		57.4	
Misc. Equipment		10.5				2.2				2.3				2.4						
Audit, Eval. Other										23.2				24.3						
TOTAL		233.4	70.7	0.0		182.6	148.0	0.0		338.5	167.1	0.0		355.4	175.5	0.0		59.5	85.9	0.0

AUDIT, EVALUATION AND PROJECT SUPPORT

Line Item	Units	TOTALS USAID FX	TOTALS USAID LC	TOTALS GOC LC	Unit	Cost/ Unit	ASSUMPTIONS
VI. OTHER COSTS		663.8	261.2	0.0			
Rental		116.8		0.0	per mo.	2.4	Estimated @ FCFA 600,000 per month
Utilities	42.00	116.8		0.0	per mo.	2.4	Utilities budgeted at 100.00% of monthly rent
O&M Vehicle	42.00	48.7		0.0	per mo.	1.0	Operating costs estimated @ $1,000 per month
O&M Motorbike	42.00	11.6		0.0	per mo.	0.1	Operating costs estimated @ $100 per month
Office Maint.	42.00	52.7		0.0	per mo.	1.1	DMS contract estimated at $13,000 annually
Off. Oper. Exp.	42.00	121.7		0.0	per mo.	2.5	Office operating expenses: $2,500 a month for communications, etc.
Software		8.7		0.0	lump-sum		
Expend. Supplies	42.00	121.7		0.0	per month	2.5	Assumes $2,500 per month for paper, computer and photocopy supplies, etc.
Guards Res.	15.00		261.2	0.0	per yr.	15.0	
Misc. Equipment		17.5		0.0	lump-sum		
Audit, Eval. Other		47.5		0.0	lump-sum	10.0	Budget includes $10,000 in other costs for each audit, evaluation.
T O T A L		1169.4	647.3	0.0	1816.6		

ANNEX K

FINANCIAL & ECONOMIC ANALYSIS

ANNEX K
FINANCIAL & ECONOMIC ANALYSIS

1. INTRODUCTION

Agriculture has been the leading sector in Chad's post-civil war economy, accounting for about 40 percent of gross domestic product (GDP) and for most of Chad's export earnings. In 1988, it accounted for 42.8 percent of GDP, broken down as 28.3 percent for food crops, 11.9 percent for livestock, and 2.7 percent for cotton. Also in 1988, industrial and "semi-industrial" processing added value of FCFA 46 billion, or 16 percent of the country's GDP of FCFA 308.5 billion. Agribusiness firms played the dominant role in this production. The agriculture sector employs approximately 80 percent of Chad's economically active population, or about 1.8 million men and women.

Real GDP expanded at an estimated 5.3 percent annual rate between 1982 and 1988. It had declined 27 percent from FCFA 161.8 billion to FCFA 118.8 billion between 1977 and 1980. However, the economy recovered and GDP passed the previous high 1977 level in 1985 reaching FCFA 179.5 billion. High rainfall in 1988 contributed to an approximate 12 percent gain in real GDP. Agricultural production, which increased by an estimated 17 percent in 1988, is considered to have driven the expansion. Given Chad's 2.3 percent population growth rate, however, real per capita GDP has yet to reach its 1977, or pre-war, level.

Agricultural production increased 7 percent annually in real terms between 1983 and 1988, well above the 4.2 percent growth rate for trade and services, and the 1.3 percent rate for manufacturing and mining. Although cereals comprise the major share of total agricultural production, agriculture's contribution to GDP did not rise with increases in cereals production. No correlation is evident between cereals production in tons and agriculture's portion of the GDP. Simply put, in years of good rainfall and good production, prices become depressed and the economic contribution is unchanged.

Although channels of distribution and the extent of competition at the wholesale level for different commodities are not well understood, the volatility of prices demonstrates that Chad's markets for cereals and horticultural crops are competitive and that market participants respond to market signals. Data that exist demonstrate that the markets are, however, characterized by a high degree of risk. Seasonal price fluctuations, uneven rainfall distribution, poor road conditions, lack of transportation, and political instability contribute to the uncertainty. Neither the GOC nor A.I.D. can affect rainfall, and the GOC is devoting most of its own revenues to fostering

[illegible] to improvements in roads and transportation.

The AMTT project will work with the GOC to increase the efficiency of the agricultural marketing system by increasing the capacity of the private sector to engage in agricultural marketing activities and improve the public sector capacity to facilitate those activities. At the end of the four year Phase 1 project, the following conditions will have been achieved:

- **Market communication, as measured by increased market correlation coefficients, will have improved.** This will greatly decrease the risk to numerous private sector market participants, as supply stabilizes across time and space and marketing costs decrease.

