

ANGOLA AGRICULTURAL SECTOR ASSESSMENT  
FINAL REPORT

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## **Preface**

This assessment of the Angolan agricultural sector was done by a two-member team consisting of Dr. Norman Rask, agriculture economist, and Michael Tinne, agricultural consultant, under contract with Chemonics International Inc. As part of the assessment, the team made visits to the provinces of Bie, Huila, Malanje, Kwanza Norte, Luanda, and Cabinda. The team interviewed government officials, donors, NGOs, and private sector individuals both in the field and in the capital, Luanda. An oral briefing and discussion was held with government officials, donors, NGOs, and private sector individuals. An early draft of the team's report was reviewed by USAID. Agency comments, along with comments from the oral briefing, are incorporated into this report.

The team would like to thank Keith Simmons, mission director; Alfreda Brewer, program officer; James Jackson, SO1 team leader; and Gomes Cambuta, agricultural advisor of USAID/Angola for their time and support in arranging schedules and field trips and providing insights into the Angola agriculture sector. In addition, the team would like to thank Jerry Brown, agribusiness advisor USAID/Washington, and John Mullenax, regional agricultural advisor, REDSO USAID/Nairobi for their helpful comments on the draft report.

Given the necessity of gathering information and forming impressions in a short time and given the extreme shortage of published information on the Angolan agricultural sector, it was necessary to rely principally on consultant reports, discussions with informed government and private sector individuals, and field observations. Under these circumstances, factual errors and information gaps are possible. To the extent such errors and gaps exist, they are the responsibility of the team members, and in no way reflect on the excellent insights provided to us by respondents.

## ACRONYMS

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ADRA	Rural and Environmental Development Action NGO
BNA	National Bank of Angola
CABCOG	Cabinda Gulf Oil Company (Chevron)
CAP	Bank for Agricultural and Livestock credit
CDA	Rural Development Center
CRS	Catholic Relief Services – NGO
DNA	National Directorate for Livestock
DRC	Democratic Republic of Congo
EDA	Rural Development Station
FADA	Support Fund for Agricultural Development
FAO	Food and Agriculture Organization of the United Nations
FFPO	Food for Peace Officer
GDP	Gross Domestic Product
GOA	Government of Angola
GRA	Government of Angolan Republic)
IDA	Institute for Agricultural Development
IFAD	International Fund for Agricultural Development
IIA	Institute for Agricultural Research
IMF	International Monetary Fund
IDP	Internally Displaced Persons
INC	National Cereals Institute
MCS	Monitoring, Control and Surveillance
MINADER	Ministry of Agriculture and Rural Development
MINPLAN	Ministry of Planning
MPLA	Popular Movement for the Liberation of Angola
NGO	Nongovernmental Organization
NPA	Norwegian Peoples Aid NGO
OFDA	Office of Foreign Disaster Assistance
OSRO	Office for Special Relief Operations (FAO)
REDSO	Regional Development Support Office

PVO	Private Voluntary Organization (same as NGO)
SADC	Southern Africa Development Community
SO	Strategic Objective
SCF	Save the Children Fund – NGO
UNDP	United Nations Development Program
UNITA	National Union for the Full Independence of Angola
USAID	United States Agency for International Development
WV	World Vision (Visao Mundial) NGO
WB/BM	World Bank (Banco Mundial)
WFP/PAM	World Food Program (Programma Alimentacao Mundial)

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## Executive Summary

### Purpose

The purpose of this report is “to rapidly appraise the constraints and opportunities for intervention in subsector (agricultural) development to determine whether or not there are any major constraints that would inhibit the achievement of significant results in market-led agricultural development activities and identify the areas that appear to present major opportunities and could be further pursued in subsequent activity design work.”

### Background

Angola is presently undergoing several transitions that significantly affect the prospects for development in the agricultural sector. These include transitions from:

- *Civil war to peace.* This is an elusive transition. There have been advances and regressions in the war, but in terms of the impact on agriculture there has been little or no progress over the past 10 years.
- *A command to a free market economy.* Local markets operate freely without state interference. However, a number of parastatal organizations still exist, and the command mentality of state intervention is prevalent in some state institutions. In most public institutions, analytical skills (especially for economic and policy analysis) need to be strengthened.
- *Food import dependence to food self-sufficiency.* The level of food self-sufficiency ebbs and flows with the continuation of the civil war. Currently, well over one-half of all food needs are imported. Agricultural exports are negligible.

The confluence of these transitions gives rise to several issues that guide and restrict the opportunities for intervention. They are:

- *Geographic limitations.* Currently, military-secure areas are limited to the southwestern part of the country, the northwestern detached province of Cabinda, some coastal areas, and narrow peripheries around major cities. Most of the major agricultural areas of the central and northern plateau are not secure, with the exception of major cities and their peripheries. This limits major geographical agricultural interventions to the southwest, extreme northwest, and coastal areas. Minimal low-cost investments are possible near major cities in the interior.
- *Market separation.* There is no countrywide market. Most major urban areas are market enclaves, separated by security and economic (marketing margin) factors. The southwestern area is a partial exception to this general characterization, but for

economic reasons is still largely separated from the large Luanda market. The economic separation is real. Years of neglect have left transport conditions in an extreme state of disrepair. Paradoxically, an export farmer 4,000 miles from Angola can access the Luanda market more competitively than an Angolan farmer located 300 miles inland from Luanda. Correction of this market separation factor requires a massive investment in transport infrastructure. This is unlikely to happen until military security is greatly improved.

- *Import-substitution.* The market separation problem (high marketing margins) precludes an export potential for the major agricultural regions of the central and northern plateau. It also limits the degree to which producers on the plateau can access coastal markets. Currently, only producers on the western fringe of the interior production regions can be competitive with imports to the coastal markets. This leads to a development strategy for the near and medium term that should focus on regional import-substitution, including product diversification and regional value-added industrialization, within the limits imposed by security concerns. Further, Angolan processed food items cannot be found in most markets. Wheat and rice were once produced in Angola but are now imported. This is further evidence of the need for product diversification and processing.
- *Land quality and use.* Overlapping and conflicting claims to land ownership and use rights have accumulated over time. These include: the original local land-use systems, the Portuguese colonial farms, post-independence state expropriations, recent and continuing state land concessions, resettlement of displaced persons and discharged military personnel, and voluntary occupation of unused land. Situations of both intensively cultivated marginal land and non-use or only extensive use of productive land are evident. To maximize rural productivity and income, these conflicting rights to land use need to be resolved.
- *Capacity strengthening.* Agricultural research, extension, and state policy institutions are underfunded, understaffed, and undertrained, especially in the area of economic and policy analysis (command economy legacy). Sorting out comparative advantage and other production and marketing issues in the Angolan economy requires a significant level of economic sophistication. Further, NGO and donor activities siphon off the more capable local agronomists. They are doing good work in plant trials and seed multiplication, but often have contributed little to capacity building when their work is done.

## **Intervention Strategies**

The nature, scale, and geographic location of suggested intervention strategies are limited by security concerns, timeframe (five years), and cost. Nine intervention strategies are suggested for consideration:

*Non-secure areas:*

- *Value-added, small-scale processing.* Imported vegetable oil is available in all local informal markets at high prices. Domestic oil, with the exception of some palm oil, is not available in any market. A number of local oilseed crops are produced in the regions including sunflower, sesame, and groundnuts. Experimental plantings of soybeans show early promise of superior yields. Local or village processing of vegetable oils would provide a less expensive source of cooking oil for farm families and rural villages, a source of additional income, a by-product protein source for human or livestock consumption, and additional employment for rural or village people. Maize, cassava, and wheat flour are also available in these markets. Farm or village processing would provide added employment for women and relieve them of the tedious task of traveling long distances to secure flour and cooking oil. Small, simple, and inexpensive oil presses and milling machines are available in other countries (Mozambique, Nigeria, Zimbabwe). Local production of these machines would be another source of agribusiness development in regional communities. These minimal-level activities would be possible on the plateau near major urban centers as well as in more secure areas.
- *Farm and village crop storage.* Pest and spoilage losses of up to 30 percent are reported for seed and food crop storage. Most local storage facilities have been destroyed during the war. Efficient farm or village storage facilities would allow farmers to extend the crop marketing season, take advantage of off-seasonal peaks in crop prices, and reduce current losses of food and seed. As with the above, these activities would be possible near urban areas on the plateau.

*Secure areas:*

- *Land tenure conflict resolution.* Unresolved land issues are prevalent in almost all areas. Tenure problems are expressed in a variety of ways — good productive land remaining idle while local residents toil on marginal land; land degradation in many areas; peasant farmers moving onto previous, but now idle colonial or government property; the government conceding large tracts of land to interested parties while denying use to others; inability to receive credit without title to land, etc. Several institutions are initiating work to begin resolution of this complex issue. They feel work has to begin at the local level in a consensus-building framework. A first step is to map the overlapping claims to land. Next is a negotiating phase among interested parties to arrive at a local consensus. Following this, provisional title is given. As an incentive to engage in this process, and to help in further development, some assistance is provided for community rehabilitation, i.e., schools, infrastructure, markets, etc. (a form of integrated rural development). This process will be replicated under various conditions to provide a basis for eventual national legislation on land tenure.
- *Value-added regional food processing.* Imported processed foods and beverages are found in all markets (local, regional, and national) at elevated price levels. Very few

Angolan processed foods are available. Farmers in the southwestern region indicate that surplus fruits (apples, pears, peaches, strawberries) and vegetables (tomatoes, potatoes) at harvest time either rot in the fields or are fed to animals because of lack of fresh produce markets. Cold storage could extend the fresh produce marketing season and processing of food and beverage products could allow expanded production of a greater variety of seasonal crops. As noted earlier, a variety of oilseed crops are grown throughout the country (sunflower, sesame, groundnuts) and experimental plots with soybeans show promise as another potential oilseed crop. Oilseed processing would also provide animal feed protein by-products for poultry, swine, and dairy enterprises. In Cabinda, pineapple, groundnut, palm oil, and poultry are seen as potential value-added products.

*Support services:*

- *Early warning and price reporting systems.* There is substantial price variation between markets, often in neighboring areas. Lack of market price knowledge can put farmers at a significant disadvantage when marketing their products. Collection and rapid dissemination of local, regional, and national information relative to commodity prices and commodity availability will help both farmers and traders better schedule market activities. Complete market knowledge will help farmers receive better prices for their products. Policymakers will have access to information to improve the timing and nature of interventions in agricultural markets when needed. Similar programs have been successful and well received in other countries (Mozambique). This is an opportunity to strengthen institutions at the local, regional, and national level, including the extension service. Price data from regional markets throughout the country will be collected at the same time each week, tabulated, and quickly disseminated through radio and print.
- *Strengthening economic and policy analysis capacity.* Assuming a policy focus on regional and national import substitution, various production, processing, and marketing options arise for both USAID support and Angolan policymakers. Each demands sophisticated economic analysis before implementation. However, there is an extreme shortage of economic analysis capability in Angolan institutions working with agricultural issues. The economic analysis work for determining USAID intervention activities can be done with outside consultations. However, local institutions need to be strengthened in the process so they can perform this function in the future when faced with other economic policy choices. Initially, outside consultants will be needed to help conceptualize and guide the analysis. Later, local professionals will be capable of assuming greater responsibilities. The types of economic studies needed include: studies of regional, national, and international comparative advantage for a number of products; the economic viability of introduction of new and previously cultivated crops and livestock products (e.g., wheat, rice, sugar, soybeans, poultry, milk, among others); the advisability of introducing modern technology (e.g., hybrid seeds) into the traditional farming systems under alternative market conditions; advisability, location, size, type, and product definition of processing facilities, etc. The list can be quite long.

- *Marketing margin reduction.* Currently, very high Angolan marketing margins have multiple impacts on agricultural production, marketing, and investment decisions. Interior and coastal markets are isolated and separate. Exports of agricultural products from the interior are not economically feasible. Economic access to the large Luanda market is limited to nearby regions. Interior markets can experience wide product price swings when local production is in surplus or deficit. Selection of appropriate farm enterprises or enterprise combination is affected, as is selection and location of value-added activities. Costly road/railroad transport and high port clearing costs contribute significantly to high marketing margins. The reduction of these costs is vitally important to growth in the agricultural sector beyond farm and regional self-sufficiency. Significant reductions in highway transport costs are necessary to open the large Luanda market to producers in the planalto region. In addition to highway improvements, port clearing cost reductions would also help producers in the southwest and in Cabinda better access the Luanda market. These are costly interventions beyond the cost and time frame for direct USAID involvement. However, studies and policy encouragement can be supported.
- *Personnel training.* Many personnel in research, extension, and state policy institutions are not adequately trained, especially in the area of economic analysis. The transition from a command economy to a market economy is much more difficult for economists than for physical scientists, as it involves a significant change in analytical concepts. Sorting out comparative advantage and other production and marketing issues in the Angolan economy requires a significant level of economic sophistication. In addition, some very capable local physical scientists (tecnico agronomos) have been hired away from GOA employment by NGOs and donors, leaving a depleted and less well-trained staff. Thus, additional training at a number of levels and disciplines is needed.
- *Establishing an agribusiness support unit.* We are not suggesting this as a standalone intervention. However, should USAID choose to support several multiprovincial processing activities, they may wish to consider establishing a central support activity located in Luanda.

### **Illustrative Activity Designs**

We have outlined several specific activity designs drawn from the general intervention strategies above. This is not an exclusive list. The activities selected are meant to illustrate how specific activity designs may be developed. They are specific to location, security status, and commodities. The commodity-oriented activities represent production diversification, local storage, and value-added processing in line with our suggestion to support import substitution projects.

In the secure areas of Cabinda and Lubango, we are suggesting fruit, vegetable, and livestock product emphasis assisted by the establishment of agribusiness centers. In the less secure small and medium farm highland areas (Malanje and Kuito), and in the more secure escarpment areas (Bengo) we suggest a focus on oilseed crop development associated with village-level processing

and storage to replace imported vegetable oil, along with small-scale milling of maize and cassava.

At the national level we propose support for a price reporting service to help farmers and traders throughout the country better market agricultural produce, and in the process build analytical and policy capacity.

Additional activity designs can be developed for addressing land tenure issue, personnel training, strengthening institutional capacity, and reducing marketing margins, among others.

## SECTION I

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### **Background**

In our visits with policymakers, donors, consultants, and other development practitioners, we found several recurring general perceptions concerning the present and future state of Angolan agriculture. These perceptions have led to optimistic projections concerning food self-sufficiency and exportable surpluses.

Our limited observations of the present conditions in the country lead us in some cases to different and less optimistic conclusions. In particular, soil quality and degradation, high marketing margins to access coastal markets, and land-use issues all militate against a quick return to country food self-sufficiency, let alone exportable surpluses. In turn, these same conditions point to the need for a medium-term focus on provincial and regional food self-sufficiency, with attendant farm-level product diversification and regional value-added industrialization.

In other cases we have reaffirmed some generally held perceptions. We agree that national and regional support services are ill prepared to help in this process. We find the rural people to be dedicated, resilient, and entrepreneurial in the face of trying circumstances, and feel they will respond quickly as conditions improve.

However, because perceptions often guide general policy direction, and the sum of our observations leads us to a less optimistic conclusion about the role for agriculture under eventual peaceful and free market conditions, we find it important to revisit these perceptions.

The implications that flow from a lower expectation of agricultural performance do not imply a lessened role for development efforts. On the contrary, the implications are that a greater effort will be needed to achieve a given level of agricultural self-sufficiency, resource conservation, and food security.

This report outlines for USAID choices for intervention options based on our view of the current and potential contribution of the agricultural sector. To the extent this differs from the more conventional view, it will be important to test our assumptions.

#### **A. Observations on Development Perceptions**

In our discussion with policymakers, donor representatives, and others, and in reading consultant reports that were made available to us, an optimistic view of eventual surplus exportable agricultural production emerges. This can be summarized, though oversimplified, in the following composite simulated quote.

“Angolan agriculture has an excellent, abundant land resource, combined with favorable climate, low population density, and demonstrated entrepreneurial

spirit, that will lead to rapid growth and eventual exportable surplus of agricultural commodities.”

These perceptions probably stem from the relatively stable conditions that existed prior to independence, some 25 years ago. At that time, arable land per capita was abundant at about .5 hectares, and farm size in the traditional farm sector was 5 to 7 hectares. However, crop yields were low, reflecting low levels of technology use and the inherent low to medium quality of many soils. Because this characterization of the soils is not consistent with common perception, we have quoted FAO below from their 1997 *ANGOLA: Agriculture Recovery and Development Options Review*, where the soil base in Angola is characterized as follows:

“Soils are quite variable (map 6). The southeastern part of the country has soils derived from Kalahari sands. Very little cropping is practised on these soils. Granite and gneissic formations predominate in the highlands. Here the most important cropping soils in the country exist. Oxisols predominate which are of low fertility, acidic, low in organic matter and commonly affected by aluminum toxicity. There are, however, large areas of alfisols and utisols which are reasonable fertile and suitable for crop production. Ferralitic and paraferalitic soils are widespread on the Planalto central and northern parts of the Angolan highlands. The sandy soils of the coastal plain and parts of the foothills have low fertility and low water holding capacity and are prone to salinity problems.”

Despite only moderately productive soils and low per-hectare productivity levels in the pre-independence era, animal power was used to extend labor inputs over a greater land area to produce significant marketable surpluses and exports (maize). This, along with other domestic livestock, provided additions to soil fertility and conservation. Further, extended fallow rotations and shifting cultivation allowed for periodic soil recuperation. In the large farm sector (cattle, coffee, sugar, cotton), farmers were technically efficient and productive and could access international markets with quality products. Finally, a good system of market corridors to coastal cities, including both rail and highway routes, facilitated movement of agricultural products.

Today, production and marketing conditions are quite different. First, population has doubled, creating more pressure on land resources. Arable land per capita is reduced to about .25 hectares, about world average, and yields are lower. Projected population growth rates of near 3 percent per year will reduce available land/capita further in the future. In some areas, around secure cities and in other areas where internally displaced persons (IDPs) are congregated, there is strong pressure on the immediately accessible land, resulting in overintensive cultivation, loss of fertility, and soil degradation. Fallow rotations, which had been between 7 to 10 years, are now reduced to 1 to 2 years.

Because of IDP resettlement, cropping is also occurring in some areas that are not naturally suited for intensive cultivation, and the soil degradation in these areas is severe. Animal power is not generally available, and the reduction in farm size per family, in many instances, will not allow full benefits from the use of animal power, restricting further the potential size of marketable surplus.

Other factors have also intervened in the past 25 years:

- Little investment in the creation and/or adaptation of new production technology
- Shifts in export market conditions (coffee, for example, from robusta to arabica)
- The addition of three layers of land tenure (state ownership, state land concessions, and IDP settlements), further confusing land ownership and use rights for producers
- Heavy destruction of rural infrastructure and transport systems such that markets will not operate efficiently for some time [see Section 2(C)].

Such conditions are not conducive to successful competition in export markets.

Also, on the marketing side, internal transport and port clearing costs are extremely high, limiting or probably precluding Angola from competing in international cereal markets for some time. This same port inefficiency provides a significantly higher internal market price for both consumers and producers, which benefits producers, as long as food self-sufficiency is not reached. These same high marketing margins put interior producers at a competitive disadvantage in serving coastal markets. Currently, internal marketing margins from a distance as short as 300 km from the large Luanda market exceed international marketing margins.

Further, the almost complete absence of any domestically produced processed food items indicates a great potential for value-added agribusiness development. This will not only add significantly to rural development but will provide an expanded market for a greater variety of agricultural products. Again, the high internal marketing margins provide a significant level of market protection for beginning industries in interior areas. However, given the precarious nature of regional security, these investments are only possible in relatively secure areas.

On the positive side, we find the entrepreneurial spirit to be strong and expressed very clearly in secure areas by both established residents and IDPs. In many areas, IDPs are making periodic visits to their former lands to attempt limited production, producing small quantities of food on limited acreage in the new areas, and engaging in other productive activities. As areas become secure, traders quickly reestablish contact with producers. And, once transport corridors are opened, truckers quickly reestablish trading routes to major consumption centers (i.e., Malanje-Luanda), though at high costs because of inferior road conditions.

The convergence of these conditions leads us to be more cautious in projecting a rapid emergence of a surplus-producing agricultural sector. Rather, we feel that while conditions for a reasonably rapid return to subsistence levels by the traditional farming sector are good in some areas, export potential for food crops is unlikely in the near to medium term. Instead, we believe that emphasis should be placed more on import substitution rather than export and in the near term on provincial and regional rather than national food self-sufficiency.