- **Private sector investment in agribusiness will have increased in relative and absolute terms.** The increased investment will both respond to and drive stable, and potentially increased, production of key commodities as demand for raw produce increases.

- **The GOC will be using improved information to assess the impact of policy alternatives.** The information will enable the GOC and donors, including A.I.D., to analyze policy alternatives and assess benefits and consequence of the investment. Costly mistakes will thus be avoided.

The project will thus have a strong impact in the short-term on private sector market participants, and the possibility of longer-term impact on both the private agribusiness sector and the public sector. Section 2 below described the process through which the Mission selected the interventions that will lead to these achievements. Section 3 assesses the cost-effectiveness of achieving them.

2. CHOICE OF INTERVENTIONS

The main body of the AMTT Project Paper (PP) and the introduction to Annex H summarize Chad's "stage of market development", as measured against a draft typology recently suggested by AFR. The summaries differentiate among systems by commodity type. The GOC's historical domination of rice, sugar, and cotton sub-sectors is ending, and this could lead to dramatic change in the near term. The cereals sub-sector has only been superficially studied, and the horticultural sub-sector is virtually unstudied, except for small area-specific bases. The discussion that follows focusses primarily on the latter two sub-sectors, as they are most important to the project goal of promoting competitive food crop marketing, improving marketing efficiency, and increasing the role of agribusiness in the

marketing process. The summary demonstrates that AMTT project interventions have been selected carefully based on analysis of Chad's stage of market development, including assessment by general commodity type of market participants, infrastructure, and the policy and regulatory environment.

The draft AFR strategic framework for marketing recommends the general types of A.I.D. support that are appropriate at each stage of market development. The recommended activities for levels one, two, and three are summarized below, with reference to choices made in the design of the AMTT project.

The draft AFR Framework suggests that, based on the application of the framework for market development, some actions may be more appropriate for commodity marketing systems at certain times than others. That is, the following general activities should be considered for **Stage One** countries:

- **supporting a policy and regulatory environment that encourages marketing agents, including farmers, to respond to market signals which reflect the underlying supply and demand conditions for different commodities.** Analyses undertaken during PP development, as summarized in Annex H, conclude that **Chad's domestic prices for food crops are determined by supply and demand.** Recent GOC activities, including the elimination of the transport monopoly CTT and the decision to initiate a national MIS, demonstrate its commitment to continue to develop an encouraging marketing environment.

- **supporting a policy environment that fosters private entrepreneurship and investment rather than massive government intervention.** Over ninety-nine percent of food crop marketing is undertaken by private market participants. The remainder is undertaken by ONC. Policies firmly support private market participants; the concept of massive government intervention is simply not relevant in Chad.

- **supporting improvements to the transportation and communications infrastructure through the programming of local currencies.** Local currencies are limited in Chad to those generated by the P.L. 480 Title II Section 206 program, which will commence in FY 1991. The World Bank and other donors are currently financing the rehabilitation of 3,800 km of roads. This effort's targeted completion date is 1993. Under project 667-0050, USAID/Chad had obligated $ 27.2 million through FY 1989. It plans to obligate an additional $ 12.5 million in the near future to strengthen Chad's capabilities to maintain these roads as they are improved. As mentioned in numerous analyses for this project, and cited in most other reports on the country,

roads are considered the number one constraint to development in Chad and thus should be accorded this priority.

Communications within Chad are carried out by a combination of telephone, telex, numerous SSB radio networks, and national and regional Radio Chad broadcasts. While not terribly efficient, the communications infrastructure is considered adequate for medium-term development scenarios. Enhancing use of this communications network to enable more market participants to respond to market signals is discussed under Stage Two below.

- **Supporting improvements in farm productivity and reducing post-harvest losses so as to increase marketed surplus.** Estimates of the amount of cereals production marketed range from 10 - 50 percent, with the general working assumption being 20 percent in the Sahelian zone and 50 percent in the Sudanian zone, in years of adequate rainfall. However, these estimates are just that, and based on numerous rapid appraisals over the last fifteen years. The AMTT project will support a long-term, in-depth commodity sub-sector study of millet and sorghum, the primary cereals in Chad, to gain a better insight into degree of surplus and surplus marketed. The study will also quantify the degree and types of post-harvest loss for these commodities and recommend possible interventions to alleviate those that are significant. In the interim, USAID/Chad will continue its work with rodent control, and will continue to be prepared to assist with locust control.

Horticultural production is almost entirely for market. Most products are sent to market fresh, although there is some traditional drying of tomatoes and okra occurring at the artisanal level. Estimates of post-harvest losses in horticulture average 50 percent. Constraints include the absence of suitable means of produce handling, absence of facilities to preserve produce, seasonal gluts and shortages due to a variety of agronomic and technological factors, and possible limited domestic demand. The AMTT project will support an initial Rapid Appraisal (RA) of three horticultural commodities--tomatoes, onions, and garlic--which are generally considered to have the highest domestic demand. Onions, in particular a special Chadian variety produced near Abeche, may have significant export potential as well. The project provides for follow-up on the findings of the RA, either through activities of the ASC for private entrepreneurs in production and processing, or through additional studies or policy/regulatory reform dialogue under the Market and Policy Analysis component.

Field production activities in both cereals and horticultural crops will continue under the PVO Development Initiatives Project (667-0051) in selected areas of the country, although emphasis on marketing, as opposed to production alone, will increase.

The draft AFR Framework suggests that the following general activities should be considered for **Stage Two** countries:

- **encouraging governments to open markets to <u>competition</u>.** As stated above, Chad's markets for cereals and horticultural crops are already open to competition. Data that exist demonstrate that the markets are, however, characterized by a high degree of risk. Uneven rainfall distribution, poor road conditions, lack of transportation, and political instability contribute to the uncertainty and exacerbate seasonal price fluctuations. Neither the GOC nor A.I.D. can affect rainfall, and the GOC is devoting most of its own revenues to fostering political stability. A.I.D. and numerous other donors are contributing to improvements in roads and transportation.

  The AMTT project will work with the GOC to increase competition through reducing the risk due to price fluctuations. The GOC has already committed resources to a national market information system (MIS), which the project will strengthen. A demand-driven, functioning MIS will increase price and distributive efficiencies and competition, by providing market participants better access to price information, and thus reducing seasonal price fluctuations and stabilizing supply of products across time and space.

- **strengthening the <u>policy, regulatory and legal environment</u> which will encourage private enterprise.** Annex H summaries the policy and regulatory environment and demonstrates that although it is generally liberalized, certain actions relating to tariff policy and business regulations could be revised to encourage private investment. The AMTT project includes a number of conditions and covenants, along with TA to help the GOC analyze the impact of the revisions, to ensure that these take place in a timely but rational manner.

  Annex H also identifies a number of market participants--the transport industry, private financial services and capital markets, women's participation--that may be inhibited by the GOC policy or regulatory environment, but about which not enough is known to proceed. The AMTT project provides funds to further study these topics and to identify appropriate

reforms or incentive structures that need to be implemented to further encourage investment.

- **maintenance and rehabilitation of infrastructure gradually taking precedence over expansion of capacity.** As stated above, A.I.D. intends to contribute a total of $ 39.7 million to strengthen road maintenance in Chad. Under the MIS component of the AMTT project, the Ministry of Agriculture's SSB radio network will be improved and maintained to foster communication. "Soft" communications, in terms of transfer of information, will be improved in the MIS in a manner that can be sustained over time.

- **improving rural road networks, especially, both to draw more farmers into producing for the market and to ensure that surplus production is encouraged by the delivery of consumer goods (incentives) to farming households.** Chad had less than 50 km of all-weather road at the end of hostilities in 1982. The multi-donor effort to rehabilitate the road system is correctly focussing on national links. Feeder roads will only become appropriate when the national links are rehabilitated and when the GOC demonstrates it can maintain the road system itself.

- **assisting private firms to adopt new technologies, and organizational and managerial methods which can increase the efficiency of their activities.** Private investment in agribusiness is limited in Chad, due to lack of technical, managerial, and organizational skills, and due to the high-risk environment in which entrepreneurs must operate. AMTT support to the national MIS will reduce risk through improving market communication, and thus stabilize supply over time and space. The project will also support a pilot effort to provide technical, managerial, and organizational skills and methods to private entrepreneurs through the ASC. It is not certain that the ASC will be successful, given other risk factors. It will be carefully monitored and terminated if demand does not prove sufficient.

There are no activities planned under the AMTT project that correspond to the AFR draft strategic framework recommended activities for Stage Three marketing systems because Chad's commodity marketing systems are still at a relatively unsophisticated stage of market development. The analysis that follows assesses the costs and benefits of each of the activities, grouped by project component, to determine the financial and economic impact of each.

3. ANALYSIS OF FINANCIAL AND ECONOMIC FEASIBILITY

The paucity of data on Chad has been noted above and in all other project analyses. There has never been a census in Chad, so all data on population totals, distribution, or any per capita calculations are but rough estimates. Data on agricultural production is based in large part on farmer recall and on post-harvest surveys, with no standardized weights, measures, or grades used. Data on marketing is equally limited; Annex F's analysis of price data collection systems identifies numerous deficiencies in systems used. Even macroeconomic data are flawed, in that they capture but a very small percentage of actual economic activity because they only focus on the formal sector.