This leads to a somewhat different development focus: toward growth in the livestock industry and appropriate feed sources; toward increased domestic processing of a variety of products

including the concomitant expanded farm level production (i.e., cooking oil crops, fruits, and vegetables); and toward the possible reintroduction of once-produced basic crops that are presently imported in significant quantities (wheat, rice, and sugar, for example). This focus also prompts us to suggest the need for a national capacity to study the comparative advantage of various agricultural subsectors and to sort out whether and where import substitution is feasible.

## **B. An Import-Substitution Focus**

Given the current debilitated state of the agricultural sector in terms of its production base, markets and infrastructure, support services, and displaced people, it is possible to arrive at an almost endless list of justifiable interventions. To organize and prioritize our findings, we developed a framework within which to consider alternatives. The terms of reference suggest the need to focus beyond emergency relief-humanitarian issues toward a transition to economic development. We have reframed this concept in terms of an import-substitution focus. This is a pragmatic approach that leads us to a series of intervention options at various levels and regions within the agricultural sector over immediate, intermediate, and longer-run time frames.

In suggesting an import-substitution approach, we consider the need to bring a number of agricultural products toward country self-sufficiency, rather than concentrating on a few export potential commodities. As detailed later in this report, current production and productivity levels along with high marketing margins preclude the possibility of accessing export markets in the near term.

We envision the import-substitution process proceeding in three stages:

- *Local food self-sufficiency* — With cessation of war activities and the return of displaced people to their farms, farm families should be able to quickly provide for themselves without outside assistance, plus produce enough surplus for smaller rural communities. In the areas we visited, we found local markets to be operating quite well given the limitations imposed by dislocation and conflict. While many interventions may be desirable at this level, sufficient production should be forthcoming under traditional conditions. Also, this level of food self-sufficiency occurs presently at the ever-changing interface with ongoing security problems, an unstable condition that limits the amount of advisable intervention.
- *Regional food self-sufficiency* — Supplying the food needs of major interior urban areas will require additional productivity at the farm level, and the rehabilitation of regional marketing infrastructure. High marketing margins to coastal urban centers provide a measure of price protection for regional food processing and production diversification. Currently, value-added processing may be limited to a few geographical areas because of security problems. However, we anticipate that restoring low-cost transport corridors is a long-term prospect and thus, that high marketing margins will persist well after security problems ease. A number of production and marketing interventions may be advisable and helpful at this level, though restricted to secure areas in the near term.

- *National food self-sufficiency* — Here we consider meeting the food needs of major coastal cities such as Luanda. This is a major challenge since interior production areas must compete with imports. Farm production must be efficient and marketing margins low. Not all domestic commodities will be able to compete for this market. In addition to the interventions advisable for level two, a number of interventions at the national level will be helpful in understanding and guiding policy, as well as facilitating production and marketing efficiency.

Some agricultural regions with little exposure to the ongoing conflict may well receive level-three interventions (i.e., in the southwest). Other regions, such as secure areas around major cities, may be early candidates for level-two interventions (see maps 1 and 2). Finally, some interventions, such as capacity building at the national level, can proceed independently of the security situation. The interventions we have suggested for review cover all of the above possibilities, with somewhat less emphasis on level one.

## **C. Current Security Status**

### **C1. Food Security**

Food security is defined as ensuring that every person has access to enough food every day. In Angola, food security is threatened in several ways: for displaced persons who have lost the ability to produce their own *fundo*; for low-income people with insufficient income; and for children orphaned by the war. In addition, current food production shortfalls and the resultant higher food prices make more low-income people vulnerable to food insecurity.

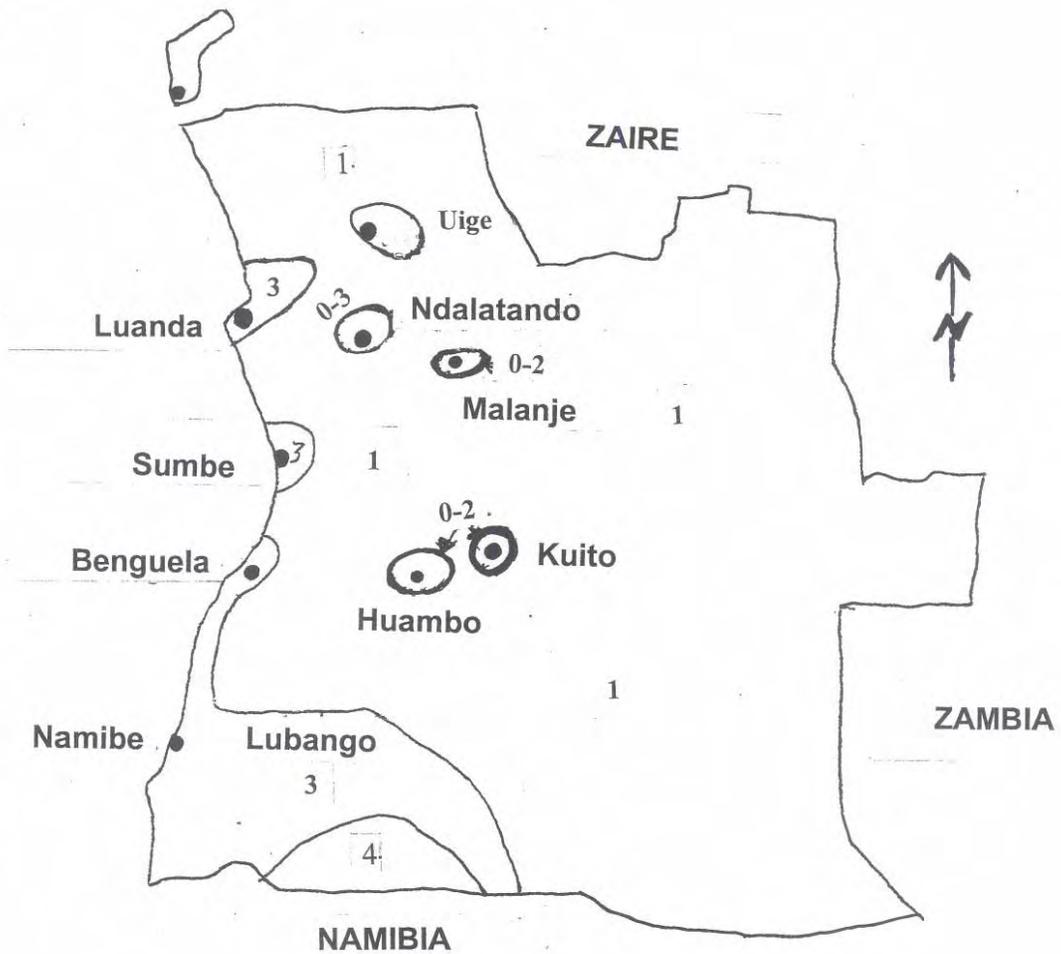
In the short run, there is a huge dependence on food aid and food imports to meet food security needs. The World Food Program manages the countrywide distribution of food to main centers of population and is assisted by the NGOs in the local distribution of food to needy populations. In February 2,000, WFP distributed almost 16,000 tons of food aid to more than 1 million people. The principal provinces receiving food aid were: Bie, 3,000 tons; Malanje, 2,800 tons; Huambo, 2,400 tons; and north Huila, 1,900 tons.

The GOA provides arable land in small parcels to most IDPs, and NGOs supply needed inputs such as small tools and seeds to both IDPs and existing agricultural units. This allows displaced persons to meet part of their own food needs and encourages marketable food production from resident farmers.

Unfortunately, the transition from food security dependence to food self-sufficiency is not a smooth process. There are many periods of regression as the war-related security situation changes. The example of the city of Kuito, located in a principal grain-producing region on the Planalto in Bie province (map 3) is illustrative. In 1996, the WFP was distributing 1,800 tons per month to Kuito. This was reduced to a little over 100 tons per month until the security situation deteriorated about a year ago. Currently, the WFP is distributing almost 3,000 tons per month to Bie province with the majority to Kuito.

We infer from the above that once physical security is guaranteed, local food self-sufficiency will return quickly to principal *fundo*-producing areas with little outside intervention. This can be

Map 1. ANGOLA: Levels of Agricultural Market Self-Sufficiency (02/00)



MARKET SELF-SUFFICIENCY SCALE:

- 0- Deficit
- 1- Local Market
- 2- Regional Market
- 3- National Market
- 4- Export Surplus

Map 2. ANGOLA: Population Distribution by Province  
 (000)  
 1998, Source: UNDP



Total: 12,262,000

Map 3. ANGOLA: Provincial Boundaries and Capitals



enhanced by improving on-farm and village crop storage facilities where losses reportedly can exceed 30 percent. However, as noted later, regional or national food self-sufficiency will require a much greater and sustained effort in a number of areas.

## **C2. Military Security**

The situation of military security was raised at each meeting we held. Our intent was to identify as closely as possible areas of the country where meaningful agricultural development could take place. Based on these discussions, a composite estimate of the secure areas as of February 2000 is shown on map 4, where shaded areas indicate “secure” areas outside of which it is considered inadvisable to travel by road. This means that one should not travel more than 20 to 25 miles outside Luanda in any direction. The same applies to most major cities and towns throughout the country with even shorter distances around such places as Malanje, Huambo, and Kuito. South of the railway line running from Namibe to Menongue as far as Matala is considered secure; this takes in substantial areas of Namibe, Huila, and Cunene provinces.

However, the situation remains extremely fluid throughout the whole country. The scenario can change daily as there are no fixed boundaries between the combatants. Indeed, UNITA forces would appear to be more dispersed than previously with their individual field commanders using more guerrilla-style war tactics. In addition to military raids, there are bandit attacks and robberies along highways. It is often uncertain whether the military or bandits are responsible for the attacks.

In addition, a dire situation still remains with respect to the mines, with off-road demining progressing slowly as efforts are concentrated on designated critical areas that should be cleared and declared safe first. Recently it was reported that remining of one or two previously cleared roads has taken place.

## **D. Agricultural Production History**

Before independence, Angola was self-sufficient in all main food crops with the exception of wheat; the country also exported surplus coffee, maize, bananas, beans, palm oil, sisal, sugar, and tobacco. Angola was the world’s fourth largest producer of coffee, reaching a total of 218,700 tons in 1973, and the third largest producer of sisal, exporting 112,000 tons in 1973. Coffee production is now minimal, with a few thousand tons being exported through the Democratic Republic of Congo. To reestablish the coffee production to anything like previous levels will be a major undertaking, entailing in many cases a switch from the normally produced robusta to arabica, and indeed to arabusta. The sisal industry would not be worth reviving. Since the mid-1970s, the world market for sisal has declined substantially, due mainly to growth in the use of synthetics.

Since independence, production of all crops has fallen dramatically and the country has become largely dependent on food imports. Most large commercial farms were abandoned by the Portuguese and expropriated by the state. However, the state lacked the necessary management expertise and a steep decline in production followed. Small farmers also suffered from a policy environment that was not conducive to their increasing output over and above that sufficient to



satisfy the domestic market. In most cases, production declined even further as the security position worsened, the war became widespread, and rural trading activities came almost to a standstill. It then became a matter of survival, with small farmers producing where they could enough food to satisfy themselves, their families, and local areas.

Small farmer agricultural production recovered again in 1991 after the Bicesse peace agreement. However, hostilities resumed at the end of 1992 with more of the population being displaced, reducing still further the agricultural labor force. This same pattern has continued up to the present time with numerous false starts. Just when peace seemed to be breaking out on a more permanent basis, allowing displaced persons to return to their areas of origin, soldiers to be demobilized, and farmers to resume cultivation, hostilities would resume.

During the periods of peace, production of basic food crops (see Section III) grew rapidly; it is apparent that reaching a state of food self-sufficiency in rural areas would not be too lengthy or difficult an undertaking. The main problem arises with food supply for the major cities, particularly those on the coast such as Luanda, Lobito, Benguela and Namibe. Most of these areas have been largely import dependent for a number of years.

## SECTION II

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### Overview of the Agricultural Sector

#### A. Agricultural Resources and Climatic Regions

Angola is the second largest country in Sub-Saharan Africa after the Democratic Republic of Congo with an area of 1,246,700 square kilometers; it is divided into 18 provinces, one of which, Cabinda, is separated from the rest of the country by the outlet to the Atlantic of the DRC and the Congo river (see map 3).

In distinct contrast to many countries in Sub-Saharan Africa, Angola has a good resource base for agriculture production. Agroclimatic conditions vary widely from humid tropical lowlands in the north and northeast to desert in the southern coastal belt bordering Namibia (see map 5). The central highlands (planalto) have considerable areas with good rainfall (1,500 to 2,000 mm per year) and moderate temperatures but have somewhat acid and infertile soils; the highest rural population density lives in this region of the country. The southern coastal regions are much drier, with rainfall ranging from 100 to 1,000 mm per year, where irrigation is essential for agricultural production, but for which there are considerable surface water sources (see map 6).

The climate is strongly influenced by altitude and geographical location. The coastal belt is the driest region, especially in the south. Climates are generally milder and wetter at increasing altitudes, and mean temperatures over most of the country range between 16 and 26 degrees centigrade, with the coolest regions being in the planalto and the hottest in the northeast interior. Altitudes rise from the coastal band at up to 200 meters above sea level to more than 2,000 meters in the planalto region. Most of the country lies within an altitude band of 1,000 m to 1,500 m (see map 7).

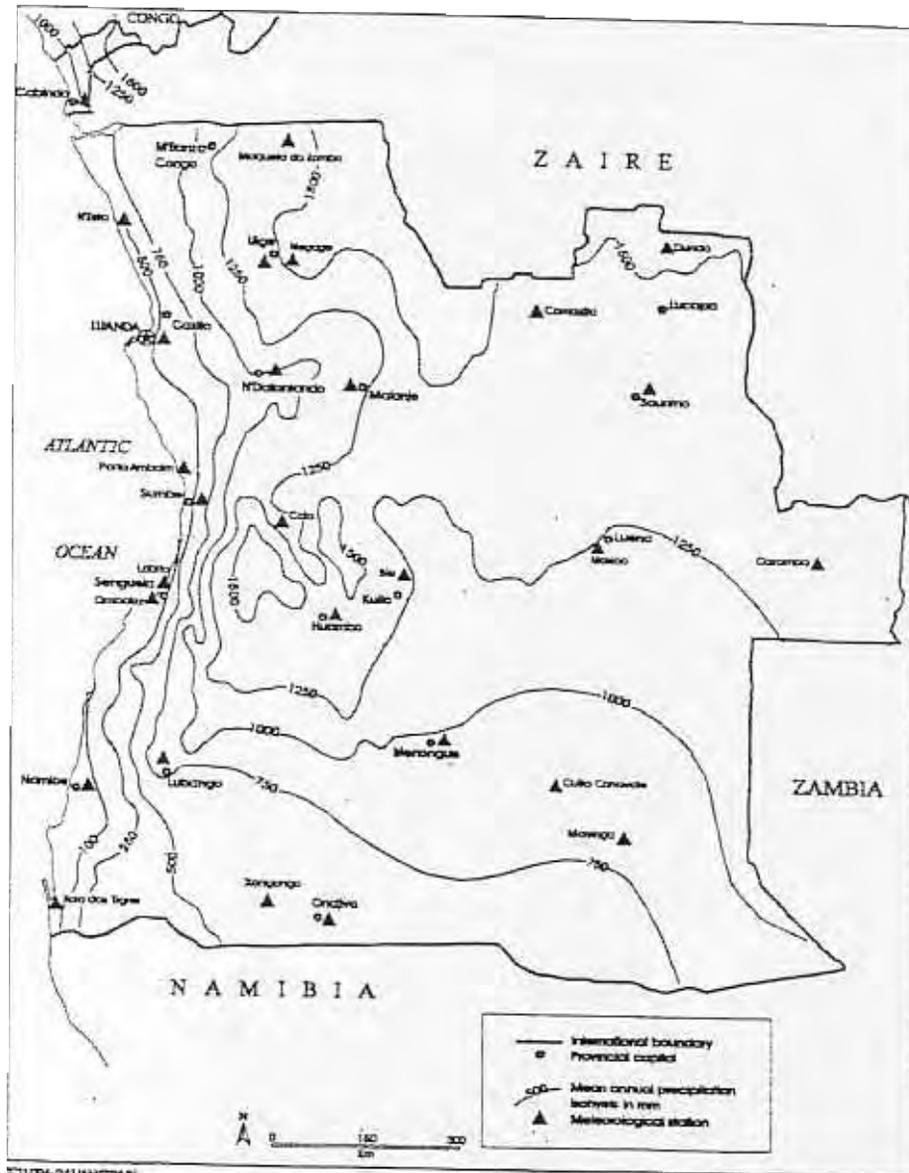
Surface water availability is substantial, equivalent to almost 12,000 cubic meters per head of population per year, but these areas of water resources do not match well with areas of demand for agriculture and domestic use. The depth of groundwater is between 5 and 30 meters in the coastal zone and 10 to 30 meters in the planalto. However, in the semi-arid areas of the south, groundwater levels may extend to depths of more than 200 m and well water yields are low.

There are numerous river basins in Angola with most rivers sourced from the planalto. The country's main rivers are the Zambese, Congo, Cuanza, Cuando, Cunene and the Cubango/Kuito of which the Zambese and Congo rivers are two of the most important in Africa (see map 8).

Soils are quite variable (see map 9) and in many cases change their make-up within short distances. The southeastern part of the country has soils derived from Kalahari sands with very little cropping being carried out. Granitic and gneissic formations predominate on the highlands and planalto where the most important cropping soils exist. Oxisols, which are of low fertility, acidic, low in organic matter, and commonly affected by aluminum toxicity predominate, but there are large areas of alfisols and utisols that are reasonably fertile and suitable for crop production. Ferralitic and paraferalitic soils are widespread in central and northern parts of the