The situation should improve dramatically in the near term. With A.I.D. assistance, Chad is beginning its first census in the spring of 1991. By the end of the calendar year, cross-tabulations of population totals and distribution by prefecture, at least, will be available. The MIS to be supported under this project will also begin harmonizing the numerous price data collection activities, so that marketing data will begin to have an historical base. The RA of tomatoes, onions, and garlic commodity sub-sectors and the longer-term millet and sorghum study will provide much more depth to the price data, and analyses of production trends and distribution will become possible.

Because of the lack of data at this time, classical benefit/cost analysis and rate of return analyses cannot be performed for the project. It is probable that such analyses can be accomplished by the time of the mid-term evaluation in early FY 1993, and will be included in the scope of work. At this stage of project development, however, a cost-effectiveness analysis is indicated.

Cost-effectiveness of the overall project must be judged in terms of component parts. The MIS is the only project component expected to have significant impact during the life-of-project, and is thus discussed in detail below. The Market and Policy Analyses, and ASC components will have less defined benefits and are thus discussed in less detail thereafter.

3.1 MIS Cost-Effectiveness. While ex-post methods have been developed to evaluate the impact of a MIS, i.e., the decision theoretic approach, the net social benefit analysis, the scoring approach, and an econometric model using agent risk preferences, they are not appropriate for ex-ante analysis, and require empirical data that do not currently exist. Therefore, the economic analysis of the MIS component relies on information available at the time of the PP design, discussions with market

participants, government and donor agencies, and anticipated benefits and costs of the MIS.

As stated previously, a favorable policy environment currently exists for private market participants. Redef nition of the national grain marketing board, Office Nationale des Cereales (ONC), and dismantling of the transportation monopoly, Cooperative de Transporteurs Tchadienne (CTT), have led to increased private sector participation in the marketing system. Despite these improvements, however, the marketing system is still characterized by numerous constraints. These include seasonal price fluctuations, uneven rainfall distribution, poor road conditions, lack of transportation, and political instability. All of these conditions exacerbate risk and uncertainty present in the marketing system.

The MIS has the potential to have a significant impact on marketing efficiency by reducing some of the constraints cited above. In particular, goal level indicators (lower marketing costs, reduced seasonal price fluctuations, increased stable supply of products across time and space, and lower consumer prices) may be addressed by the MIS.

As illustrated in numerous studies over the past decade, high marketing costs are not due primarily to a desire for profits. The risk undertaken by market participants must be compensated by higher margins. For example, while market intermediaries are often characterized as abusive and profiteering, it is now recognized that they provide an invaluable service without which the market can not function. Until their risk is reduced, market margins must remain high to cover losses due to spoilage, high maintenance costs of truck fleets due to poor roads, high fuel costs and lack of spare parts, and lack of information.

The MIS component of the AMTT project offers the opportunity to improve production and marketing decisions for over 2 million producers and intermediaries. This will be achieved through provision of timely and accurate information on market prices, food aid distribution, market volume, and price trend analyses. Producers and intermediaries alike will have equal access to information, thereby equalizing market power and ultimately reducing marketing costs.

The second indicator, seasonal price fluctuations, may also be addressed by the MIS. Current seasonal price trends are typical of many developing countries with uniformed production and marketing decisions. While some seasonal price fluctuation is necessary to allocate supply between harvests, studies on the Chadian marketing system indicate extreme and unpredictable price changes throughout the year. By providing market information,

the AMTT MIS component will improve production decisions again for over 2 million producers in the medium-term. Additionally, traders will improve storage and marketing decisions through more accurate price forecasts to determine appropriate timing of stock release onto the market. This will not only reduce seasonal price fluctuation, but also lower marketing costs discussed above by reducing the risk borne by traders.

As indicated in section 1, Chad has been analyzed as food self-sufficient in years of adequate rainfall. Although this may be true for the country as a whole, increased spatial arbitrage is necessary to reduce supply/demand imbalances that exist from region to region. The MIS component of the AMTT project will facilitate spatial arbitrage by providing timely and accurate information which reduces the risk involved in moving crops from surplus to deficit regions. Traders can more accurately assess the costs and benefits of moving crops, particularly if the market information includes volume in each area. By year four, the MIS component plans to announce 10 cereal variety prices in 50 markets and 4 vegetable prices in 15 markets. Complementary analyses will be added to weekly broadcasts as the ability of the MIS is improved. These achievements should provide the impetus to increase spatial arbitrage and thus improve stabilization of supply across regions.

The final goal indicator, reduced consumer prices, should provide the most evident impact of the MIS. While other Sahelian experiences have shown that consumers are the primary beneficiaries of the MIS, over 1 million urban consumers should benefit in Chad from reduced prices, improved choices, and increased bargaining power.