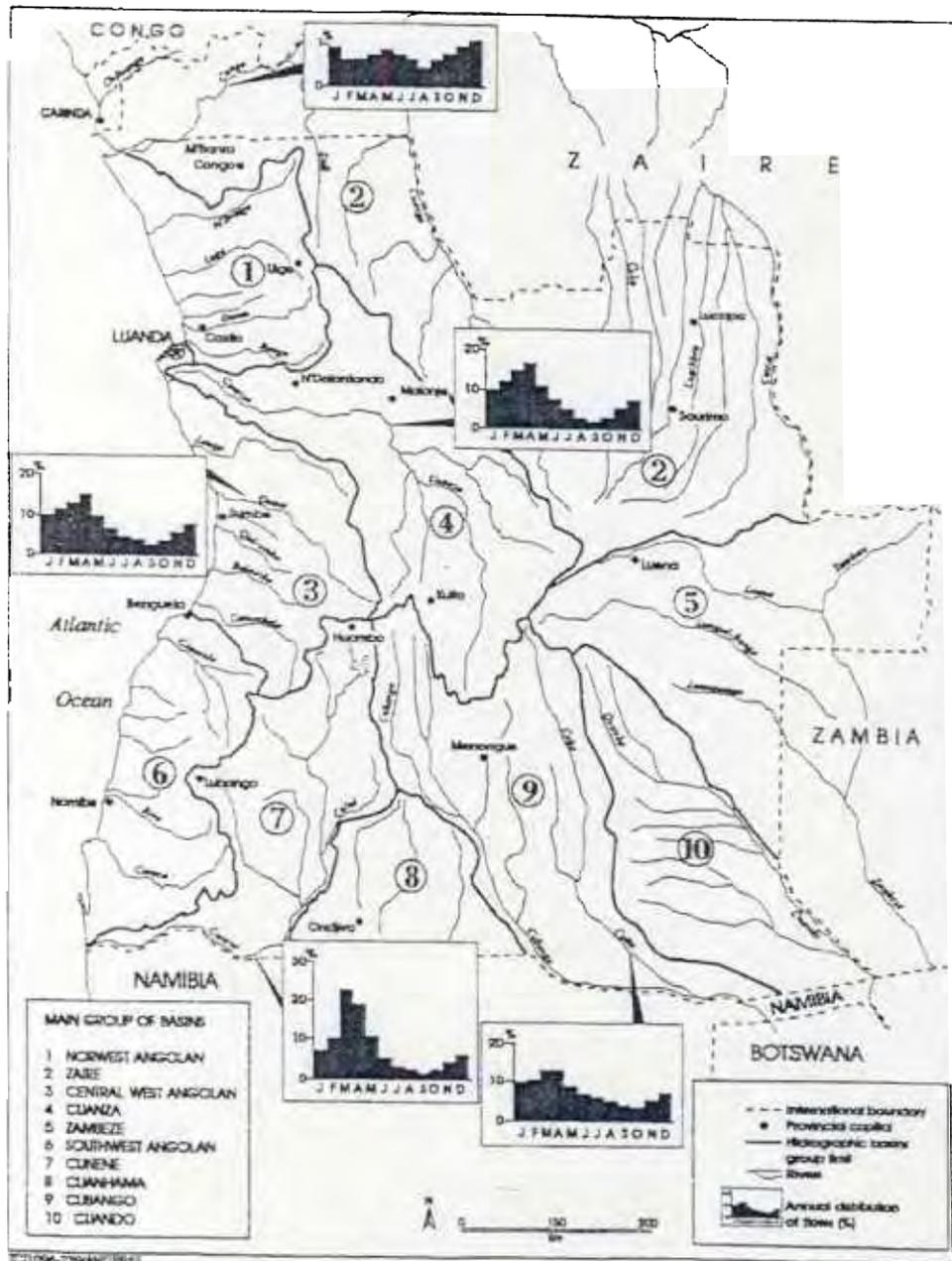
Map 6. ANGOLA: Average Annual Rainfall

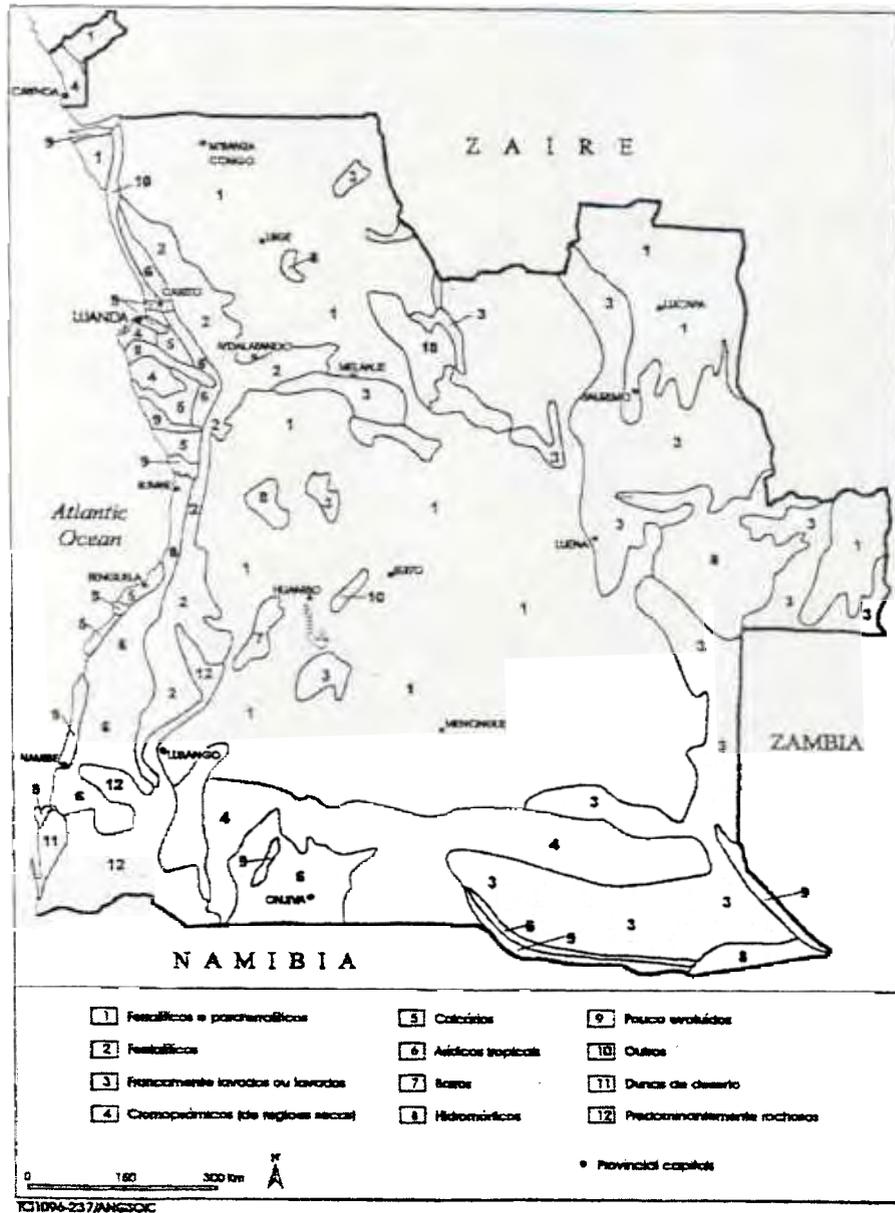


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Map 8. ANGOLA: Main Basins and River Characteristics





planalto. The sandy soils of the coastal belt and parts of the foothills have low fertility and low water holding capacity and are prone to salinity problems.

There is ample land suitable for cultivation of reasonable to good potential. Estimates range from 5 million to 8 million hectares, of which about 25 percent is currently under cultivation. There are relatively high concentrations of population in some parts of the maize growing areas of the planalto (Bie, Huambo, north Huila, and parts of Benguela provinces) and a high concentration of people on the land surrounding the main cities. Given the widely used systems of extensive livestock production and shifting crop cultivation, some concern has been expressed that land is not necessarily so abundant in certain parts of the country and that this could lead to conflicts on land use in the future (see subsection D).

*(Some of the above has been extracted and extrapolated from FAO's "Agricultural Recovery and Development Options Review", July 1997).*

## B. Farming Systems

There are five main smallholder-farming systems used in Angola dependent to a certain extent on the vegetation zones (see map 10).

*1. Cassava-based food production systems* predominate in the humid north and northeast; however, in recent times cassava production has spread into areas further south. Small ruminants provide an important source of protein and vegetables are grown in the dry season in irrigated lowland areas close to rivers and streams, commonly known as "nacas." Sales of cassava and vegetables provide the main source of income. Upland rice is also commonly grown in these regions on the higher ground known as "lavras." Land preparation is carried out manually with virtually no application of fertilizers or pesticides except occasionally in small quantities on irrigated vegetables.

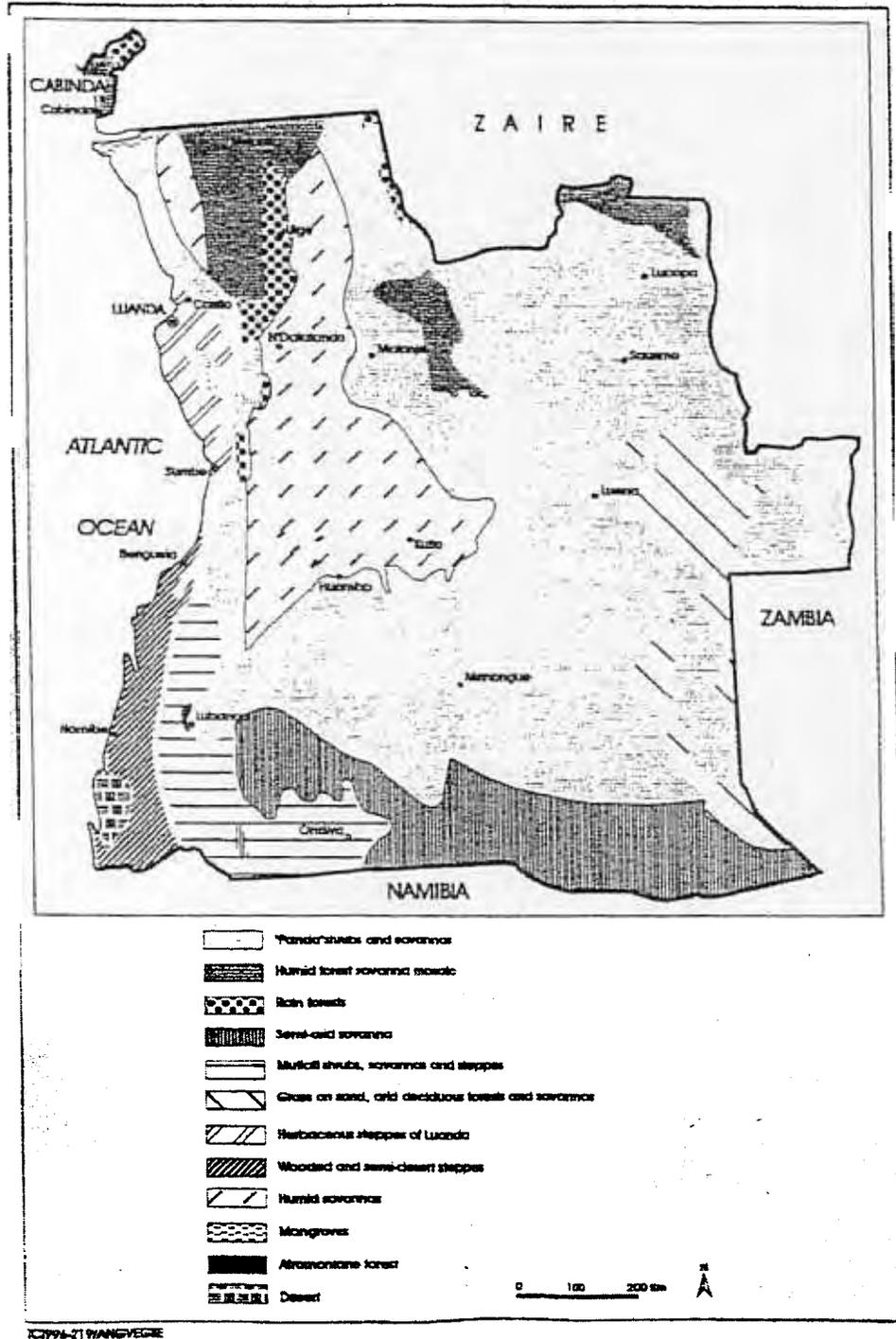
*2. Coffee-based systems* are found in the northern region and parts of the planalto. These farmers also grow a variety of food crops, mainly to cover subsistence and family needs, with coffee generally providing the main source of income.

*3. Maize-based systems* are predominant in the populated parts of the central planalto. Most farmers used to use draft animals for land preparation, husbandry and transport; many also used fertilizers. Farmers in nacas grow irrigated vegetables and maize during the dry season. Maize, often intercropped with beans, cassava or groundnuts, provides the most important source of income.

*4. Sorghum/millet systems* are mainly to be found in the southern provinces, where they are associated with cattle raising, based primarily on foraging of natural vegetation. Cattle from this area have also provided the basis for the draft power used by farmers in the planalto which has been almost wiped out due to the continuing conflict.

*5. Irrigated production systems* have been developed particularly along the coastal belt and in the green belts surrounding the major cities and towns. Sales of vegetables give families their income and purchasing power.

Map 10. ANGOLA: Vegetation Zones



## C. Land Tenure

We found unresolved land tenure issues to be prevalent in almost all areas and with most people we visited. Tenure problems are expressed in various ways — good productive land remaining idle while local residents and IDPs toil on poor land; land degradation in many areas; peasant farmers moving onto previous but now idle colonial or government plantations; the government conceding large tracts of land to interested parties while denying use to others; inability to receive credit without title to land, etc. At the root of these problems is the lack of secure access to land.

### C1. The Land Tenure Legacy

Clearly, as Angolan agriculture transits toward development, secure expectations to land use rights will be vitally important for maximizing investments on and productivity from agricultural land, as well as minimizing the conditions leading to conflicts over land ownership and use. Unfortunately, land tenure conditions in Angola today (including legislation), reflect overlapping and unresolved claims to land that have accumulated over time. And, the situation of displaced persons and returning military personnel add further conflicting dimensions to an already complex problem. The principal claimants to land that will, in many situations, come into conflict on a given parcel of land are as follows:

Local land-use systems	pre-colonial to present
Portuguese – expulsion-compensation	Colonial
State expropriation and ownership	post independence
State concessions	1992 to present
Resettlement (displaced persons-military)	Present
Occupation of unused land	Present

*Local land-use systems.* These systems currently manage more than 95 percent of land-use units in the country. By nature they are land extensive and vary by region. For example, in cropping areas they may involve a combination of both communal land and individual family land allocation for shifting cultivation, pasture for draft animals and other livestock, and fuelwood collection. In more arid regions, the system may be more pastoral in nature and involve long-distance migratory grazing.

Shifting cultivation and migratory grazing leave a portion of the traditional land use system in an apparent “unused” state for periods of time. Further, decapitalization of peasant farms as a result of the war (e.g., loss of draft animals) has reduced their ability to cultivate previous land areas, or the need to utilize all livestock pastures. This gives additional appearance of underutilization of land and can come into conflict with legislation (Decree 4/92), which authorizes state confiscation of abandoned, and unoperational agro-pastoral properties.

*Former Portuguese colonial property rights.* The Portuguese colonists expropriated some of the better farming land and compensated local Angolans with “equivalent” quality adjacent land, which in practice was of inferior quality. These were large farms that after independence became property of the state. However, in many instances, these lands are now reoccupied by local population, or are used temporarily for relocation of displaced persons, remain idle land, or

increasingly are used for granting of large land area concessions to individuals for “modern farming.”

Thus, there may be overlapping claims on these properties, including those of the Portuguese colonists or their families. Some provisions of the colonial laws may still be valid, if they do not conflict with Law 21-C/92 or if they deal with situations not covered by Law 21-C/92. Further, the preamble to the Law clearly states that original local community land rights will be protected.

*State ownership.* Following independence, the state took ownership of all land and natural resources and this remains the cornerstone of the legislation.

*State land concessions.* Anecdotal evidence is that a number of large parcels are being ceded to interested parties in the government. We have no direct evidence of the extent of this. We did visit an 870-hectare parcel of land (formerly a large state fruit farm) on the outskirts of Humpata in Huila Province. This parcel was being ceded (sold?) to a number of local producers for fruit production in parcels of 2.5 to 10 hectares. The process for selecting individuals and relating these individuals to specific parcel sizes had not been determined.

*Resettlement of displaced persons and demobilized military.* The size of the land area needed for resettlement of displaced persons and demobilized military personnel is large enough to cause conflicts with local people or result in the resettlement of these people on idle land not suitable for farming, as has already happened with placement of many displaced persons.

*Occupation of unused lands.* As noted above, there are many instances in which settlers are occupying actual or apparent unused land. Additional cases may materialize as displaced persons attempt to return to their former lands. In other situations, recapitalization of farm operations (return of cattle and draft animal power) will allow cultivation of greater areas per family and require greater areas for pasture. Thus, some of the apparent unused land will revert to previous use levels.

## **C2. Toward Resolution of Land Tenure Issues**

Several institutions are initiating work on resolving this complex issue. The sense is that these multiple and overlapping land tenure issues cannot be adequately and equitably resolved at the national level. Rather, the best way to reach an equitable understanding among conflicting claims is to work toward conflict resolution at the local level. They envision a several-step process at the local and regional levels that involves reaching a consensus among interested parties. Also, because of differences between regions and the need to arrive at a local resolution to conflicts over land rights, a relatively small area is needed.

The first step will be to map the overlapping claims to land. Second, a negotiation process will be undertaken to arrive at a local consensus. Third, provisional title will be given. Fourth, as an incentive to engage in this process and to aid further development, some assistance will be provided for community rehabilitation, i.e., schools, infrastructure, markets, etc. (a form of integrated rural development). Finally, this process will be replicated several times under various conditions to lay the basis for eventual national legislation on land tenure. This is a long-term effort.

Presently, this work is being coordinated in MINADER with collaboration and support from FAO. Italy and France have indicated interest in providing support as well. We are recommending that USAID consider supporting this collaborative effort.

*Note: The discussion in this section draws heavily from Working Paper 13, (Report on Land and Natural Resource Access and Management), volume III of the FAO report entitled "Angola: Agricultural Recovery and Development Options Review", Report No. 96/116 TCP-ANG, 1997*

## **D. Status of Agricultural Markets**

Efficiently functioning markets are essential to a prosperous rural economy. Under the current conditions of instability, and badly destroyed and depreciated infrastructure, markets in Angola cannot perform well. Further, in the short time available to us, and given the travel limitation imposed by the security situation, we could only sample very generally the current status of rural markets. Therefore, what follows are general impressions gathered from visits to open markets in Luanda, Kuito, Lubango (including regional markets around Lubango – Humpata and Chibia), Malanje, N'Dalatando and historical price data from Kuito and Malanje (CARE, World Vision). We have also included a discussion of estimated import and export parity maize prices under long-run cost and price assumptions to place in perspective the prospects and outcomes for meeting regional and national import substitution and possibly export goals. Although the discussion uses maize as an example, the implications cover a broad range of domestic and imported items.

### **D1. Traders, Infrastructure, and Market Performance**

In the secure areas around Lubango and Luanda, we found the markets were functioning well. A number of both open and closed stalls were available, a wide range of products were offered for sale, the markets were very busy, and competition was evident in terms of the number of buyers and sellers and in pricing for most products. In Malanje, Kuito, and N'dalatando, the markets also appeared to function well, although volumes and product choices were lower and the products were generally offered for sale in open areas. In all cases, the infrastructure was less than desired, but did not appear to inhibit market operation.

Each market was also performing accumulation and transshipment functions with trader and truckers — apples from Humpata to Benguela, cassava meal and maize from N'Dalatando to Luanda, and a very limited amount of cassava meal from Malanje to Luanda. It is significant that the major tonnage transported was toward the interior of the country, with backhaul quantities from the interior market still somewhat limited. Under normal conditions one would expect the reverse to be true, i.e., a major flow of unfinished agricultural products to the main coastal urban areas, with some backhaul of finished goods to the interior. In contrast, we found a large amount of finished goods and processed (imported) agricultural products moving to the interior.

A random list of informal market prices in various coastal and interior cities is shown in Table 1 on the next page. There are wide differences in pricing of the same product among markets, indicating that a combination of poor market price knowledge and market separation are at play.

Table 1. ANGOLA: Local Informal Market Prices - January -February 2000

	Luanda	Kuito	Lubango	Kz/kg and Kz/ liter		Melanje	N'dalatando
				Chiba	Humpata		
<b>Corn</b>							
Yellow domestic		2.2			1.35	0.8	
Yellow imported	3.5					0.4	
White domestic	5					1	
<b>Corn meal</b>							
Yellow domestic		2.5	1.4	1.4		1	
Yellow imported	3	2					1.5
White domestic	2.5		1.6	1.6			
<b>Wheat flour</b>							
Cassava Flour	6.6	4				1.3	2
Beans		5		4.5		2.5	
Rice	3	5				3.5	
<b>Ground nuts</b>							
Sugar	12	5				3.5	3
Veg. Oil	18	11	7.5	10		7	10
<b>Eggs (per egg)</b>							
Chicken Whole US (frozen)	1	2.5	1		1	19.2	1.5
Apples					0.55		
Fertilizer		12					

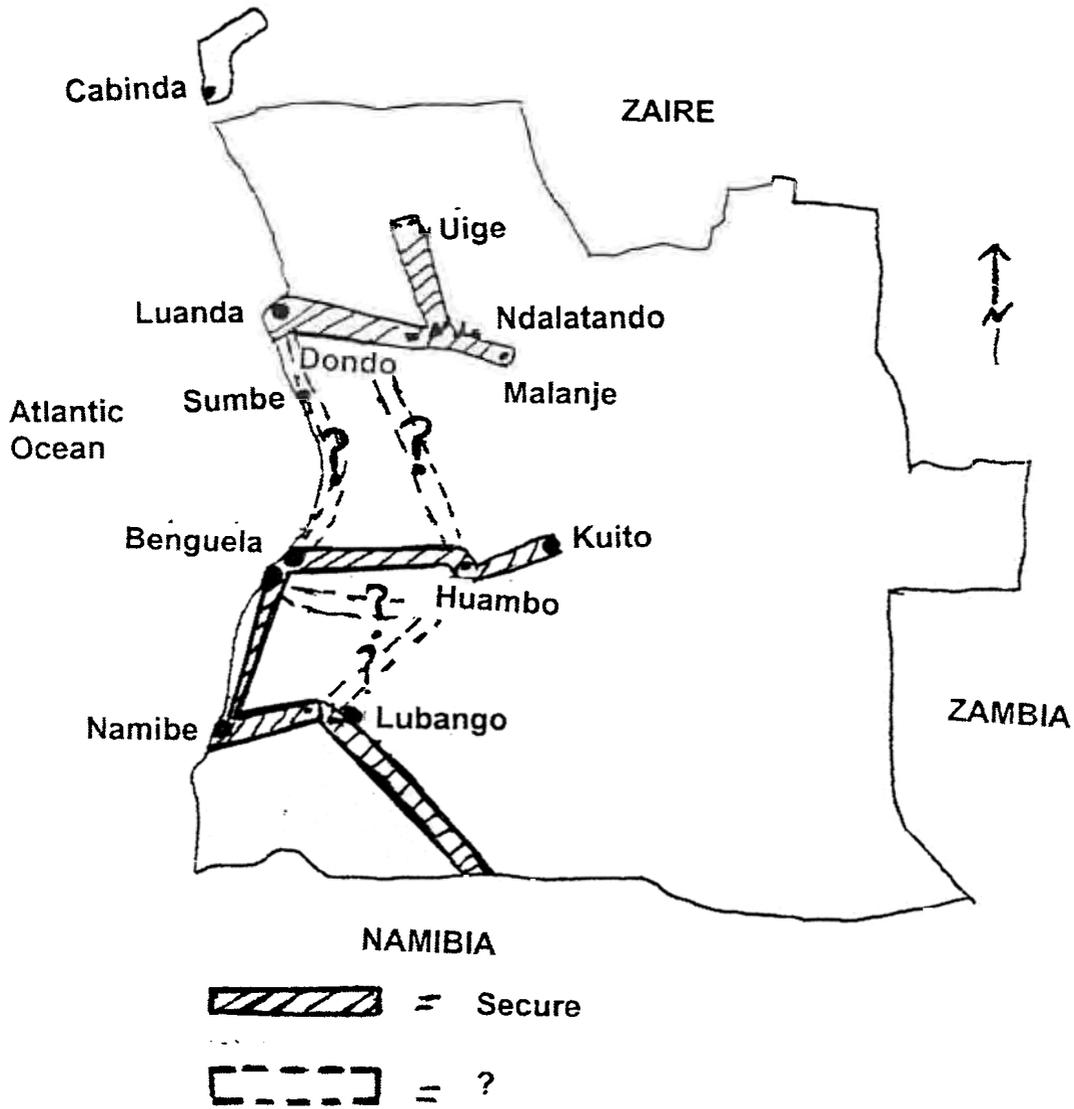
## D2. Transport

The experience of the recently opened Luanda-N'dalatando-Malanje corridor (see map 11), including the associated markets, is instructive. It highlights the huge marketing problems posed by a debilitated road network. Two transport systems currently operate in this corridor. A system of large trucks (20-30 ton capacity) transports World Food Program relief supplies from Luanda to Malanje, and private traders operate between each of the cities, often using N'dalatando as a transshipment point. The distance from Luanda to Malanje is 450 km, from Luanda to N'dalatando 280 km, and from N'dalatando to Malanje 170 km (see map 12).