The total cost of the MIS over a the four year life-of-project is estimated at $ 5.9 million. Assuming the benefits accrue to 2 million producers and intermediaries, and 1 million urban consumers, the total beneficiary population in conservative terms is 3 million. The cost per beneficiary for the four year period is thus only $ 1.90 per beneficiary, or less than 50 cents per person per year.

As demonstrated in the component budget at Annex J, the GOC is already paying the full operating costs of the MIS, and these costs will increase only minimally over the life of the project. The 1990 budget for BSA and personnel costs of collaborating institutions totalled $ 691,900. This may be considered the "pre-project" costs. In FY 1994, the last full year under the project, they will be $ 710,000 (without inflation). This represents less than a 2 percent increase over the life of the project, without inflation. At the end of the project, it is reasonable to assume that the GOC will continue to pay the operating, or recurrent, costs.

These annual operating costs are equal to 24 cents per each of the 3 million beneficiaries. As the system proves effective, it is assumed that the number of beneficiaries will grow, and that the unit cost will decrease further. The MIS is thus considered cost-effective in terms of benefits provided, both during the project and thereafter.

3.2 Other Components' Cost-Effectiveness. The other two project components' benefit horizon is much longer term, and more difficult to quantify. The ASC will develop business plans for 13 enterprises, assist in the establishment of 4 new agribusiness ventures, and promote the introduction of 4 new products or venues in the market. The business plans to be developed, and the feasibility studies for the new ventures, will carefully define all costs and benefits of the operations. Given the narrowness of the agribusiness sector in Chad, however, benefits are likely to be small relative to the overall economy.

The Market and Policy Analyses component will produce studies which will immediately benefit the GOC and USAID/Chad. Benefits to the private sector will occur as the business registration and Investment Code processes are revised. Even greater benefits may accrue to input suppliers and transporters if customs tariffs are reduced; this will form part of a separate area of investigation under the project. If the transport, financial services and capital markets, and women's studies identify needed policy or regulatory reform that leads to better public and private investment, benefits will be significant. However, none can be quantified at this time.

The costs of the two components are steep, relative to the short-term benefits. The ASC costs are estimated as $ 2.5 million for four years. Because it is considered a pilot effort; if it does not yield results after 18 months, it will be terminated and costs will be significantly less. The costs of the Market and Policy Analyses component total $ 4.3 million, of which $ 4.2 million are A.I.D. These can only be justified in the long-term.

As stated at the beginning of this analysis, there are virtually no data on which to base rational planning in Chad. The ASC and Market and Policy Analyses will provide data, analysis, and experience on specific topics of interest to A.I.D. and the GOC. These topics have been selected because they represent areas which can have significant impact to the Chadian economy in the longer-term. To the extent that A.I.D.'s investment to improve planning reduces A.I.D.'s and the GOC's risk of investment, and possibly increases such investment through a Phase 2 effort, the benefits could clearly outweigh the costs. The project is thus considered cost-effective.

ANNEX L

BIBLIOGRAPHY

ANNEX L

BIBLIOGRAPHY

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ANNEX M

LIST OF PERSONS CONTACTED

ANNEX M

LIST OF PERSONS CONTACTED

GOVERNMENT OF CHAD (GOC)

Ministry of Agriculture

Abdelwahid Cherif, Director General

BIEP

Namba Yallah, Directeur General/a.i.
Brahim Idrissa
Dhel Soudgo, Agro-economist
Alain Dufour, Conseiller Technique Principal, FAO
Alec Bouchitte, Ingenieur Economist, FAO

BSA

Jean Dondasse, Animateur Local CILSS/Projet DIAPER II
Lotard Mugabe, Director
Tao Bouhouraye, Superviseur des Enquetes de la Statistique Agricole
Djebonguem Gadjinadji, Supervisor, Moundou

Bureau de la Rechercher Agronomique

Mahamet Adoum Djaya, Directeur General
Tamitah Djidingar, Ingenieur Agronome

ONADEH

Aberamane Oudah, Chief Marketing Division

ONDR

Djime Ngaba Tchere
B.B.W. Boukar, Division Programmation
Djimtoignar
Ndosngar Gaingar, Sous-Directeur Zone Soudanienne, Moundou
Ahmadai Abderaman, Chef Secteur, Moundou
Tchilgue Youle, Service Suivi Evaluation, Moundou

Ministry of Commerce and Industry

Yamatedaye Nadgitangar, Directeur General, Industrie
Tchoroma Matalama, Directeur du Commerce
Vissia Bouranqa, Chief Interior Trade
Oidongarti Bamadjita, Chef de la Division de la Planification et de la Promotion des Industries
Dr. Guealbraye Manasset, Direction Generale

Direction des Impots

Patrick Marie, Advisor to the Director

OPIT
Mahamat Oumar Bahradine, Directeur

Chambre Consulaire du Tchad
Mbao Dingamyo, Chef de la Division des Relations Publiques et de la Documentation