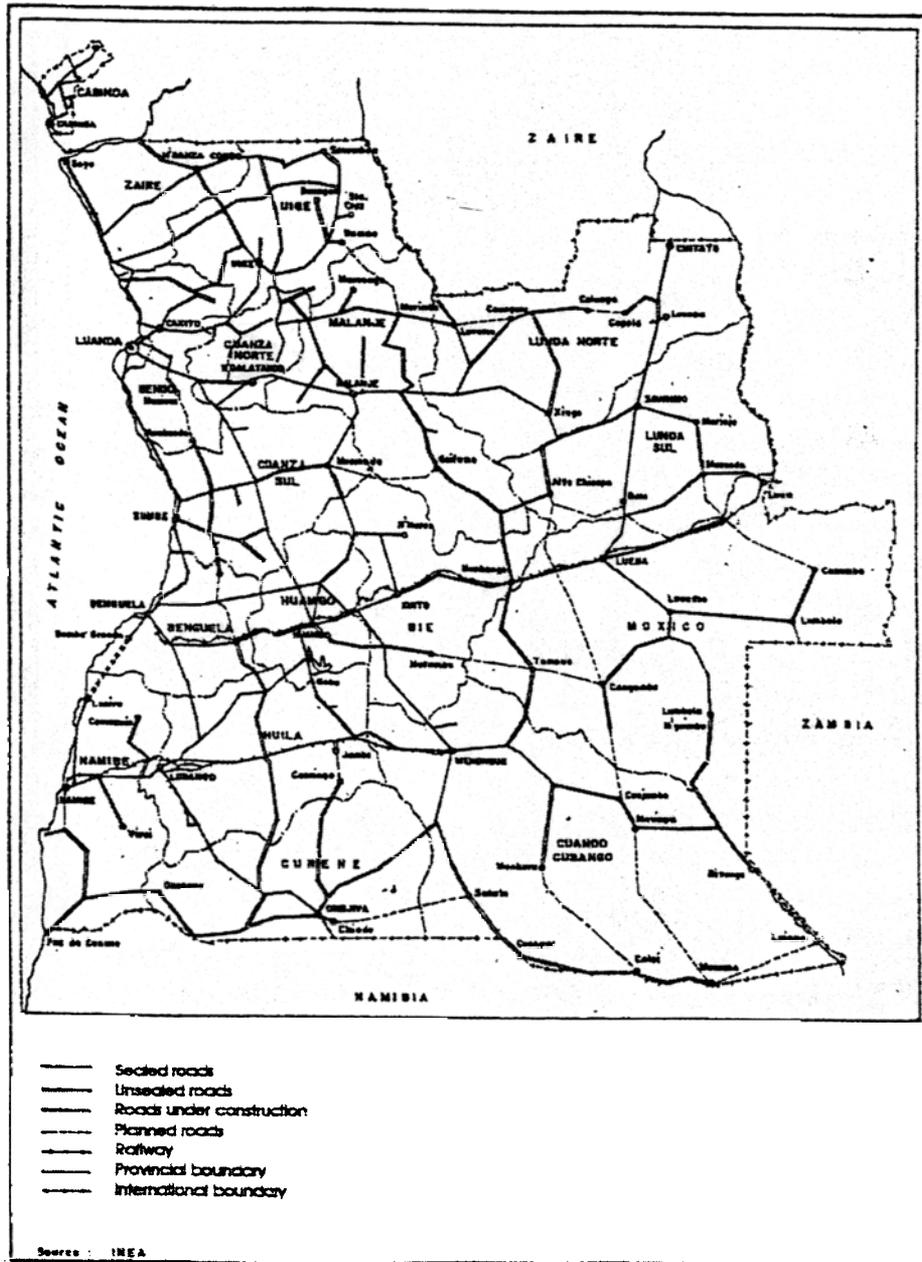
The road is in a state of serious disrepair, especially the first 35 miles east of N'dalatando toward Malanje. This stretch requires 4 hours to pass. The total trip from Luanda to Malanje requires three days. The backhaul with a reduced or empty load takes two days. Turnaround time with loading and unloading and frequent repairs is 8-9 days. With passable roads, the time could be easily cut in half and perhaps less. With good roads it would be an easy one-day trip. Thus, the current road conditions necessitate at least a doubling and perhaps tripling of the truck fleet necessary to carry a determined tonnage in a given time frame.

The costs of transport reflect these harsh road conditions. WFP pays the truckers \$120/ton one-way, Luanda to Malanje (450 km), but restricts the truckers to no backhaul. The truckers feel

Map 11. ANGOLA: Transport Corridors



Map 12. ANGOLA: Main Road Network



costs are more like \$130/ton, so they accept a little backhaul (cassava meal at \$90/ton) to make up the difference. Local merchants pay \$100-\$130/ton to bring in merchandise from Luanda. Refrigerated items cost \$200-250/ton. Private trucker costs between N'dalatando and Luanda (280km) are about \$68/ton and between N'dalatando and Malanje (170 km) they range from \$50-100/ton depending on the space occupied per unit weight. Traders can accompany their cargo to Malanje (on the back of the truck) for an additional \$8.

In other markets, trucking costs reported were \$20-25/ton from Namibe to Lubango (180 km, grain), and \$130/ton from Lubango to Benguela (500 km, apples). Thus, the transport costs we have recorded for bulk non-refrigerated products range from a low of about \$.12/ton/km in Lubango (better roads) to a high of over \$.30/ton/km in the N'dalatando-Malanje corridor (very badly deteriorated roads). Undoubtedly there are both higher and lower costs in other areas of Angola. It is important to note that Brazil, with passable roads, and a similar escarpment to descend to coastal ports, has a fairly uniform truck cost of about \$.02/ton/km. The United States, with an efficient river transport system, has significantly lower marketing costs than Brazil. These are two important competitors in international markets.

### D3. Market Margins

Marketing margin — the difference between what the farmer receives and the end user pays — is an important determinate of farm-level profitability. Angola is a price taker in international agricultural product markets. Therefore, the end user price is set in those markets, and the farmer receives the residual left after the marketing system pays its costs.

The international market price can be viewed by a country in two ways, as an *export parity price*, or as an *import parity price*. For importing countries, the import parity price (the cost of bringing imports into the country) is the relevant price for domestic producers, because they have to be sufficiently productive to meet this border price.

For exporting countries, the relevant price is the export parity price. This is a lower price because international transport costs must be covered. Thus, exporting countries must not only have a highly efficient low-cost agricultural sector, they must also have low marketing margins. In this instance, Angola's high marketing margins cannot be overcome by efficient production. An example of the international maize market makes this very apparent.

Because the United States is the major maize exporter, the departure point in this example is the long-run export parity price for maize, FOB New Orleans of \$115/mt. (The maize price is currently about \$20/mt lower than the long run price). Note that import taxes in Angola are currently greater than export taxes; hence the \$6/mt difference in port clearing costs between imports and exports.

Import Parity Price	Export Parity Price
U.S. farm-level price	\$100/mt
U.S. market margin	\$15/mt
Maize price Fob New Orleans	\$115/mt
International transport costs	\$40/mt
Maize price (Rotterdam, Luanda)	\$155/mt \$115/mt

Import Parity Price	Export Parity Price
Port-clearing costs – Luanda	\$38/mt \$32/mt
Import (export) parity price Luanda	\$193/mt \$83/mt
Market margin Huambo-Lobito	\$75/mt \$75/mt
Price Huambo	\$118/mt \$8/mt

In the above example, given high port-clearing costs and high internal marketing margins, it will be impossible for Angola to compete in maize export markets. On the other hand, the high port-clearing costs add to the value producers would receive as long as a maize deficit condition exists in the country. Further, high internal transport costs limit the distance that maize can be profitably shipped and still provide a reasonable return to farmers. For example, while prices in Huambo would be about \$118/mt, Kuito could expect only \$93/mt and Malanje even less at about \$68/mt (see map 13 on the next page). With improved port clearing cost levels and/or lower port taxes, prices in the interior would be commensurately lower than those shown above.

Alternatively, if we consider import substitution at the regional level only (which is the probable situation for some production areas until roads are improved), then a different price structure emerges, one more aligned with current interior prices. In this instance, as long as imported maize is shipped to Huambo, the local price (regional import parity price) will be \$268/mt (Luanda \$193/mt plus transport costs of \$75/mt for a total of \$268/mt). This is a very strong incentive to local producers. It translates to about Kz1.6/kg, or similar to recent prices in interior markets (see Table 2 on page II-18 for a series of simulated maize market prices based on distance from port city, alternative transport costs, and two levels of import and one level of export parity prices).

Finally, if we consider seasonal distribution of supply and demand for maize, we can expect large price swings between the harvest season when maize is in surplus (shipped to coastal market, \$118/mt) and the inter-harvest season when maize supply is in deficit in the Huambo market (\$268/mt). In this instance, post-harvest storage on-farm or in local urban areas could be very positive in maintaining the market deficit price for a longer time and for a greater share of the total crop, strongly enhancing farmer income in the process.

Our example is maize, but other products face the same transport costs and a number of imported food items including wheat, rice, vegetable oil, sugar, and a variety of animal products (fresh and frozen) can be found in all interior markets. Clearly, some of these items receive a certain level of subsidy either by the government (wheat), or as emergency food relief, but many of the imported items in the markets are the result of private trade and reflect the market potential that exists for regional value added production.

#### **D4. Consumption-Production Imbalances**

There is little reliable information on the actual production-consumption levels of various food items. In May of 1999, a joint FAO/PAM mission visited Angola to estimate food import needs for the 1999/2000 period. We use their estimates below to provide a rough measure of the current level of self-sufficiency for major food items.

Map 13. ANGOLA: Marketing Margins to Coastal Markets (02/00)



Table 2. ANGOLA: Simulated Maize Import and Export Parity Prices Based on Distance From Port City Under Alternative Truck Transport Costs In \$US/Metric Ton

City	Km From Port	Alternative Truck Transport Costs - \$US/mt/km				
		0.02	0.05	0.1	0.2	0.25
<b>Regional Import Parity Price - \$US/mt</b>						
Port	0	193	193	193	193	193
	100	195	198	203	213	218
Lubango	200	197	203	213	233	243
Huambo	300	199	208	223	253	268
Kuito	400	201	213	233	273	293
Malanje	500	203	218	243	293	318
	700	207	228	263	333	368
<b>National Import Parity Price - \$US/mt</b>						
Port	0	193	193	193	193	193
	100	191	188	183	173	168
Lubango	200	189	183	173	153	143
Huambo	300	187	178	163	133	118
Kuito	400	185	173	153	113	93
Malanje	500	183	168	143	93	68
	700	179	158	123	53	18
<b>Export Parity Prices - \$US/mt</b>						
Port	0	83	83	83	83	83
	100	81	78	73	63	58
Lubango	200	79	73	63	43	33
Huambo	300	77	68	53	23	8
Kuito	400	75	63	43	3	-17
Malanje	500	73	58	33	-17	-42
	700	69	48	13	-57	-92

Simulated Prices are Based on:

FOB New Orleans -\$US115/mt

International Freight - \$US40/mt

Port Clearing Cost - Luanda - \$US38/mt (imports)

- \$US32/mt (exports)

March 2000 Angolan truck transport costs and maize parity prices

1999 Brazilian truck transport costs

Cereal production was estimated at 533,000 tons for the period. A majority of this is maize, 428,000 tons. Rice production was estimated at 3,000 tons with the remainder provided by sorghum and millet. Wheat had no local production.

Consumption needs were estimated at 1,038,000 tons, with 938,000 tons for food, and 100,000 tons for seed, animal feed, and other uses. Import needs were estimated at 505,000 tons. Thus, in general terms the country is supplying slightly more than one-half of its cereal and other grain needs.

Among cereal crops, wheat imports were estimated at 220,000 tons with no local production, rice at 70,000 ton, with 3,000 tons produced locally, and other cereals at 215,000 tons of which most is maize. It is noteworthy that wheat accounts for more than 20 percent of cereal consumption, but is not produced locally.

Cassava production and utilization were estimated at 3,130,000 tons, of which 2,360,000 tons were consumed as food. There were no imports or exports of cassava.

Thus, self-sufficiency levels are slightly greater than 50 percent for all cereals with wheat at 0 percent, rice at 4 percent, maize about 50 percent, and sorghum and millet at near 100 percent.

## **E. Agricultural Support Services**

### **E1. Credit**

There has been no formal rural credit available in Angola for almost a decade. The Government of Angola established the Caixa de Credito Agropecuario and Pescas (CAP) to provide credit to the agricultural sector, specifically to small enterprises, farmers and fishermen, but it never had time to establish itself before the internal war began. CAP is part of the Banco Nacional of Angola (BNA) and did not have financial autonomy. It now looks as though the CAP will be liquidated in the proposed reorganization of the financial sector in the country's stabilization and adjustment program.

Formal credit has never been provided directly to small farmers. In many cases in the past there were informal credit arrangements through rural traders. Also, small farmers have engaged in barter trade as a substitute for more formal credit arrangements.

Government created the Fundo de Apoio ao Desenvolvimento Agraria (FADA) – Fund for Support to Agricultural Development. This fund has received substantial amounts of public funds, with which it has financed a wide range of activities on a flexible basis. The administration of this fund has been non-transparent in its workings and has had a small staff administering it. With its present structuring, it could not be considered as a credible rural finance institution capable of channeling substantial funds into the rural sector.

The GOA is actively studying ways to help with the rural credit problem and is considering setting up a new fund, linked in some way to the revenues received from the oil industry. This might be tied to a levy on quantity of production specifically allocated to agricultural

development since agriculture has suffered considerably over the years due to distortions in the economy caused by the oil revenue induced over-valued exchange rate.

In addition, it became increasingly apparent in our discussions in the provinces that the re-capitalization of the rural economy needs to be urgently addressed. A key issue that continually arose was the question of Lei da Terra (land tenure law), needed to give farmers some means of providing the collateral security required by lending institutions.

## **E2. Extension and Research**

Considerable numbers of field staff are still nominally employed by IIA and IDA centrally and in the provincial delegations. However, the research, extension, and seed supply services have almost ceased to function.

The farming community tends to be a traditional community and industry whose skills and knowledge have been handed down over the generations. This is certainly the case in Angola where even in the IDP communities, often situated considerable distances from their home localities, the farming knowledge and know-how is clearly evident. Provided it is able to get the necessary inputs (seeds and planting materials, fertilizers, pesticides and herbicides, animal traction and access to farm machinery, if and when required), it is likely to perform adequately.

This does not mean that capacity building to support farmers with extension services is not vital; in fact, it is even more so, and could even be considered a gender issue, now that women are taking an increasingly leading role in the rural sector. With many able-bodied men caught up in the war, women, in addition to having to carry out their traditional work, are having to handle the family's farming activities. Indeed, our visits up country indicated that extra support through extension services may be required. The organization should be put in place for the ready availability of key inputs, and constraints should be removed as soon as possible. This need not necessarily be a GOA or ministry function, but GOA must ensure that an environment exists that allows providers of these inputs, who may be from the private sector, to function without restrictions.

Research should be focused on adaptive research at farm level rather than on rehabilitation of the research centers; this will require the strengthening of the personnel base of IIA and IDA so that they can support the farmers in the field, especially the growing numbers of women. NGOs should work closely with MINADER provincial offices so that findings can be collated and shared with other regions.

Seed multiplication and the question of crop plant genetic resources of Angola needs to be carefully addressed, particularly with the recent introduction of foreign seed material, a great many of which are hybrid varieties. There is still a substantial amount of locally adapted seed material available and the development and research into the multiplication of this should be urgently being carried out at the farm level.

ANGOSEMENTES, the "parastatal" company that has dealt with most aspects of seed importation and production, has virtually ceased to exist or trade. Undoubtedly there are seed-producing companies outside the country based in Southern Africa that would be keen to come

in and start operating in Angola, possibly on a joint venture basis. However, until the necessary legislation is put in place allowing this type of foreign investment with possible set-off and inducement benefits, it is unlikely that potential joint venture partners or investors will show interest. These same companies have over the last few years been supplying a considerable amount of the imported seed material under the emergency assistance.

In carrying out the above, NGOs would have a key supportive role working with and for MINADER, IDA and IIA.

### **E3. Nongovernmental Organization Activities**

Many NGOs in Angola have assumed considerable importance in the aid cycle as emergency operations begin to operate in tandem with the rehabilitation process. This, in turn, leads into a redevelopment stage for the country.

Although NGOs play an important role in this effort, it is important that they be seen as working closely with and supporting the GOA structures. It is hoped their function is not a permanent one; therefore, their activities should be carefully focused in the agricultural sector to support the provincial government structures.

Many of the more able civil servants have been recruited by NGOs, further weakening government capacity. It is critical that any interventions by NGOs, which in most cases have acquired far greater operational resources (such as vehicles), are agreed to by the government.

NGOs have placed high priority on health and the restoration of agriculture; they have been very much involved in the “seeds and tools” distribution program over the last few years. Bilateral donors have contracted NGOs to provide emergency support and to carry out rehabilitation services in, among others, the agricultural sector; this is because donors have felt that government does not have the ability or capacity to carry out this work.

If interventions are made in the agricultural sector by NGOs, they must be carefully focused to provide a clear beneficial impact. Considerable work is already being done in the field of seed multiplication and this should be continued. Regular contact should be maintained with IIA and results of trials at farm level recorded and compared to achieve optimum results; more comparative trials with recording of results should be carried out.

Other potential interventions in the rural sector for NGOs include:

- Development of on-farm post-harvest facilities, as currently substantial losses occur due to pests and fungi (30 percent or more of stored grain being destroyed)
- Provision of small hand-operated presses for oil production
- Provision of small hand-operated mills for grinding grains and also for processing cassava

- Expansion of breeding programs for small ruminants — rabbits, guinea pigs, goats, and poultry
- Redevelopment of the animal traction capabilities
- Establishment of small revolving credit funds to enable village and women's groups to buy presses and mills (see above)

## **F. Agricultural Policies**

GOA and MINADER have programs for agricultural development, but important policy issues have not been fully considered. This is particularly the case with such issues as “Lei da Terra” (land tenure). Lack of secure land use rights impinges on virtually everyone in every sector in all rural areas of the country, whether they be a large commercial farmer, a demobilized soldier, an internally displaced person, a returning refugee, a provincial civil servant, an ordinary small resident farmer and indeed and importantly all those policy makers at the center of government and in the relevant ministries in Luanda.

MINADER's strategy/policy is reactive and short-term. It is built around a policy of food self-reliance for the IDPs with possible support to micro-enterprises at the village level, to small-scale traders, to the green belt areas, and to the confined areas surrounding the major towns and cities.

There appears to be no policy regarding the division of responsibility and coordination with the proliferation of existing NGOs.

A list of objectives has been published in the “Síntese do Programa Económico e Social do Governo” for 2000 covering all areas of GOA policy. In fact, the “synthesis of intentions” for the productive sectors Agro-Pecuário and Pescas e Ambiente sectors is simply a long list of what could be done, with no prioritized policy for achieving the objectives.

In fact, little is being done by way of policy planning for the agricultural and rural development sectors. Programs are prepared and priorities and lists made of what needs to be done, but the actual policies required for the objectives to be achieved have not been agreed to or put in place.

## **G. Commodity Associations, Farmers Organizations, and Agribusiness Centers**

Previously active associations representing producers, processors, transporters and exporters of all the main crops, both food and industrial, as well as associations representing all sectors of both the livestock and fisheries industries, no longer operate in any meaningful way.

Farmers organizations exist in some areas at a basic level. The attempt to build them up, particularly women's groups, has featured substantially in NGO interventions into the agricultural sector. The approach has been to build from the bottom up, organizing community-based participative involvement rather than imposing a top-down model. Cooperative groups are formed at village level, with a revolving fund accumulated whereby such items as small manual cereal, cassava, and oil mills are purchased.

Often, local producers have gotten together to try to establish a more coordinated marketing system, such as with fruit growers in the Humpata region of Huila province outside Lubango.

Little market information is generally available on which associations, organizations, or groups can rely. An intervention to supply this information countrywide would benefit the farming community at all levels as well as other components of the agricultural industry such as traders and transporters.

“Beneficiary participation” in the design, construction, and operational infrastructure should be encouraged, as evidence from many countries, including in Africa, demonstrates that it reduces costs and ensures better maintenance and more efficient utilization of the infrastructure. For small irrigation works, user associations need to take responsibility for operation and maintenance. In doing this, MINADER would be divesting itself of certain services that it currently should be providing but does not have the capacity to provide.

In Cabinda Province, we met the president and members of the Provincial Farmers Association. This was the only functional farmers association that we were able to contact. This association was operating in a relatively secure area and its membership was composed of farmers at a different level from the “camponistas” and peasant farmers in the other provinces, with the possible exception of part of Huila province in the south. Farmers with similar-sized holdings to those in Cabinda do not exist in most of the war-ravaged provinces. Thus, as the security situation improves and is sustained, it is hoped that further areas will be brought back into cultivation and the need for farmer’s associations will return.

NGOs can play a very important role in building up capacity at the farmer level by helping with the formation of village groups and farmer organizations.

*Agribusiness centers.* A major constraint to development in the agricultural sector in Angola is due to the fact that with virtually no existing private business sector, particularly in the rural areas, there is no value-added agribusiness development. Indeed, post-harvest production activities at all levels is negligible.

## SECTION III

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### **Major Agricultural Commodities**

This section identifies the major food and industrial crops, types of livestock, and principal fisheries present in Angola.

#### **A. Food Crops**

Maize, cassava, and beans are the principal food staples and occupy most of the crop area. However, Angola is able to produce a wide variety of food crops with its varied climatic regions, soil types, and physiography, covering all zones from the humid tropics in the north and northeast of the country through the desert terrain in the south and southwest.

Most food crops are produced under rain-fed farming systems, although a certain amount of production occurs in the “nacas” (inland valley swamp areas) during the dry season and some irrigated agriculture (mainly vegetables) in the coastal belt.

Food crops produced in Angola include the following.

- Maize — both yellow and white
- Beans — various varieties, but mainly “butter,” “cariocca,” and “macunde”
- Cassava — also known as mandioc; second only to maize as a staple
- Millet — mainly in the more arid areas to the south
- Sorghum — also in the southern areas of the country
- Cow Peas
- Potatoes — sweet, European/Irish
- Oil crops — sesame, sunflower, groundnut
- Vegetables — large variety including tomatoes, carrots, cabbages, lettuce, egg plant, etc.
- Fruit — apples, pineapples, pears, strawberries, guavas, bananas
- Wheat — currently imported (sometimes at subsidized prices)
- Rice — small local production, about 4% of consumption
- Soya — not currently grown, but field trials show promise

Some of the above crops were once exported, but none are currently.

#### **B. Industrial Crops**

Industrial crops were once exported in significant quantities. However, currently only a small amount of coffee is being exported. The contribution of industrial crops to the agricultural sector output is minimal.

*Sugar.* There were four sugar plantations at Caxito, Bom Jesus, Catumabela, and Dombe Grande with factories. None are currently producing, and all with the exception of the one at Dombe

Grande, south of Benguela, are unlikely to become operational again because the machinery has been almost totally destroyed and the land allocated for other purposes. The sugar consultants F.C. Schaeffer and Co. of the United States have recently assessed the Dombe Grande plantation and it is understood that, subject to funding availability, rehabilitation will proceed. Potentially large industrial users of sugar, such as the new Coca Cola plant at Bom Jesus, are located some 40 kms from Luanda, but they will be users of refined sugars; no doubt this has been taken into account in the consultant's report. It would be difficult to justify the development from scratch of any new sugar plantation and factory given the low international price of sugar and the many low-cost established sugar producers throughout the world.

*Tobacco.* None is produced commercially any longer, although a small amount is produced on-farm for local consumption and local sale. Otherwise, all tobacco is imported.

*Sisal.* This is no longer produced, although the remains of the old plantations are still visible. As a commodity, this has been overtaken by synthetics and should not be revived.

*Cotton.* Small quantities are still cultivated although it is no longer farmed on a major scale; in some areas the seeds are still used for oil, extracted by simple manual methods. Interest has been shown in reviving the industry, but synthetics and other established low-cost producing countries would make it unlikely to be economically viable.

*Coffee.* This was one of the major export crops of Angola, indeed of Africa, peaking at around 219,000 tons in 1973. However, it is extremely difficult to get an accurate figure on current exports, although a figure between 10,000 and 15,000 tons has been mentioned, with most of this exported through the Democratic Republic of Congo. This major industry and potential export earner may be resuscitated, but it is an area in which the private sector should take the lead. The larger farmer would then most likely operate alongside a substantial smallholder industry, as it is unlikely that the cultivation of coffee would be reintroduced on a large-scale plantation basis.

*Two other industrial crops (tea and cashew) could be developed but up until now have not been considered. In the colonial period, when these crops were being introduced in Africa, Portugal allocated certain crops to each of its colonies, coffee to Angola, and tea and cashew to Mozambique.*

### **C. Livestock**

Cattle husbandry, which was extensively carried on throughout the country, is now mainly concentrated in the south, a relatively secure area. There is also a close and ready market for cattle in neighboring Namibia, and a very small amount of beef is flown to Luanda. The south is also the region of the country where nomadic pastoralists and herders have always existed. One or two substantial ranches also exist in the region, in addition to one of the few medium-sized dairy farms left in the country.

Most livestock industry research and veterinary facilities, as well as many animal processing and animal feed factories, have either been totally destroyed by the war or are in a state of disrepair.

Support to the industry is currently being provided through EU funding on a small scale in the southern secure areas. The reintroduction of these livestock enterprises in the rest of the country awaits the return of a secure situation.

A once flourishing and large swine industry in the planalto region is in the early stages of becoming reestablished, although without support from inputs such as veterinary services, supplemental feed, etc. Goats and other small ruminants such as rabbits and guinea pigs are being slowly established as a form of protein.

Poultry was another once-thriving industry, but today chicken is imported in large quantities. We actually saw frozen chicken produced in the United States being sold in a small, up-country market in Malanje.

Finally, on livestock, one turns to the question of animal traction and the desperate need for this to be actively encouraged and reestablished in all areas, where it was once thriving and contributing very much to crop production. Use of animals benefited farmers in many ways, not only allowing them to cultivate substantially more land but also acting as a means of transport in the rural areas, while at the same time helping to provide nutrient and manure for the soil. Soil degradation and erosion is becoming a serious problem particularly in the secure areas close to towns due to land pressure and consequent little crop rotation and ever-decreasing cultivation cycles. A considerable impact might be made at the village level with the reestablishment and use once more of draft animals

#### **D. Fisheries**

With a coastline of some 1,650 kms, Angola has some of the richest fishing waters in Africa, the most prolific in the southern coastal zone. There are large shoals of pelagic fish as well as tuna and shellfish. Fishing was a major industry in Angola with numerous canneries, fishmeal and fish oil factories, and facilities for drying and semi-curing fish, as well as freezer plants.

Annual catches totaled around 300,000 tons, peaking at almost twice this in 1972. Artisan fisheries accounted for some 30,000 tons per annum, with 1973 fish accounting for 5.7 percent of the country's exports (current production data are not available).

The industry has gradually come to an almost complete standstill; nevertheless, the Ministry of Fisheries puts the sustainable annual catch at about 450,000 tons, indicating huge development potential. Its future depends on the control of unlicensed fishing vessels. To this end, a major SADC project covering Angola, Namibia, Mozambique, and Tanzania financed by the EU will shortly get underway. Headquartered in Namibia, the project will cover all four countries and will set up a monitoring, control, and surveillance (MCS) service for the region.

In addition, Angola has a substantial inland freshwater resource on which many people depend as a source of protein. Local fish from this source were on sale in up-country markets as well as fresh/frozen fish and dried/cured fish from the coast. Virtually no information is available on the freshwater fishery in Angola (for which MINADER is responsible rather than the Ministry of Fisheries).

## SECTION IV

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### **Intervention Strategy Options**

In our selection of intervention strategy options for USAID, we are guided by several observations and perceptions. We believe it is important to recognize, consider, and further study the relevance of these in the continuing evaluation and prioritization of the suggested interventions. Our observations are presented below.

*Market separation.* It is clear that there is no countrywide market. Most major urban areas are market enclaves, separated by security and economic (marketing margin) factors. The southern area is a partial exception to this general characterization, but is still largely separated from the large Luanda market. Security levels ebb and flow and could be ameliorated rapidly but probably will not be. We note that consultants' reports over the past five or more years point to real or potential improvement in security, yet the conditions present at that time still exist today. The economic separation is real. It provides local farmers with a short run price advantage in food deficit situations, but a long-run price disadvantage when local production increases. Correction of this market separation factor requires a massive investment in rebuilding roads and other transport infrastructure. This is unlikely to occur as long as security problems exist, and even after security has been assured, will require years to complete. This condition leads us to the second observation.

*Import substitution focus.* The market separation problem precludes an export potential for the major agricultural regions of the central and north plateau. It will also limit the degree to which producers on the plateau can access coastal markets. These coastal markets may be open only to producers in the western parts of the production regions. Thus, a more probable development strategy for the near and medium term is to focus on regional import-substitution. This strategy essentially leads to product diversification and regional value-added industrialization. The level of value-added processing activities, both in terms of location (farm, local village, major urban area) and investment, of course, will be guided by security concerns. Thus, more major, regional investment could be justified in the South and near principal coastal markets, while local or farm-level investment might be more appropriate for less secure areas. A further observation driving the need for value-added processing and product diversification is the almost complete void of Angolan processed food items in interior markets. Processed products are there in both formal and informal markets, but are all imported. Wheat and rice are mostly imported and are sold in interior markets. Production diversification may be indicated to include these once-produced crops. These are all complex issues that must be investigated further to determine specific interventions. We are not suggesting policy protection for specific product import-substitution, but rather to provide assistance in the identification of opportunities presented by the current marketing margins.

*Land quality and use.* Overlapping and conflicting claims to land ownership and land use rights have accumulated over time. These include: the original local land use systems, the Portuguese colonial farms, post-independence state expropriation, recent and continuing state concessions, resettlement of displaced persons and discharged military personnel, and voluntary occupation of

unused land. We noted situations of both intensively cultivated marginal land and non-use or only extensive use of productive land. To maximize rural productivity and income, these conflicting rights to land use need to be resolved.

*Human and institutional capacity strengthening.* This is a more difficult issue to judge in a short period of time. However, our general impression is that research, extension, and state policy institutions are underfunded, understaffed, and under trained, especially in the area of economic analysis. The transition from a command economy to a market economy is much more difficult for economists than for physical scientists because it involves a significant change in analytical concepts. Sorting out comparative advantage and other production and marketing issues in the Angolan economy requires a significant level of economic sophistication. To this end we have included some intervention options that relate directly to further economic training, and suggest a broader level of human and institutional capacity strengthening be a part of each intervention where feasible. We find that in several situations, the NGOs have hired capable agronomists (often from GOA institutions). They are doing good work in plant trials and seed multiplication, but in most cases there is little capacity strengthening to leave when their work is done. We suggest that, to the extent NGOs participate in the chosen interventions, that human and institution capacity strengthening be integral components of their programs.

## **A. Non-Secure Area Interventions**

We characterize non-secure areas as those situations where occasional security problems exist. These are areas where it would not be prudent to build expensive structures that could become targets for destruction, or would be lost if rural families were forced to leave the area. In terms of geographic locations, these could be areas around the periphery of “safe” urban centers in the center and north agricultural regions. Value-added processing, crop storage, and seed multiplication are suggested interventions.

### **A1. Value-Added, Small-Scale Processing**

*Justification.* Imported vegetable oil is available in all local informal markets at high prices. Domestic oil, with the exception of some palm oil, is not available in any market. A number of local oilseed crops are produced in the regions including sunflower, sesame, and groundnuts. Experimental plantings of soybeans show early promise of superior yields. Local or village processing of vegetable oils would provide a less expensive source of cooking oil for farm families and rural villages, a source of additional income, a by-product protein source for human or livestock consumption, and additional employment for rural or village people. Maize, cassava, and wheat flour are also available in these markets. Farm or village processing would provide employment for women and relieve them of the tedious task of traveling long distances to secure flour and cooking oil. Small, simple, and inexpensive oil presses and milling machines are available in other countries (Zimbabwe). Local production of these machines would be another source of agribusiness development in regional communities.

*Potential participating institutions.* NGOs.

*Recommended level of intervention.* Pilot projects in several regions with a variety of crops at farm and village levels. Follow-up studies to determine impact of intervention.

## **A2. Farm and Village Crop Storage**

*Justification.* Pest and spoilage losses of up to 30 percent are reported for seed and food crop storage. Most local storage facilities have been destroyed during the war. Efficient farm or village storage facilities would allow farmers to extend the crop marketing season, take advantage of off-seasonal peaks in crop prices, and reduce current losses of food and seed.

*Potential participating institutions.* NGOs.

*Reference material.* FAO, 1995. "Post Harvest in Angola," Technical Report OSOR/ANG/502/NET.

## **B. Secure Area Interventions**

Geographically, secure areas are limited [see Section I(C2)]. Currently, the southwestern area of the country is considered secure, as are smaller areas along the coast and around major interior cities. Whether a given area is sufficiently secure for a particular intervention is a judgment that will have to be made at the time the intervention is considered.

### **B1. Land Tenure Conflict Resolution**

*Justification.* Unresolved land issues are prevalent in almost all areas. Tenure problems are expressed in a variety of ways — good productive land remaining idle while local residents toil on marginal land; land degradation in many areas; peasant farmers moving onto previous, but now idle colonial or government property; the government conceding large tracts of land to interested parties while denying use to others; inability to receive credit without title to land, etc. Several institutions are initiating work to begin resolution of this complex issue. They feel work has to begin at the local level in a consensus-building framework. A first step is to map the overlapping claims to land. Next is a negotiating phase among interested parties to arrive at a local consensus. Following this, provisional title is given. As an incentive to engage in this process, and to help with further development, some assistance is provided for community rehabilitation, i.e., schools, infrastructure, markets, etc. (a form of integrated rural development). This process will be replicated under various conditions to provide a basis for eventual national legislation on land tenure.

*Potential participating institutions.* MINADER; FAO; European Union; Italian and French governments; Land Tenure Center, University of Wisconsin, USA.

*Reference material.* FAO 1997. Working Paper 13, "Report on Land and Natural Resource Access and Management," volume III, of report entitled Angola: Agricultural Recovery and Development Options Review, Report No. 96/116TCP-ANG.

*Recommended level of intervention.* Participation in one or more local projects and assistance in drafting eventual national legislation.

## **B2. Value-Added Regional Processing**

*Justification.* Imported processed foods and beverages are found in all markets (local, regional, and national) at elevated price levels. Few Angolan processed foods are available. Farmers in the southern region indicate that surplus fruits (apples, pears, peaches, strawberries) and vegetables (tomatoes, potatoes) at harvest time either rot in the fields or are fed to animals because of lack of fresh produce markets. Cold storage could extend the fresh produce marketing season and processing of food and beverage products could allow expanded production of a greater variety of seasonal crops. A variety of oilseed crops are grown throughout the country (sunflower, sesame, groundnuts) and experimental plots with soybeans show promise as another potential oilseed crop. Oilseed processing would also provide animal feed protein by-products for poultry, swine, and dairy enterprises. In Cabinda, pineapple, coffee, poultry, groundnut, and palm oil are seen as potential value-added products.

*Potential participating institutions.* Golfrate Group Limited, Asif Aziz; Cabinda Golf Oil Company Ltd.

*Recommended level of intervention.* Establish agribusiness centers to work with local producers, commodity groups, and business people to determine product(s), location, and size of processing plant(s), considering market potential and development of raw product supply. Determine advisability of joint-venture operations with foreign concerns. Cabinda Golf Oil is interested in cosponsoring feasibility and implementation studies in Cabinda Province and perhaps other areas. Golfrate is building an oil (fish, vegetable) refining plant in Luanda and would consider an oilseed crushing plant, but would require a daily throughput of 100 tons of raw product (soybeans, sunflower, groundnuts, sesame).

## **C. Support Service Interventions**

### **C1. Early Warning and Price Reporting Systems**

*Justification.* Collection and rapid dissemination of local, regional, and national information relative to commodity prices and commodity availability will help both farmers and traders schedule market activities. Complete market knowledge will help farmers receive better prices for their products. Policymakers will have access to information to improve timing and nature of interventions in agricultural markets when needed. Similar programs have been successful and well received in other countries (Mozambique). This is an opportunity to strengthen institutions at the local, regional, and national level, including the extension service. Price data from regional markets throughout the country will be collected at the same time each week, tabulated, and quickly disseminated through radio and print.

*Potential participating institutions.* IDA; Food Security Office – MINADER; various NGOs; David Tshirley, Michigan State University, USA (Mozambique experience).

*Recommended level of intervention.* Help the Food Security Office – MINADER make this program operational by providing periodic outside technical assistance. Encourage the analysis of data collected, and periodic publication of summary price and other information.

## **C2. Strengthening Economic and Policy Analysis Capacity**

*Justification.* Collection and rapid dissemination of local, regional, and national information relative to commodity prices and commodity availability will help both farmers and traders schedule market activities. Complete market knowledge will help farmers receive better prices for their products. Policymakers will have access to information to improve timing and nature of interventions in agricultural markets when needed. Similar programs have been successful and well received in other countries (Mozambique). This is an opportunity to strengthen institutions at the local, regional, and national level, including the extension service. Price data from regional markets throughout the country will be collected at the same time each week, tabulated, and quickly disseminated through radio and print

*Potential participating institutions.* Ministry of Planning; Food Security Office – MINADER.

*Recommended level of intervention.* Provide for outside consultants on specific projects. Provide support for data gathering and processing. Include local institutions and personnel when evaluating intervention options.

## **C3. Marketing Margin Reductions**

*Justification.* The currently very high Angolan marketing margins have multiple impacts on agricultural production, marketing, and investment decisions. Interior and coastal markets are isolated and separate. Exports of agricultural products from the interior are not economically feasible. Economic access to the large Luanda market is limited to nearby regions. Interior markets can experience wide product price swings when local production is in surplus or deficit. Selection of appropriate farm enterprises or enterprise combination is affected, as is selection and location of value-added activities. Costly road/railroad transport and high port clearing cost contribute significantly to high marketing margins. The reduction of these costs is vitally important to growth in the agricultural sector beyond farm and regional self-sufficiency. Significant reductions in highway transport costs are necessary to open the large Luanda market to producers in the planalto region. In addition to highway improvements, port clearing cost reductions would also help producers in the south and in Cabinda better access the Luanda market.