SOTERA
Lamine Ahmed, Liquidateur

Ministry of Food Security and At-Risk Populations

SAP
Betoynar Tadinoudjibe, Responsable National du Systeme d'Alerte Precoce
Thierry Godbille, Chef de Projet
Denis Michiels, Ingenieur Agronome

ONC
Nadoumabe Yamadjita, Chief Marketing Division
Ahmet Tom Zachariah, Cellule d'Information de Prix Suivi et de Suivi de Stock
Timan-Djibrine, Chef d'Agents, Moundou

Ministry of Plan and Cooperation

DSEED
Djimtoignar Nadjiounoum, Chef de Service de la Statistique des Prix

Ministry of Social Affairs and the Promotion of Women
Titimbayo Mariam, Directrice de la Promotion Feminine
Hadje Fatime Sissoko Nar, Coordinatrice Generale a la Direction de la Promotion Feminine
Somte N'Dealbaye Delhine, Chef du Service de La Promotion et de la Coordination des Avtivities Feminines
Gursette Haoua, Senior Field Supervisor,
Nadji Nomal Alice, Extension Agent

Moundou
Cecile Keilalyol, Directrice, Moundou Office
Sadjangar Mbaleyo, Deputy Directrice, Moundou Office
Fangbo Mabeugalarkei, Extension Agent

Ministry of Transport and Civil Aviation
Dr. Palkoubou Issakha, Directeur

Ministry of the Interior
Oumarou Yerima Djibrillah, Directeur General
Hauman Nodjigoto, Directeur de la Surete Nationale

Radio Tchad

Dourna Kam Kam, Technician
Namodji Dah, Directeur de Programme des Nouvelle de Radio Tchad
Mbairougol Nurem, Moundou

PRIVATE SECTOR

Market Participants

Fatime Abaka, Cereals Producer/Retailer, Linia
Mahamat Abbassi, Director, Quincaillerie Moderne du Marche
Jabrim Ahmed, Cereals Producer, Linia
AL-MA-ACH, Cooperative de Consommation, Marche Central (cereals wholesalers)
Adoudou Artine, Deputy, Chamber of Deputies
Djalal Bechir, Ets. Djalal Bechir, Commerce General
Dr. Gaston Bleni, Representant, Cooperative de Commercialisation de Viande et Betail (CCVB)
Doudou El Hadj, TOTAL/Chad, Renault/Chad, major transporter, major urban landlord, etc.
Mohamet Garuba, Cereals Wholesaler, Linia
Betombayza Keytoro Jerome, Directeur General, Groupement Professionnel des Transporteurs Routiers du Tchad (GPR)
Khadidja A. Kolingar, Directrice Generale, Societe Africaine pour le Commerce et l'Industrie au Tchad (SOACIT)
Haroum Moussa, Cereals Wholesaler, Linia
Josephine Nekingatol, Okra Retailer, Moundou
Mahamat Nour Salah, Directeur Executif, Gestion Transport et Service (GETRANS)
Koulamallah Souradj, Directeur General, Gestion Transport et Service (GETRANS)

Onion Retailer, Moundou
Red Sorghum Wholesaler, Moundou
Rice Retailer, Moundou
Vegetable Retailer, Moundou
Proprieter du Hangar 551, Marche du Mil, N'Djamena
Proprieter du Hangar 546, Marche du Mil, N'Djamena
Proprieter du Hangar 164, Marche du Mil, N'Djamena
Sultan Djani of Karal
The Market People of Karal and their Customers
The Village Chief and Imam of Danouna and other villagers
The President of the "Foyer Feminine" of Dougghia and the other women of group.
The Village Chief of Dougghia and his advisory council
The Market People of Dougghia, including the vendors, traders and purchasers.
The Village Chief of Lamadji and other village respondents

PRIVATE SECTOR (Continued)

Financial Services

Kebba Wouado Evarist, Directeur de l'Exploitation, Banque Tchadienne de Credit et de Depots

Kerim Mahamat Ali, Fonde de Pouvoirs Adjoint, Directeur du Credit, Banque Internationale pour l'Afrique au Tchad

Mejid Modakkem, Conseiller Technique, Banque de Developpement Tchadienne

Djetodjide Kanayo, President, Association d'Appui aux Initiatives Locales de Developpement (ASSAILD)

Ningatolum Tain-Tain, Responsable du Projet, Caisse Rurale d'Epargne et Credit aux Logones (CREC)

Consultants

Michel Bako, Private Consultant

Marc Beringaye, Ancien Doyen de la Faculte des Science Juridique, Economiques et de Gestion, Universite du Tchad