*Level of intervention.* The financial costs of rehabilitation of highways and ports are beyond the scope of USAID funding. However, the importance of improving marketing margins for agricultural sector growth should be a central point of discussion with GOA. More specifically with ports, cost improvements through lowering of real or administrative costs may be the important link in helping the southern and Cabinda regions invest in product processing for the Luanda market.

## **C4. Personnel Training**

*Justification.* Many personnel in research, extension, and state policy institutions are not adequately trained, especially in the area of economic analysis. The transition from a command economy to a market economy is much more difficult for economists than for physical scientists, as it involves a significant change in analytical concepts. Sorting out comparative advantage and

other production and marketing issues in the Angolan economy requires a significant level of economic sophistication. In addition, some very capable local physical scientists (tecnico agronomos) have been hired away from GOA employment by NGOs, leaving a depleted and less well-trained staff. Thus, additional training at a number of levels is needed.

*Level of intervention.* On-the-job training is suggested with all interventions above by including Angolan personnel whenever project planning, analysis, implementation, or evaluation is carried out. In addition, short courses in Angola or abroad, distance learning, and selective formal degree training should be considered.

### **C5. Establishing an Agribusiness Support Unit (ASU)**

*Justification.* This intervention is contingent on the selection of multiple secure area food processing activities. We are not suggesting it be a stand-alone intervention. Currently, Angola has almost no agribusiness industry and no focal point for the redevelopment, rehabilitation (as appropriate), and renewal of agribusiness.

*Level of intervention.* An ASU would be established as an autonomous unit based in Luanda with subunits set up in secure provinces where corollary agribusiness interventions are being initiated. The intention will be to start operating at a modest level in conjunction with provincial interventions. Then, depending on experience gained, the unit may wish to set up operations and interventions elsewhere in the country, dependent on security. This modus operandi with a modest start will give the unit flexibility to react positively as required and will also enable it to restrict its operational activities if negative situations develop. Although autonomous, the unit management will naturally closely liaise with GOA structures, commodity associations, farmers organizations, NGOs, and all other interested parties. It is further suggested that an advisory panel be set up consisting of representatives of interested parties to help develop priorities, as well as to give transparency to the organization.

In Table 3 on the following page, we have classified the interventions by level of intervention (local, regional, and national - plus security status) and presented a preliminary evaluation based on major or minor impact on selected development objectives.



## SECTION V

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### **Illustrative Activity Design**

Below we outline specific activities drawn from the general intervention strategies developed in Section IV. This is not an exclusive list. The activities selected are meant to serve as examples of how specific activity designs may be developed. They are specific to location, security status, and commodities. The commodity-oriented activities (A-D below) represent production diversification, local storage, and value-added processing in line with our suggestion to support import-substitution projects.

In the secure areas of Cabinda and Lubango, we are suggesting a fruit, vegetable, and livestock product emphasis assisted by the establishment of agribusiness centers. In the less secure highland areas (Malanje and Kuito), we suggest a focus on oilseed crop development associated with village-level processing to replace imported vegetable oil, along with small-scale milling of maize and cassava.

At the national level (activity E below) we propose support for a price reporting service to help farmers and traders throughout the country better market agricultural produce, and in the process, build analytical and policy capacity.

#### **A. Cabinda Agribusiness Center**

*Location.* Cabinda, Cabinda Province.

*Security status.* Secure.

*Purpose.* Increase local income through import substitution by establishing local supply of high quality fruits, vegetables, and livestock products for local and oil industry consumption centers.

*Commodities.* Fresh vegetables, pineapple, oranges, poultry products, fish

*Collaboration.*

- Cabinda Golf Oil Company (cosponsor)
- Cabinda Farmers Association
- MINADER

*Justification.* Cabinda Golf Oil Company supports a large staff of temporary and permanent workers and worker family members in Cabinda. The company currently imports a majority of the fresh food consumed, but would purchase from a local source of high quality food products. It is also interested in supporting local development through its business development office. Local markets contain a number of imported food products.

*Results.*

- Establishment of local food processing and distribution businesses
- Establishment of input supply and other service support firms
- Introduction of new agricultural products and increased production of existing agricultural raw products on both small and medium size farms
- Business, market development, and production training for farmers and business people

**B. Lubango Agribusiness Center**

*Location.* Lubango, Huila, and Namibe Provinces.

*Security status.* Secure.

*Purpose.* Increase local income through import substitution of fruits, vegetables, and livestock products including increased agricultural product production, processing, storage, distribution, and marketing in local and regional markets.

*Commodities.* Fresh and processed fruits (apples, pears, peaches, and oranges), tomatoes, and milk products.

*Collaboration.*

- MINADER
- Local farmer associations

*Justification.* Fruit and vegetable producers are not able to sell all fresh produce in local and regional markets at harvest time. Additional production will be possible with expanded markets. Many food products are imported, especially during the interharvest period. Cold storage will extend fresh fruit season and processing will add additional market outlets for fruits and vegetables.

*Results.*

- Establishment of local food processing, storage, and distribution businesses
- Establishment of input supply and other support service firms
- New product development and increased production and income for medium- and small-size farms

- Business, market development, and production training for farmers and business people.
- Development and dissemination of market information

### **C. Integrated Small Farmer-Village Value-Added Production**

*Location.* Malanje, Malanje Province and Kuito, Bie Province.

*Security status.* Temporarily secure.

*Purpose.* Increase local income through import substitution production, storage and processing of vegetable oils, cereals, and cassava through the introduction of small manual presses, milling machines, and crop storage facilities to serve producer families and local markets.

*Commodities.* Groundnuts, sesame, sunflower, maize, and cassava.

*Collaboration.*

- MINADER
- Local farmer-village associations

*Justification.* Imported vegetable oil is sold in all local markets at prices between \$US 1.40-2.00 per liter. Many local milling and storage facilities have been destroyed. Storage facilities are needed to provide year-round product for processing. Value-added processing will increase local income. Women often travel long distances to secure cooking oil and flour. Local processing will reduce time spent in travel to purchase these food items and provide additional employment and income for women. Crop diversification and nitrogen fixation will improve soil conditions and yields.

*Results.*

- Establishment of local food processing, storage, and marketing
- Crop diversification and soil enhancement
- New product development and increased production and income for medium- and small-size peasant farms
- Business, market development, and production training to farmers
- Development and dissemination of market information
- Enhanced employment and income for women

## **D. Integrated Small Farmer-Village Value-Added Production**

*Location.* Bengo Province.

*Security Status.* Secure.

*Purpose.* Increase local income through import-substitution production, storage, and processing of vegetable oils, cereals, and cassava through the introduction of small manual presses, milling machines, and crop storage facilities to serve producer families and local markets.

*Commodities.* Groundnuts, sesame, sunflower, maize, and cassava.

*Collaboration.*

- MINADER
- Local farmer-village associations

*Justification.* Imported vegetable oil is sold in all local markets at prices between \$US 1.40-2.00 per liter. Many local milling and storage facilities have been destroyed. Storage facilities are needed to provide year-round product for processing. Value-added processing will increase local income. Women often travel long distances to secure cooking oil and flour. Local processing will reduce time spent in travel to purchase these food items and provide additional employment and income for women. Crop diversification and nitrogen fixation will improve soil conditions and yields. Production can be sold in the large informal Luanda markets.

*Results.*

- Establishment of local food processing, storage, and marketing
- Crop diversification and soil enhancement
- New product development and increased production and income for medium- and small-size peasant farms
- Business, market development, and production training for farmers
- Development and dissemination of market information
- Enhanced employment and income for women

## **E. Market Price Information**

*Location.* Luanda and provincial market centers.

*Security status.* Secure.

*Purpose.* Increase farmer income, improve market performance, and strengthen institutional policy analysis through timely collection, analysis, and dissemination of market prices throughout the country.

*Commodities.* All major raw and processed food products.

*Collaboration.*

- Food Security Office of MINADER
- FAO through support of Food Security Office

*Justification.* Provincial and local markets are separated by significant marketing margins and lack of information resulting in substantial short-run price discrepancies. Farmers, traders, and consumers will benefit from improved and timely market information. Institutional capacity for economic and policy analysis is limited.

*Results.*

- Improved farmer income
- Improved market efficiency and pricing
- Strengthened institutional capacity for economic and policy analysis
- Strengthened extension delivery system

## **ANNEX A**

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### **Scope of Work**

#### **Terms Of Reference And Description Of Tasks, USAID Angola Agricultural Sector Assessment, Statement of Work**

##### **Background**

Angola is one of Africa's largest oil producers. It has a wealth of mineral resources and high production for agricultural and forestry products. Unfortunately, ongoing civil war since independence in 1975 has prevented Angola from developing its economic potential. Much of the country's oil is spent on fighting a civil war. A peace agreement signed in 1992 has collapsed and fighting has resumed. There are some prospects for a renewed peace agreement, but at this point prospects for peace are still uncertain.

The Angolan civil war has created large numbers of displaced persons from rural areas. It has also resulted in resident populations that have lost their basic production assets. Extensive land mining has also reduced the areas available for farming.

A USAID mission was established in Angola in 1996. The initial interventions were focused on relief and transition activities for populations affected by the war. The Mission is currently providing emergency seeds and tools to farm families that have lost their production assets due to war. This program is being carried out by grants to Private Voluntary Organizations. These projects have enabled the target populations to rapidly begin meeting their basic food requirements.

##### **Rationale and Purpose**

The USAID Angola Mission is now developing its 5-year strategy for the period 2001 to 2005. The Mission is now considering a strategy, which will provide opportunities for transition from shorter production support activities to a program that has a longer-term perspective and supports broader development of the agricultural sector, particularly for smallholders. It has been recognized by the Mission that, once subsistence needs are met, the most pressing need for the war-affected populations is to move rapidly to producing for markets to satisfy their cash needs and open opportunities to evolve beyond basic survival.

One of the options being considered by the Mission is a Strategic Objective that includes the development of a selected number of commodity chains and/or agricultural sub sectors. This portion of the SO would conceivably be implemented by providing assistance to producers and farmers associations and agro enterprises to identify market opportunities and assist in overcoming the constraints to exploiting them. The proposed strategy may focus on revitalizing limited aspects of smallholder agriculture and agribusiness in Angola to help reestablish/strengthen the links rural sector and private sector traders and processors.

Before deciding to include this type of activity in its strategy the Mission needs a more thorough assessment of the feasibility of this approach in Angolan general and in more precision in terms of the types of activities, target areas, commodities, and implementation mechanisms to consider under this proposed SO.

**Therefore the purpose of the work to be carried out under this Task Order is to carry out an assessment that would provide sufficient information to permit the Mission to decide whether or not to develop an SO that includes agricultural sub-sector support activities.**

The report provided by this consultancy is not intended to provide thorough sub sector analyses or provide a complete design. It is expected to rapidly appraise the constraints and opportunities for interventions in sub sector development to determine whether or not there are any major constraints that would inhibit the achievement of significant results in market led agricultural development activities and identify the areas that appear to present major opportunities and could be further pursued in subsequent activity design work.

## **Description of Tasks**

### *1. Information and Data Gathering*

The consultant will carry out site visits and interviews in selected areas of the country. The purpose of these visits is to obtain an overall understanding of the agricultural sector in Angola and identify potential opportunities for interventions too increase production and income from the agricultural sector in general and for small scale agricultural producers in particular. These visits should include the following informants and areas.

USAID: The consultant will interview officials in the Luanda Mission to obtain background information on Angola, the Missions ongoing activities, the strategy design process, the potential place of agriculture in the new strategy and the resource parameters envisioned for implementation of agricultural related activities.

Donor Organizations: The consultant will visit donor organizations and PVO's. These visits should serve to collect information on the activities that are being carried out and/or planned by donor organizations and obtain other donors perspectives on the types of activities that would be most useful in alleviating food insecurity in Angola.

Government of Angola Agencies: The consultant will visit the relevant GRA ministries and agencies to understand their mandate, policies, activities and capacity. A major focus of information gathering with the GRA agencies is to determine the extent which Government policies and programs can enhance or inhibit development of private market led agricultural sector and obtain information on national and regional production levels.

PVO Projects: The consultant will conduct site visits to PVO projects where food production activities are being assisted to identify potential activities to increase production, market access and value added processing.

High Potential Production Areas: Visits will include areas of the country that are relatively unaffected by the civil war and/or have high potential for increased market oriented production.

These visits will include small-scale peasant farms and commercial farms, processing enterprises and input supply firms and commodity traders in provincial markets and in Luanda.

Private Input and Commodity Traders: To the extent possible the consultant should provide quantitative information on agricultural inputs (imports, types of inputs used and crops that benefit from input use); commodity imports and exports; and major commodities traded on internal markets.

## 2. *Assessment Report.*

The contractor shall provide an assessment report that covers the points described below.

*Overview of the Angolan Agricultural Sector:* The contractor will summarize the major characteristics of the Angolan economy and the agricultural sector, including livestock and fish. This overview should identify agricultural commodities and geographic areas that hold significant potential for creating increases in overall income growth, internal and external trade, and opportunities for increased income for rural inhabitants. This will include the identification of agricultural commodities that are already produced in Angola and as well as commodities that could be produced in response to internal and external markets. The assessment should also provide an understanding of the role of the state in developing agriculture and policy and political constraints to private agricultural development. Following are specific issues, which should be examined by the feasibility assessment.

### *Commodities that can provide broad based, environmentally sound economic growth.*

The contractor will identify the commodities that have the greatest potential for providing broad based equitable growth taking in to account current and potential market opportunities and potential for employment generation in production, processing, storage and marketing. These assessments will make an initial appraisal of the potential impact of development of 'best bet' commodities from the standpoint of potential for increasing economic growth, increasing income for rural and urban populations. The contractor will identify at least 10 commodities and/or sub sectors with potential for development and provide brief commodity profiles that include summary information on markets, production potential, current status of the commodity in terms of production practices and sector organization and the areas for further study and development during an activity design stage. These assessments should take in to account the potential positive and negative effects of development of the sub sector on gender and on the environment. In addition to market potential these profiles will identify potential constraints in production, transport, storage, bulking, processing, finance, regulatory procedures and organization of producers, traders and processors.

*Assess Commodity Associations and Farmers Organizations:* There are a number of commodity/processor associations operating in Angola. The consultant will identify the major associations and assess these associations from the standpoint of membership, capacity to promote small producers interests and the potential of these associations to serve as a vehicle for technology transfer, trade promotion and lobbying. The prospects for using local level farmer organizations for improved production and marketing of commodities should also be included in

the assessment. Finally these organizations should be considered from the standpoint of capacity to transmit nutrition and health information to their members.

*Role of Commercial Farms:* The study will assess the types and roles of commercial farms in Angola. The focus of this assessment will be to determine to what extent commercial farms play a positive role in sector development that benefits both large and small players. It should also provide guidance on the extent to which the SO should include support to commercial producers.

*Linkages and Impact on IDPs and War Affected Areas:* The report should identify the commodity chain development activities that would have maximum benefit for generating additional income for rural populations affected by the war. The potential linkages, synergy and complementarity that can be created between agribusiness development activities and work carried out by PVOs in agricultural production should be identified.

### **Cross-Cutting Areas and Policy Issues**

Cross cutting areas that should receive special attention include:

- financial sector and credit availability for investment and production in small and medium production enterprises;
- transport constraints;
- tax, policy and regulatory constraints;
- resource allocation and land tenure issues;
- input availability;
- human resources, skills and training opportunities;

### **Feasibility of Creating and Sustaining Agribusiness Support Centers**

One potential approach for intervening in the agricultural sector is to create one or more Agribusiness Support Centers. These centers would carry out continued analysis of the Angolan agricultural sector to identify evolving market prospects and they would provide an array of services to producers organizations and associations such as:

- market information;
- advisory services in production and post harvest handling
- advisory service in trade development and processing
- assistance in organizing production and bulking;
- assistance in accessing credit and financing for production, processing and marketing;
- organization and delivery of training programs;
- strengthening of firms and producer organizations;
- developing and strengthening of producers, processor and trade associations.

The assessment will examine the feasibility of using agribusiness centers as an implementation structure and compare this approach with other potential approaches to creating and improving commodity chains in the agricultural sector. The study should contain information and recommendations on:

- the demand and clientele for Agribusiness centers;
- the type of institutional status, roles and relationships of the centers vis a vis the government, USAID and the private sector
- functions and resources for these centers;

The study will also examine the potential for creating full or partial sustainability of these centers by charging fees for services and or developing local private sector capacity to provide the same array of services.

### 3. *Seminars and Workshops*

The contractor will organize stakeholder, partner and client workshops to explain the appraisal exercise and receive feedback and guidance on the conclusions and recommendations developed in the report.

### 4. *Deliverables*

#### **Report**

The contractor will produce ten copies of a report in English covering the points discussed in the task description above including conclusions and recommendations. The draft report will be submitted to the Mission for review and approval one week prior to the completion of the assignment. The final report will be delivered before departure.

#### **Draft Results Framework**

Based on the conclusions of the report, the contractor will create a proposed framework that:

- proposes higher and medium level results, targets and indicators
- proposes a realistic monitoring system; including baseline data requirements and monitoring information;
- provides a brief description of illustrative activities
- identifies major partners, stakeholders and clients
- proposes structures and mechanism for implementation.

#### **LOE and Description of Functions**

USAID/Angola requires the services of two consultants from the US who will be assisted by a local consultant. The LOE is 108 days. Six-day workweeks are authorized.

USAID/Angola is developing a five-year strategy, which, in part, is moving from an emergency/humanitarian focus to exploring the potential for more sustainable, value added type activities.

The first consultant must be able to analyze the agricultural sector in broad terms. S/he must look at the overall constraints such as transport, infrastructure (storage facilities, processing), financial, human resource and regulatory to the expansion of agriculture and identify policies or practices which will inhibit growth of the sector. The consultant must be able to identify policies

or practices, which will inhibit growth of the sector. The consultant must be able to identify opportunities for growth given the current policy environment and also identify policies, which have the most constraining effects on the agricultural sector. Special attention must be given to the impact of large numbers of internally displaced people who may remain in their current locations or return to their homes of origin.

The second consultant must look at agribusiness specifically and be able to identify what organizations and associations would be most effective counterparts to expand agribusiness in Angola. The consultant must be able to prioritize which commodities and services (credit institutions) have most potential for increasing rural incomes.