Dr. Idabaye Ka-Gara, Directeur General, Tchad Business Counseils

Magourna Kagdom, Consultant, Tchad Business Conseils

Isaac Godje Tedambe, Directeur, Bureau d'Etudes des Projet et de Conseil dans les Affaires (BEPROCA)

INTERNATIONAL ORGANIZATIONS

EC

Dru Barron, Delegue de la Commission des Communautes Europeennes

Claude Arditi, FED Consultant

FAO

Mohammed Bocoum, Advisor to ONC

UNDP

Emmanuel Dierckx de Casterle, Resident Representative

Blanche de Bonneval, Assistant Resident Representative

Marc Riehl, Program Officer

UNICEF

Carol Watson, Program Officer

UNIFEM

Merriam Pangah

World Bank

Etienne M. Alingue, Charge de Programme, Chad

Pap Sow, Economist, Washington, D.C.

Peter Thompson, Washington, D.C.

NON-GOVERNMENTAL ORGANIZATIONS

ACDI
Roger Vinita, Director, Chad
Anne Whitlock, Program Officer

Africare
Jennifer Yarnell, Economist

CARE
Carell Laurent, Deputy Director
Djime Adoum, Agronomist/Project Manager
Shoa Asfaha, Economist
Ismael Azizi, Project Manager, Micro-Enterprises, CARE

CEFOD
Alain Allandigta, Librarian, CEFOD

ORT
William Stringfellow, Director

OXFAM
Sarah Westcott, Representative

SECADEV
Adam Abbone, Delegue-Adjoint, Karal

Union Nationale des Associations Diocesaines de Secours et de Developpement (UNAD)
Louis Sarazine, Director

VITA/PEP
Iven L. Ose, Director
Haroun Sao, Agricultural Loan Officer
Youndailaou que Tolloum, Administrator

U.S. PEACE CORPS
Joe Henman, Director
Thomas W. Mathison, Assistant Peace Corps Director, Agriculture

A.I.D.

USAID/CHAD
Bernard D. Wilder, A.I.D. Representative
Carole Sherrer-Palma, Assistant Representative for Program Development and Implementation
Kurt Fuller, Agricultural Development Officer
Noubassem Namde, Assistant Agricultural Development Officer
Samir Zoughby, Human Resources Development Officer
Isaac Tedambe, Development Training Specialist
Leslie McBride, Food for Peace Officer
Paul Laoubara Nadjiadjim, Food for Peace Liaison Assistant
Son Nguyen, PVO Initiatives Project Officer
Hendrik Van de Pol, Engineering Officer
Jerry Penno, Executive Officer
Claire Johnson, Controller
Ernest Hardy, A/Controller
Kevin Guild, DMS Administrative Officer
Dix Oliver, Regional Telecommunications Specialist/Supervisor (USAID/Yaounde)

A.I.D./Washington
Philip Boyle, PPC/WID
Millie Brown, AFR/PD
Barry Burnett, AFR/PD
Mari H. Clark, PPC/WID
Thomas J. Herlehy, AFR/TR
Yvonne John, AFR/SWA
Willie Salter, AFR/SWA
Roger Simmons, AFR/SFWA
Al Smith, AFR/TR

A.I.D. Projects

FEWS
Charles Alan May, Field Coordinator/Washington, D.C.
Felix Lee, Field Representative/Chad

HRDA
William Piatt, Labat-Anderson Incorporated
Elizabeth McDavid, Labat-Anderson Incorporated
Mohammed Dioumonde, Labat-Anderson Incorporated

Road Maintenance
Gerald Scott, Chief of Party, Louis Berger International, Inc.

ANNEX N

ENVIRONMENTAL DETERMINATION

RECEIVED ADMIN
DATE SEP 07 1990

UNCLASSIFIED

Department of State

OUTGOING TELEGRAM

677-006

PAGE 01 STATE 110787 0788 025473 :0EEEC
ORIGIN AID-00

ORIGIN OFFICE AFTR-05
INFO AFFW-04 AFCW-03 AFPD-04 AAAF-03 SAST-01 GC-01 GCAF-0
STFN-02 RELO-01 [illegible] /027 AC 06/065EZ

INFO LOG-00 AF-00 /002 R

DRAFTED BY: AID/AFR/TR/ANR: RSTANLEY: RSC7CHAD
APPROVED BY: AID/AFR/TR/ANR: LJEPSON
[illegible]
GC/AFR: PJOHNSON (DRAFT) AFR/SWA: RDANIEL (PHONE)
AFR/TR/ANR: NSHELDON (INFO) AFR/PD/SWAP: MBROWN (DRAFT)

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FM SECSTATE WASHDC
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INFO AMEMBASSY ABIDJAN PRIORITY

UNCLAS STATE 110787

AIDAC ADD, ABIDJAN FOR REDSO/WCA (HANCHETT)