The following table provides the LOE and Labor Categories/Subject Areas

Position	Level of Effort in Days	Labor Category	Subject Area
Consultant Level 1	36	Agribusiness	Agribusiness and Marketing
Consultant Level 1	36 36	Policy	Policy Reform and Analysis
Local Expert	36		Agribusiness, Ag-Economics or related field

### Schedule of Activities

Week 1: interviews/information gathering in Luanda  
 Week 2: complete interviews in Luanda begin site visits  
 Week 3: complete site visits  
 Week 4: begin report draft and stakeholder consultations  
 Week 5: complete draft report  
 Week 6; finalize report and draft results framework

### Contractor Responsibilities

- travel arrangements and costs in country
- travel from US
- lodging
- local expert recruitment and payment
- computer

### USAID Responsibilities

- office space

- airport expediting
- facilitate contact with GRA and private officials
- travel approval
- facilitate travel arrangements in country
- report printing and photocopying
- communications costs (official phone calls, fax and email)

## **ANNEX B**

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### **List of People Contacted**

#### **USAID Office, Luanda**

Keith Simmons	Mission Director.
Ms Alfreda Brewer	Program Officer.
Gomes Cambuta	Agricultural Advisor, SO1.
James Jackson	SO1 Team Leader
All staff members	

#### **USAID, Washington**

Douglas Jerome Brown	Agri-Business Adviser
Ronald Senykoff	Food for Peace Officer, BHR/FFP

#### **USAID, Nairobi**

John Mullenax	Regional Agricultural Adviser, REDSO.
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#### **Food And Agriculture Organisation Of The United Nations (FAO)**

Andrew MacMillan	Principal Adviser, Project Advisory Unit, Investment Center Division, FAO, Rome
Pierre Gence	Resident Representative, FAO, Angola
Paulo Vicente	National Program Officer
Paolo Nastasi	OSRO/FAO Agricultural Inputs Coordinator

#### **Government Of Angola Ministries, Luanda**

Eng Isaac F.M. Dos Santos	Member of Parliament (former Minister of Agriculture, Director Agri-Business SARL, Ch. GOA Pension Fund)
Eng. Pedro Afonso Kanga	Director Geral, IDA, MINADER.
Dr Pedro Luis de Fonseca	Director of Planning and Studies, MINPLAN
Dr David Tunga	Director Food Security Unit, MINADER
Raul Varela	FAO Coordinator of Food Security project (T/A MINADER)
Eng. Estevao M de Carvalho	Director General, Cereals Institute, MINADER
Eng. Alberto Ferreira Londo	Director, Institute of Research, MINADER

#### **Non-Government Organisations (NGOs)**

Michael Finley	Resident Representative, AFRICARE, Luanda
Pedro Chituco	Assistant to Res. Rep, AFRICARE, Luanda
Sashi L. Chanda	Resident Director-General, Save the Children Fund (USA), Luanda

Jennifer Press	Luanda Liaison Officer, Catholic Relief Services (CRS)
Mark Ellis	Agricultural Adviser, CRS, Lobito.
Ms Patricia Buckley	Country Director, CARE, Luanda
John P O'Brien	Assistant Country Director, CARE, Luanda
Dr David Kauck	Program Coordinator, Southern and West Africa Regional Management Unit, CARE
Mapanza Nkwitimba	Assistant Director (Development) World Vision, Luanda
Cosmos Magorokosho	Assistant Agricultural Adviser, World Vision, Luanda
Astrid Eisenlohr	Acting Project Manager, CARE – Kuito, Bie Province
Peter McNicol	Project Manager, CONCERN, Huambo.
Daniel Julio	Agricultural Manager, CARE, Kuito
Americo Paciencia	Agricultural Assistant, CARE, Kuito, Bie Province
Antonio Droenca	“ “ “
Antonio Pereira	“ “ “
Otto Jacinto	Technician, ADRA (Angola) Lubango, Huila Province
Maria Joao	Director, ADRA, Lubango, Huila Province
Fatima Faro	Accountant, ADRA, Lubango, Huila Province
Claudio Gabriel	Administrator, NPA (Norwegian Peoples Aid) Lubango
Manuel Domingos	Agricultural Programme Coordinator, World Vision, Malanje
Leonor Lazary	Agricultural Research Technician, World Vision, Malanje
Carlos	Accountant, World Vision, Malanje
Pedro Gaspar	Agricultural Extension Technician, World Vision, Malanje
Jose Luis Fernandes	Agricultural Programme Officer, World Vision, N'dalatando, Kwanza Norte Province
Carlos Woldemor	Supervisor, Seed Multiplication and Nursery, Km 11, World Vision, N'dalatando

### **International Aid Agencies**

Giovanni La Costa)	VAM (Vulnerability Assessment Section) WFP
Paulo Filipe)	
Peter Domingues	World Food Programme Representative, Kuito, Bie Province
Hans Winkler	World Food Programme Representative, Malanje.
Samuel de Castra	Assistant Manager, World Food Program, Malanje
	Manager Designate Menongue, Cuando Cubango Province.
P. O'Reilly	World Food Program Manager, N'Dalantando, Kwanza Norte Province

### **Diplomatic Corps/ Donors**

Joseph Sullivan	Ambassador of the United States of America to Angola
Christopher Osborne	Deputy Head of Mission, British Embassy, Luanda
Ms Amanda Smit	South African Embassy, Luanda
Paul Isaac	Security Officer, United States Embassy
Dr B. de Groot	European Union Agricultural and Rural Development Adviser
Ms Jill Derderian	2nd Secretary – Economic and Commercial – US Embassy

Ms Maria Teresa Felix Program Officer, United Nations Development Program

### **Private Sector And Others**

Sr Sebastiao Baster Lavrador Chief Executive (designate) of new Banco de Sol, formerly Governor of the Central Bank of Angola

Eduardo Garrett Duarte Commercial Director, Nutritiva Lda

Carlos Ferreira Owner/Manager, TONDO Commercial and Industrial

Market traders) Roque Santeiro and Rocha Pinto markets in Luanda and  
Truck drivers) elsewhere-in country

Salvador Vaz Head of Security. De Beers Angola Holdings Ltd

Toby Frears Assistant Director General, De Beers Angola Holdings Ltd

Father Thelmo Head of Catholic Mission/Orphanage, Casa do Gaiato, Malanje Province

Vittorino Palargon Caretaker, IFAD project nursery, Km 13, N'dalatando, Kwanza Norte Province

Joao Afonso Private farmer, locality of N'dalatando, Kwanza Norte Province

Bebe Aguiar Head of Residents Association in locality near to N'dalatando

Asif Aziz Managing Director, Golfrate Group, Angola, Hon Consul for Malawi

Ms. Dorothy A Lassair Manager – Business Development. Chevron – Cabinda Gulf Oil Company (CABCOG)

Estevao D C Mambo Coordinator, Business Development, CABCOG

### **Bie Province – Kuito**

Luis Paulo dos Santos Provincial Governor

Antonio Goncalves Deputy Provincial Governor

Francisco Cambundila Delegate, MINADER

Bartolomeu Sayovo Director of IDA, Bie Province

### **Huila Province – Lubango**

Affonso Manuel Veterinario, Fazenda Jamba (Fernando Borges)

Sr Henriques Administrator, Fazenda Jamba

Domingues Moria e Laudo MINADER Delegate, Humpata

Edgar Hiby Agricultural Technician, MINADER, Humpata

Hamilton G Lopes Assistant Administrator, Economics, Municipality of Humpata.

Elias Sova Assistant Administrator, Social, Municipality of Humpata and fruit farmer

Joaquim Oujayonca Fruit farmer

Jose Reania Tyiswa Fruit Farmer

### **Kwanza Norte Province – N’dalatando**

Exc. Ferreira Pinto	Provincial Vice-Governor (Administration)
Exc. Netinho	Provincial Vice-Governor (Economics)
Exc. Joao Baptista Cordeiro	‘General N’Guelo’, Vice-Governor (Defence)
Antonio J Leitao	Head of Provincial Planning Office, MINADER
Benjamino Bori Gongga	Head of Technical Department, IDA
Internally Displaced Group	Colalaia Village near N’dalatando

### **Cabinda Province**

### **Cabinda**

Eng Marcos A Nhunga	Provincial Director, MINADER
Joao Mandombo Samba	President, Cabinda Farmers Association – Farmer
Alector M S Araujo	Cabrigal Agro-Pecuaria Lda. – Association Member Farmer
Bernardo Faria Cudefe	Unidade Agro-Pecuaria de Benco-Sacato – Association Member Farmer
Antonio Francisco Mambo	Association Member Farmer
Agostinho Yambuco	Agro-Pecuaria – Association Member Farmer

## ANNEX C

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### Bibliography

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2. University of Arizona, Bureau of Applied Research in Anthropology Report for CARE International/CARE Angola: Food Needs Assessment Study for Huila and Cunene Provinces. June 1994
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4. Save the Children Federation Project Proposal Document: Integrated Food Security Activities for Kwanza South Province. February 1999
5. FAO: Agricultural Recovery and Development Options Review. July 1997
6. World Vision International: Development Activity Proposals for the Angola consortium of Care, Save the Children Federation, Catholic Relief Services and World Vision International. February 1999
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14. Steve Kyle Briefing Note: Modeling the Angolan Economy. August 1999
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19. World Food Program: Sundry Reports and Evaluations of Country and Provincial Food Requirements
20. European Union: Summary of Contributions to Humanitarian Aid during 1999 and Unconfirmed Identified Programmes for future.
21. Robert Buzzard and Ray Morton, USAID, Gabarone: Trip report on visit to Angola. June 1999
22. John Mullenax, USAID Regional Agricultural Adviser Trip Notes: Some Thoughts on Strategy Development (1999)
23. Hugh Q. Parmer, Assistant Administrator, BHR, and USAID, Washington: Report on visit to Angola 17 to 24 January 2000.

24. Gloria Almeyda and Rowland Thurlow, World Council of Credit Unions: Unedited departure Briefing for USAID, Luanda after visit 23/10/99 to 04/11/99.
25. MINADER Working Document: Description of some autonomous Funds and other Financial Institutions in the Agricultural sector in Angola. July 1998.

## ANNEX D

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### Activities Report

Date	Activity
03/02/00	Arrive Luanda; USAID briefing. Visit FAO office
04/02/00	Background reading
05/02/00	Preparing work schedule and background reading
06/02/00	Luanda area orientation; index drafting
07/02/00	Security briefing US Embassy. Meetings: MINADER and MINPLAN
08/02/00	Meetings: Food Security office MINADR, Cereals Institute, Private Banker, Africare (NGO)
09/02/00	Meetings: SCF (US), World Vision and CRS (NGOs) and Commercial Company, Nutriva Lda.
10/02/00	Visiting Luanda markets – Roque Santeiro etc
11/02/00	Meetings: World Food Program and FAO
12/02/00	Analyzing data; photocopying, map and basic annexes preparation
13/02/00	Report discussion and analysis to date
14/02/00	Meetings: European Union, CARE (NGO) and Commercial Company, Tondo Lda
15/02/00	Meetings OSRO (FAO) and De Beers (re security)
16/02/00	Visited Kuito, Bie Province with US Ambassador's Delegation
17/02/00	Internal USAID meeting on progress on Ag Sector Assessment
18/02/00	Bie Province: Kuito most of day en route Lubango, Huila Province. Visited agricultural projects (CARE and AFRICARE), food distribution to IDPs, seeds distribution and Cunge town
19/02/00	Huila province: visited large private farm - dairy herd and fruit growing (Fazenda Jamba) and also market in town of Chibia, south of Lubango
20/02/00	Huila Province: visited MINADER experimental station and fruit farmers in Humpata region; saw regional dam and escarpment
21/02/00	Huila Province: Lubango a.m. Discussions ADRA (Angolan NGO) and Norwegian Peoples Aid demining section. p.m. Malanje visited World Vision seed multiplication nurseries and Catholic Mission farm and held discussions with small local farmers
22/02/00	Malanje Province: Malanje met WFP representative, visited markets and held talks with truckers. To N'dalatando, Kwanza Norte Province; meeting with Vice Governor and Provincial MINADER and IDA Delegations. Visited World Vision agricultural support activities and IFAD project nursery; met small farmers and IDPs; local markets
23/02/00	Kwanza Norte Province: N'dalatando visited market, local traders and met truckers and traders. Returned to Luanda.
24/02/00	Debrief from up-country visit, analyzing findings etc

25/02/00 Meeting with Golfrate Group Chief Executive; international commercial trading company and local manufacturer

26/02/00 Report writing

27/02/00 Report discussion and writing

28/02/00 Visited Golfrate's stores and packaging and bottling plants, Viana

29/02/00 Presentation Meeting and Round Table Discussions with USAID's Advisory Group, donors, NGOs and other invitees

01/03/00 Made presentation and gave briefing at US Embassy to the Ambassador and Economic and Commercial Secretary on progress to date of assessment

02/003/00 Cabinda Province: meetings with local Farmers Association executive committee, Chevron (CABGOC) Business Development Unit personnel, Provincial Director MINADER, visited farms

03/03/00 Final work on draft report, which submitted as per TOR and timing requested. Meetings and discussions with USAID visitors from Washington HQ and Regional office in Nairobi

04/03/00 Checking draft and finalizing annexes

05/03/00 Working on finalizing report after verbal comments; informal discussions with USAID visitors

06/03/00 Round table discussion with Director (ag)USAID Luanda, visitors USAID and Mission SO1 Team Leader

07/03/00 Making additions, modifications etc to report after discussions (6/3)

08/03/00 Writing executive summary and fine tuning report

09/03/00 Report finalization and commencement printing it

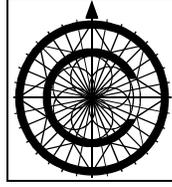
10/03/00 Submission 10 copies of report

11/03/00 N. Rask departs Angola.

12/03/00 Sorting of back-up papers, documents and reports used as per Bibliography list. N. Rask arrives USA

13/03/00 Debrief note to Ag Adviser at Mission. M. Tinne departs Angola

14/03/00 M. Tinne arrives UK at end of assignment.



CHEMONICS INTERNATIONAL INC.



A GUIDE TO DEVELOPING AGRICULTURAL MARKETS AND AGROENTERPRISES  
AGRIBUSINESS DEVELOPMENT CENTERS

Submitted to:  
The World Bank

Submitted by:  
Chemonics International Inc.

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## AGRIBUSINESS DEVELOPMENT CENTERS

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### A. Importance of Agribusiness Development Centers

“Agribusiness Development Center” (ADC) is a generic term for entities created to promote growth and prosperity in the agribusiness subsector. When well-conceived and well-executed, an ADC can help:

- Lower barriers to entry relating to capital, technology, information and market access
- Facilitate the conceptualization and establishment of new agroenterprises
- Increase marketable surpluses
- Lower unit costs of production, transport and marketing
- Encourage and facilitate innovation at the enterprise, industry and subsectorial level
- Help enterprises coalesce into a cohesive industry group with a shared vision for targetting markets, improving competitiveness and the country’s position
- Attract private capital and international donor resources
- Strengthen backward linkages to suppliers and forward linkages to buyers
- Enhance viability of enterprises and sustainability of industries

Some ADCs lack the mandate, strategy, resources, competence or vision to be truly successful, and do not always achieve these potential gains. However, most do make significant contributions to the agribusiness sector. Benefit/cost ratios of 5:1 are common, and depending on what is measured, some ADCs claim to achieve a ratio as high as 10:1.

#### A1. Changing Trends

Over the last 25 years, some important changes have occurred in the conventional wisdom surrounding ADCs:

- Initially many development planners felt the State had to be agribusiness’s engine of growth in less developed countries and should take the lead in establishing ADCs just as it did in mainstream commodity production and export marketing. By the early eighties, the opposing position was gaining strength, and soon ADCs were being formed with full private sector ownership and control. The consensus now is that government (local, regional, national, or international) can and probably should play the role of co-financier or even sponsor, but that the private sector should dominate boards of directors and senior professional positions.
- Over the past decade many ADCs have adopted a “one-stop shop” approach to agribusiness development and try to offer whatever the entrepreneur needs. While the concept is valid, trends in funding are moving away from in-house resources toward outsourcing and networking. ADCs place more emphasis on *their catalytic and facilitating roles more so than on roles as implementor*. Most have backed off from providing or arranging financing because playing the role of banker sets up an

inherent conflict with the provision of objective technical, marketing and entrepreneurial support.

- Well into the eighties, prominent ADCs still had large staffs, major facilities, and large numbers of vehicles. “Lean and mean” became the watchword after they became a drain on scarce resources, grew more bureaucratic, and even acted inadvertently as a gatekeeper rather than as a promoter and facilitator.
- During the eighties, many ADCs were pushed to become self-sufficient by generating enough income from the sale of services. This effort failed for many reasons: (a) a single user could not capture or retain benefits from ADC services; (2) there was a lag between delivery of the service and realization of benefits; (3) in some instances, the payoff in terms of new business and industry development never materialized; (4) client enterprises were too new to pay significant sums; and (5) in most LDCs, the agribusiness subsector was too small or too weak to invest heavily in its own future. Over time it became clear that ADCs will almost always require continued inflows of funding from sources external to the group of beneficiaries, unless given a large endowment at the start to offer non-competing commercial services or products.
- As the definition of ADC self-sufficiency evolved, the concept of sustainability also changed. In the late seventies and eighties, sustainability was an objective for the ADC; by the nineties, leading thinkers had concluded that the whole agribusiness subsector, its component industries, products and crops should be sustainable. Development funding continued to flow as long as ADCs continued to anticipate and respond to changes in the business and funding environment.

## B. Guiding Principles

*Specific objectives of an ADC* typically include any or all of the following:

- Expansion and diversification of agribusiness economic activity
- Stimulation and support of technology development, adaptation and transfer
- Added value to existing crops and products
- Support for development of new crops and products
- Increased market share in existing markets and penetration of new markets
- Enhanced productivity and competitiveness at the enterprise and industry levels
- Removal or alleviation of infrastructural, technical or marketing constraints
- Support for increased volume and value of domestic and export sales
- Improved profitability of agroenterprises
- Creation of direct and indirect employment
- Increased income for owners, workers, and suppliers

*ADCs are not always discrete entities with a formal title.* ADC-like objectives and services are often built into larger entities, or take the form of an agricultural development project. The main advantages of having a separate legal entity are to focus resources and stakeholders’ attention on agribusiness development, and to convey the intent to continue over the long term.

When conceived as a separate entity, *an ADC can be legalized in various ways — either as a public, parastatal, autonomous, or private organization*. The principal advantage of having a public identity is internal access to government funding, yet purely governmental ADCs sometimes suffer from excessive politicization, bloated budgets, too large a staff and slow response time. On the other hand, purely private organizations tend to have more trouble continuing the work because of funding problems. They are sometimes unable to establish a real partnership with relevant governmental agencies, and may never achieve sufficient critical mass to be credible in lobbying or trade negotiations. What is important is that the choice of legal form fits the circumstances.

Even if the ADC remains part of the government in a legal sense, *the board of directors, the executive director, and as much professional staff as possible should come mainly from the private sector*. Otherwise the entity is usually not perceived as credible, and its responsiveness and competence are too easily questioned.

*If the founders want the ADC to last, they have to obtain or plan for long-term external funding, whether by obtaining it from the start, or building in a fund-raising capacity. They cannot just provide a one-time boost to the subsector.* ADCs are sometimes established with the intent of permanence, but more often for a limited span of about five years, or as long as initial funding is available. Few ADCs have survived longer than a decade, usually for lack of second-round financial support. Fundación Chile has been a notable exception, thanks in part to its \$50 million initial endowment and the subsequent sale of its salmon project for \$21 million.

Since ADCs are tax-exempt and their core services are by nature public goods, *ADCs are most often created as not-for-profits*. Yet some are established as for-profit entities to engage in venture capital investment, land development, sale of inputs or equipment, agribusiness financing, trading or other commercial activities. Occasionally an NGO may create an ADC as a profit-oriented subsidiary or affiliate, or the reverse can happen: a for-profit entity elects to set up an ADC as a non-profit.

*It is rare for a private operator to establish an ADC as a for-profit venture* since ADCs may require significant investment in facilities, staff and information resources. They hardly ever charge enough for services to cover their full cost.

An “*agroenterprise incubation center*” model could be an exception to that rule. Primary sources of profit for business incubation centers in developed countries usually are not fees earned from providing technical and entrepreneurial advice. Instead, profits are earned through leasing space, selling support services, government tax incentives to investors, capital gains derived from selling subunits, and a percentage of the associated enterprise’s gross sales.

*Client enterprises should pay a reasonable share of the cost of goods and services* whether or not the ADC is a profit-making entity. While technical and market information can be valuable, most ADCs recover the direct cost of distributing information rather than the full cost of generating or compiling it. Too much information is available free from competing sources and users are not used to paying for it. They often do not fully appreciate its true cost or value, and in many cases, client are simply unable to pay.

Market intelligence can be more valuable still, yet most ADCs find they can charge a reasonable fee only when the customer specifically commissions its collection and retains proprietary rights for a certain time. Technical assistance may be crucial to the evolution of a new enterprise, yet most ADCs manage only to have the client pay for travel expenses and hopefully the equivalent cost of a local professional's time (rather than an expatriate-level fee). In the case of training activities, participants are usually willing to pay an admission fee that covers the direct costs of the event, but not always the full cost of external expertise brought in to make presentations. External expertise costs are best covered through sponsorships sold to banks, input suppliers, or transport carriers. Usually the ADC must cover the time and travel cost of its staff for observational tours abroad and attendance at foreign trade shows. Entrepreneurs who elect to piggyback on the ADC's lead pay their own expenses directly.

*In developed countries, ADCs are most commonly established in conjunction with a university to benefit from a concentration of expertise in the faculties of agronomy, agricultural economics, agricultural engineering or business administration. However, regional development corporations or state or municipal governments have created ADCs. The Rural Industries Research and Development Corporation in Australia (<http://www.rirdc.gov.au/home.html>) is a good example.*

*In developing countries, ADCs are more often established by national, state, departmental or provincial governments, often through a donor-financed development project. Less frequently, an association of exporters, processors or producers may establish an ADC. Even in those situations, the seed or operating money may have to come either from the host government or from an international donor interested in supporting agribusiness in that country or area.*

*ADCs can be set up as "virtual" entities with limited infrastructure and staff if they intend to deal only in intangibles such as: (a) information (e.g., country background, sectorial structure and performance, exportable supply, lists of exporters and producers, contacts, technical matters, sources of external expertise, trade statistics, foreign suppliers of inputs, on-line commerce); (b) intelligence (e.g., competing countries and major enterprises, market studies, price/volume reporting, supply and demand trends); or (c) buy-sell opportunities.*

*The majority of ADCs still choose to operate out of physical facilities because their leaders realize that client contact is necessary and mutually beneficial. They also recognize that intangible services are better offered and received if they are tailored to the customer's individual needs. Most entrepreneurs want not just information and intelligence, but an interpretation of its meaning and advice on how to proceed. The ADC may operate out of a single or multiple locations, the main determinant being the geographic area serviced. In large countries, offices may be networked.*

*It is not a good idea to locate ADC offices in ministry facilities, nor have them in heavily secured buildings. Either situation scares off potential customers; the more the ADC can look and act like a small private company, the better.*

Staffing levels vary from just one to hundreds of employees. The experience with large operations has generally been negative due to the stifling effects of bureaucracy. In smaller countries, *just a few highly trained, experienced, motivated and well-paid professionals with the*

*right backing, industry contacts, and personal networks can often energize and guide the entire agribusiness subsector.*

It is critical to *stay focused on business development*. ADCs' ultimate goals should be subsector growth, greater wealth, and sustainability, however, businesses play the main role in achieving these goals. Enterprises can make greater contributions to the subsector's broader goals if they expand market penetration and market share, grow in sales volume and value, maintain or increase margins, improve profitability, and lower risks.