E.O. 12356: N/A
TAGS: N/A
SUBJECT: IEE FOR AGRICULTURAL MARKETING AND TECHNOLOGY TRANSFER (677-0006)

REF: STATE 074013

w/ATTACHMENT

ACTION: ADD: Fulcher
DATE: 4/7 DUE: 4/10
INFO: Palmer
TION TAKEN:

INFO COPY

1. PER PARA 7E OF REFTEL, A CATEGORICAL EXCLUSION, BASED ON LACK OF SIGNIFICANT ENVIRONMENTAL EFFECT, HAS BEEN APPROVED FOR THE MARKET NEWS AND POLICY, AND MARKET ANALYSES ELEMENTS OF THE SUBJECT IEE.

2. A CATEGORICAL EXCLUSION IS ALSO APPROVED FOR THE FEASIBILITY STUDIES ON TECHNIQUES TO REDUCE POST HARVEST LOSS. HOWEVER, SINCE THE ADOPTION OF ANY SUCH TECHNIQUES WOULD HAVE THE POTENTIAL FOR SIGNIFICANT ENVIRONMENTAL EFFECT, AN ENVIRONMENTAL REVIEW WILL BE REQUIRED FOR THE RECOMMENDED TECHNIQUES BEFORE THEY ARE IMPLEMENTED. THIS DECISION TO DEFER ENVIRONMENTAL REVIEW UNTIL FEASIBILITY STUDY IS COMPLETED APPLIES TO ANY TECHNIQUES TO PRESERVE STORED PRODUCTS AND FOODS--WHETHER OR NOT THEY INCLUDE THE USE OF PESTICIDES--AND TO ANY INTRODUCTION OF NEW CULTIVARS.

3. ACCORDING TO REGULATION 16, SECTION 216.3 (2) (7), A DECISION FOR DEFERRAL MUST BE APPROVED BY THE MISSION DIRECTOR OR THE ASSISTANT ADMINISTRATOR FOR THE ORIGINATING GEOGRAPHIC BUREAU. THE IEE HAS BEEN REVISED TO REFLECT THIS, AND AFR/GC AND THE BUREAU ENVIRONMENTAL COORDINATOR HAVE CLEARED THIS CABLE. A COPY OF THE REVISED IEE WILL BE HAND CARRIED TO THE MISSION BY RSTANLEY APRIL 2, 1990. BAKER

RECEIVED APR 9 1990

UNCLASSIFIED

INITIAL ENVIRONMENTAL EXAMINATION

Project Country: Chad

Project Title: Agricultural Marketing and Technology Transfer, 677-0062

Funding: FY(s) LOP US$ 6.7 Million

IEE Prepared by: Ronald A. Stanley, Environmental Advisor AID/AFR/TR

Environmental Action Recommended:

Positive Determination	
Negative Determination	
Categorical Exclusion	x
Deferral	x

Summary of Findings:

The project elements that deal with Market News and Policy and Market Analyses will not have an effect on the natural or physical environment. These elements will consist exclusively of gathering and disseminating information about market prices and related variables plus analyses and studies of policies and Chadian market systems. These elements fall under A.I.D. Regulation 16, Sections 216.2(c)(1)(i) and 216.2 (c)(2)(iii), and therefore qualify for a categorical exclusion.

The agribusiness support element in general will not affect the environment or any effect will not be significant. However, this element will include feasibility studies of techniques to reduce post-harvest loss and to preserve foods and the possible introduction of new cultivars. Since these technologies have not yet been specified, their environmental consequences cannot be accurately assessed at this time. Thus, a process must be established to ensure that adequate consideration is given to the environment in the implementation of this element. This process will begin with a feasibility assessment to decide whether to promote a new technology or cultivar. This assessment should include a section that identifies any likely environmental consequences of implementing the proposed intervention. If significant adverse effects are identified, mitigation measures will also be proposed. The Africa Regional Environmental Officer would be required to review this assessment with clearance by the

Bureau Environmental Coordinator. Routine project monitoring should also ensure the validity of the original assessment of environmental consequences. At the time of each project evaluation, any environmental effects would be assessed, and any appropriate remedial actions that are needed will be recommended. These interventions must be spelled out before a determination can be made. Therefore, an environmental review of these should be deferred until after interventions have been identified and studied. They will be promoted only if found promising and if a subsequent IEE finds no environmental impact. The Project Agreement should contain a covenant to this effect.

Project funds will not be expended to procure, or otherwise use, pesticides.

Approval:

Mission Director

Approved: Bernard Wilder
Disapproved: _____
Date: 8 Nov 90

Concurrence:

Bureau Environmental Officer:
John Gaudet, AFR/TR/ANR

Clearance:

GC/AFR: _____ Date: 29 Nov 90

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