*Enterprises evolve over time.* The business life cycle consists of stages requiring different adaptations and responses from an ADC: (a) conceptualization (analogous to conception); (b) establishment (birth); (c) start-up (childhood); (d) growth (adolescence); (e) stabilization (adulthood); (f) sustainability (maturity); (g) senescence (old age); and (h) closure (death). Not all enterprises make it through the entire life cycle; and successful ones need not enter into senescence nor suffer closure. As businesses move through their life cycle, external support needs change.

*Agroenterprises usually need, want and solicit a wide range of support services from ADCs.* Unless the ADC decides to limit its support to specific services, and makes those limits known throughout the sector, client enterprises can and will ask for help on almost anything of concern to their business. The frequency and type of interaction may vary from a single telephone consultation to a sequence of requests and responses that may last for several years. While extended or intensive support can yield greater results attributable to the ADC, such support can be costly and can limit the number of customers that the ADC can serve. On the other hand, a small intervention sometimes can be critical to the client enterprise, and still leave room for support to other customers. Most ADCs elect to provide a mix of: (a) quick and limited responses to almost any solicitant; (b) more in-depth support to resolve a problem or to pursue an opportunity for a moderate number of qualified client enterprises; and (c) extended support for selected enterprises that may be on the verge of a breakthrough in terms of technology, crop, product, or market.

*Agroenterprises should always be viewed as the primary customers.* The best ADCs tend to devote more time to the for-profit customers who participate directly in the food chain (growers, handlers, processors or marketers), or who provide critical goods and services (agricultural finance, inputs, machinery, equipment, cold storage and transport). ADCs receive requests from consultants, policy makers, planners, researchers, extensionists, reporters, educators and students. To engender and maintain a broad base of support and funding, it is important to show a reasonable level of responsiveness to all. The danger of dispersal of effort and waste of scarce resources is ever present nevertheless.

*Establishing priorities is inevitable with limited resources, and ADCs must try to pick winning combinations.* Trade-offs between segments, products, markets, and types of clients depend not only on the ADC's original vision, but also on a deliberate analysis of where the best opportunities lie, where the most need exists, and in which areas the ADC can provide the most useful support.

*Once priorities are set, selection criteria should be defined, a process established, and then everything should be publicized.* Even if the ADC is privately funded or directed, it is wise to formalize criteria for identifying recipients and how to define a process for evaluating requests that consume resources. Priorities, criteria, and selection process terms should be circulated within the entire organization, and a brochure or handout should go to all stakeholders and prospective customers.

*The most effective ADCs are responsive and proactive.* They do not just respond to requests as they come in, but seek out prospective customers through networking and limited publicity. Their staff makes frequent visits to production areas and holds training sessions that bring in new customers. They attend shows and conferences and seek recognition from the agroentrepreneur community. If the focus is exports, they get to know exporters of targeted commodities, and seek out other enterprises that could export if given guidance and stimulation. If the focus is processing, ADC staff members look for producers of quality products and/or potential investors who might embark on a new processing venture.

*The organization should be kept as small and efficient as possible, first by prioritizing and secondly by maximizing the use of outside expertise and information resources on technical, industry and marketing matters.* The agricultural sector is complex. The universe of crops, products and activities is large and various potential target markets exist. Enterprises need different kinds of help as they evolve. This complexity notwithstanding, experience indicates that relatively small organizations do better at developing agribusiness than larger ones.

Establishment of a *documentation center and information system* is crucial almost before the ADC opens its doors. The range of technical and marketing questions exceeds the immediate grasp of even the most competent agribusiness development team. If the staff shows too much hesitancy, or cannot answer perhaps 85 percent of the questions posed within a week, the entire ADC loses credibility.

*Staffing is the most critical issue during implementation.* Getting the right executive director is probably the single most important operational concern, closely followed by hiring the right professional staff. Everyone should have at least one relevant advanced degree, plus at least 10 years of experience (15 to 25 is better). Each person should have operational experience in agribusiness, but some work in international development is desirable. Ideally, the entire professional team should be business-oriented, yet a mix of research, extension, teaching, consulting and management credentials is needed. Recent involvement in the target markets is necessary to the team, as well as strong peer networks.

The team must be very agile, which implies not just access to information and intelligence, but also *substantial resources for communications and travel.*

Very early on, the ADC will have to start *picking probable winners* in terms of clients, crop/livestock/aquaculture/forestry activities, and move forward with them. Some will prove less attractive than first anticipated, and possibly even infeasible. That is to be expected.

While “cherry-picking” is necessary, it carries the *danger of allegations of favoritism*, so both the criteria for selection and the process must be transparent to all. The criteria should squarely address the issue of working with larger players with whom the ADC might achieve a faster and bigger impact, as opposed to assisting smaller players to evolve at their own pace. Similarly, the criteria should address the trade-offs between assisting already established industries versus trying to get new ones started. The criteria should explicitly exclude assistance to any enterprises beneficially owned or effectively connected to the ADC Board or staff.

The successes of some ADCs have encouraged donors to attempt to use ADCs as development tools in other settings. Difficulties can arise when donors are not fully versed in how ADCs function, their constraints, and the effects upon them of their operating environments. Both examples of serious failures and those of success exist in promoting ADCs. *Donors commit common errors* in their exuberance to exploit the positive potential of ADCs. Some frequent errors include:

- Donors “beef up” pre-existing organizations to fill a more aggressive developmental role and expect the organization to provide some sort of matching contribution to that provided by the donor. This is a flawed approach. When an organization takes on a development role, it experiences significant costs for doing so. These costs can become manifest through under-performance, deteriorated management, complications due to loss of focus, and others.
- The stability of the organization is compromised when the leadership and management of ADCs is not organic. This results when a donor creates an entity or vastly modifies an existing one. Member and private sector ownership and “buy-in” are critical to long-term success, but are often lessened or lost when leadership springs from outside the client base.
- Donors often forget to plan the exit strategy. The private sector would implement development activities if they were profitable and donors sometimes operate under the misconception that the process will continue if they get an ADC up and running. The ADC can continue if a strategy for donor participation is built into the plan.
- Sustainable private sector development can not be built on subsidization. Donors sometimes pay insufficient attention to crafting ADC interventions that temporarily assist industries in risk management that do not skew the economics of the business enterprise.
- Donors sometimes provide collateral technical assistance projects in addition to their support to ADCs. A common donor error is to place the technical assistance project under the direction of the ADC or a government office. This often seriously compromises the effectiveness of the technical assistance project. A more useful model is to contractually obligate the technical assistance project to working with the ADC and achieving target objectives, but without placing the project under the ADC or government entity’s management control.

- Increased funding to ADCs should be accomplished by good financial audit controls. A common donor error is to be overly lax in this area until a problem requires attention.
- Donors sometimes forget that ADCs, by their nature, are dealing with an industry that has a definite cycle related to the growing seasons. Donors plan and set objectives without properly accounting for this cycle.
- Credit is a never ending problem for the agricultural sector. Donors sometimes err by using non-financial institutions as credit vehicles, without taking into account the skill level, effect on organization's mission, management systems, or personal skills.
- Donors sometimes work in charged political environments. When they promote ADCs with a stated objective of agricultural development, but have a political agenda to weaken the political power structure, they create a situation of intrigue and cross purposes that is often a recipe for disaster.

### **C. The Road Map: Establishing an Agribusiness Development Center**

Ask certain questions before deciding whether or not to proceed with the formation of an ADC.

1. What will be the *mission* of this ADC? Is growth more important than equity, or vice versa? Is the idea to expand the subsector, diversify activities, or both? Is the intended outcome of growth a stronger market position, or greater subsector profitability, or higher profitability for participating enterprises? Are those objectives consistent with each other?
2. *What portion of the agricultural sector* should this ADC focus on, i.e. crops, livestock, forestry, and/or fisheries?
3. Should this ADC concentrate on *primary production or transformation or commerce*?
4. Will the focus be on *domestic, regional, or world markets*?
5. Who are the *intended beneficiaries* of ADC assistance? Existing enterprises or prospective ones? Small, medium or large? Producers, handlers, processors, or exporters? Is segmentation desirable and possible? To what extent have potential beneficiaries been brought into the design process?
6. However the target groups are defined, *what assistance do they really need*? Have the target group leaders, key informants, and focus groups been consulted in a participatory fashion to make sure their needs and preferences are clear?
7. What should be the *menu of services and products* offered by this ADC? Technology generation, validation, transfer, replication? Support for new product development? Training and external technical assistance? Discrete interventions or long-term mentoring? Know-how, information, and/or intelligence? Cross-cutting services such as land leveling, seed procurement

and multiplication, equipment rental, fumigation, migrant worker programs, assembly, quality control, cold storage, refrigerated transport, export marketing, crop/export insurance, generic promotion? Product or market profiles? Pre-feasibility and feasibility studies? Contract farming? Policy dialogue or lobbying? Annual exposition and convention? Participation in trade fairs abroad? There are many alternatives.

8. Are the target groups already getting *help from other sources*? How appropriate, complete and useful is that help? Can this ADC do it better? If so, how? If the ADC offers these same services, will it crowd out private suppliers or consultants?

9. What *resources and capabilities* will it take to provide the tentative menu of services and products? What initial investment is required to gear up to provide them all directly? Can any of them be outsourced at little or no cost?

10. Where will the *funding for the initial investment and start-up* come from? Is enough funding available? If not, what could be scaled back or put off for the future?

11. What will be the *total recurrent cost* of operating the ADC?

12. How much will the target beneficiaries be *willing to pay for the goods or services envisioned so far*? If less than full cost, should the goods or services be offered anyway because of their potential impact on agribusiness development and/or expected spillover into the economy?

13. How big is the *gap between the price that the market will bear and the actual cost* of the services? Who will fund this gap?

14. *What is likely to happen* within the targeted geographic area, industries, product categories and marketplaces if this ADC is not created? How will that change if it does go forward? Does the potential incremental reward justify the investment and recurring expense?

15. If this analysis shows that an acceptable return on investment (ROI) is likely, *how should the ADC be structured* in terms of legal form, for-profit status or not, ownership, governance, statutes, bylaws, staffing, and location(s)? How can we ensure that the ADC is both market-oriented and largely demand-driven?

16. *What steps are required* to set it up and get it running, and in what order?

17. Who are the *other stakeholder groups*? What are their interests and concerns? Does the preliminary design satisfy them? If not, what should be changed?

18. *In the end, who is most likely to benefit* from the establishment of an ADC with these features? *Who might be hurt*? How to maximize the former and minimize the latter?

19. Given all of the above, *should this move forward* as planned? Are we the founders fully committed, and do we have the active support of the target groups?

20. *How should success be defined?* Area planted? Overall production? Value of production? Yields improved? Costs savings? Percentage shipped fresh or processed? Volume or value exported? Imports substituted? Foreign exchange generated or saved? Direct or indirect employment generated? Numbers of new deals set up? New end-markets penetrated? Increase in market share in selected markets? Number of new businesses formed? Survival rate for new agroenterprises?

21. *What criteria should be applied in deciding which customers to work with, and how long to continue assisting them?*

22. *Who should take credit* for accomplishments in terms of the above indicators? How should the matter of attribution be handled?

23. *What pre-conditions (if any) should be set to proceeding?*

24. Who should take the *next steps*, when and how?

## **D. Examples and Best Practices**

### **D1. What ADCs Typically Do**

ADCs offer a highly variable and context-specific menu of goods and services, which result from demand from producers, processors, exporters and potential customers. The ADC's goods and services menu also depends in part on the availability, cost and customers' perceived efficiency of similar services rendered by governmental ministries, universities, and private consultants.

For example, in the area of production, an ADC might:

- Develop the master plan for agriculture and agroindustry for a certain region
- Oversee the process of establishing a pest-free quarantine zone for medflies
- Supervise the design of a large-scale irrigation project to bring a new area into production
- Formulate partial budgets for alternative farm-based activities, and then help client farmers create an enterprise budget based on individual preferences
- Analyze the productive capacity and crop/livestock potential for farming sites
- Supervise or directly carry out trials relating to varietal adaptation, alternative planting and harvest dates, fertilizer response, alternative irrigation systems, optimal water use, flower induction, or dormancy management

- Design and organize a program to import and then propagate phylloxera-resistant rootstock from California for triple-use grape production in a South American country

In the area of postharvest handling, an ADC could:

- Develop low-cost methods for curing and storing fresh onions
- Introduce the use of insulated E-type containers or thermal blankets for berries intended for export
- Research methods for lowering postharvest losses in small farmer maize production in Kenya
- Arrange tests of the effectiveness of irradiation to eliminate mold and sprouting in fresh garlic shipped from Argentina to Europe
- Introduce the use of ozonization in wash water to control microbacteriological contamination in fresh herbs intended for export

In the area of processing, an ADC might:

- Co-sponsor research into broccoli varieties that yield bigger heads and produce more florets for freezing
- Help a producer of mangos perfect his processes for dehydrating mangos intended for sale as fruit leathers
- Find a packaging consultant for a maker of exotic fruit jams and jellies who wants to export for the first time
- Arrange HACCP training and technical assistance to the meat producers
- Bring in a consultant to certify as organic all processes used to convert Andean grains into certified organic pasta for export to Europe

In the area of transport, an ADC might:

- Assist the association of melon producers to arrange a time-value charter to lower their freight costs and breakeven point
- Co-finance trials on the use of modified atmosphere techniques on air-shipped strawberries

- Arrange tests of the technical feasibility of controlled atmosphere shipping of asparagus in sea containers, and then examine market acceptance of the product after arrival

In the area of marketing, ADCs could:

- Provide guidance to a first-time exporter of hot pepper sauces from Mexico on proper labeling and markings for shipment to Canada
- Analyze the pros and cons of abolishing the Cocoa Marketing Board in Trinidad
- Explore interest in the U.S. market for off-season Satsuma mandarins from Peru
- Spearhead the establishment of a quality seal for Chilean grapes so as to control excess supply while enhancing market position
- Establish the first cold storage facility at the airport in Port-au-Prince to improve the cold chain and facilitate shipment of perishables
- Arrange and lead an observational tour of cut flower producers from Zimbabwe to Holland to learn more about greenhouse design and production practices
- Establish a new price reporting system in all the wholesale markets in South Africa to improve the transparency and efficiency of the food marketing system

In the trade arena, an ADC might:

- Take the lead in representing the interests of Dominica in the E.U.-U.S. banana dispute
- Arrange for a U.S. importer to request a change in USDA/APHIS regulations to permit the entry of fresh papaya into South Florida
- Advise the Bolivian government on the most sensitive food and agricultural products to include in its new initiative the control of contraband
- Fight a move by California strawberry growers to prohibit the entry of Guatemalan raspberries allegedly carrying cyclospora
- Help negotiate a new price support system for domestically produced potatoes to prevent an import surge

In the area of business and market analysis and planning, an ADC could:

- Commission a targeting study for 10 promising new product-market combinations for the Davao area of the Philippines

- Conduct a pre-feasibility study for pickling cucumber production and processing operation in El Salvador
- Hire and supervise a consultant to analyze the candy and natural foods markets in the United States to determine whether an organic chocolate bar with quinoa and amaranth is likely to be a winner

Finally, in the area of industry organization, an ADC can:

- Serve as a friendly meeting place for agroentrepreneurs that want and need to share their experiences and learn from each other
- Facilitate the formation of new associations or other groupings of entrepreneurs, then provide the means of following up on consensus once reached
- Help do the staff work needed to formulate a reasonable position of sensitive policy matters and on public investment in support of agribusiness
- Provide facilities for training or R&D activities
- Make available other cross-cutting services (such as a documentation center or market information system) that are too expensive for a single enterprise or association to offer or set up alone

## **D2. Noteworthy Cases of ADCs**

Probably the best-known ADC in the developing world is Fundación Chile (FC), which is a privately owned, non-profit corporation established 21 years ago. FC defines its mission as “technological innovation, mainly through the transfer of proven technologies that aim to take better advantages of Chile's natural resources and productive capacity, all in response to market demands.” FC has carried out hundreds of innovative projects that have contributed significantly to the development of Chile's agribusiness, aquaculture and forestry sectors, with a focus on exports. One main technology transfer mechanism developed by Fundación Chile has been the creation of demonstration companies. In the last 15 years, FC has created 36 companies, 17 of which have been transferred to the private sector. The corporation has about 150 specialists with extensive experience in technical, market and management areas. Since 1985, the Fundación has undertaken numerous agribusiness projects in more than a dozen countries in Latin America, leading to the creation of a wide network of technical and trade contacts and the accumulation of valuable international experience.

Other entities that have tried to follow the Fundación Chile model to some degree include the Costa Rican Coalition for Development Initiatives (CINDE); the Salvadoran Foundation for Economic and Social Development (FUSADES); the Corporación Colombia Internacional (CCI); and Fundación BolInvest.

Despite massive USAID funding, CINDE and FUSADES had more success at investment promotion in areas besides agriculture than in export-oriented agribusiness development. Costa Rica has done well in nontraditional agricultural exports (NTAEs), but a significant share of the volume is attributable to multinational/foreign-owned company involvement in bananas, pineapple, melons, cut foliage, and organics. The rest is probably attributable to a combination of CINDE and PROEXAG support.

By contrast, despite substantial FUSADES activity in the NTAE arena, including a large pineapple-for-export project owned directly by FUSADES, El Salvador has been unable to increase its agricultural export base.

In the case of Colombia, CCI received an initial endowment of more than \$3 million, and has since received additional yearly funding from the Ministry of Agriculture. Its main activity has been the establishment of a Market Intelligence System for exportable produce and domestically sold items, plus a minority share in a 100-ha asparagus farm intended to generate income to help CCI become financially sustainable.

The reasonably successful strategy used by USAID-dependent BolInvest in an environment not conducive to exports was to respond to needs of individual entrepreneurs or groups of producers pursuing a particular product-market combination. The issue of attribution has come up repeatedly because of the limited time an entity stays with a client. None of these foundations can claim the same success at agribusiness development that Fundación Chile can.

Many agribusiness development projects over the last fifteen years have opted for the project-based approach, usually based on the formation of an independent office staffed by a mix of two to eight expatriates and three to fifteen local professionals. Probably the first such project was AGRO-21 in Jamaica. Then came the Nontraditional Agricultural Export Support Project (PROEXAG) and its successor the Export Industry Technology Support Project (EXITOS), which operated out of Guatemala between 1986 and 1994, providing assistance to Central America and Panama. Another was PROEXANT, a similar effort in Ecuador over a period of about four years. Almost in parallel with PROEXAG, the High Impact Agricultural Marketing Project (HIAMP) was set up in Barbados for eastern Caribbean, followed by the West Indies Tropical Produce Support Project in Dominica. The Latin American NTAE projects served as the model for others elsewhere in the world, most notably the Morocco Agribusiness Promotion (MAP) project, the Madagascar Commercial Agricultural Production (MADCAP) project, the Uganda IDEA project, the Agribusiness Development Projects in Indonesia and Sri Lanka, and the Agricultural Commercialization for Export (ACE) Project in India. All were USAID-funded, because the World Bank and regional development banks have not become as involved in this field until recently.

All projects established ADCs out of project offices and usually centered around a combination of a technical documentation center, a market information center and the team's collective capacity to help identify winning export deals (a combination of crop, target market, and season). They then helped producers and exporters participate successfully in the deal. In the earliest projects, the documentation and information was generally left to the counterpart entity, usually the exporters association. Unfortunately the business and market development capacity has

generally not been transferable. Yet all projects boosted the export-oriented agribusiness subsector, and in some instances (e.g., PROEXAG), external evaluations indicated a very significant return on the development investment.

A third category of efforts connected to the ADC concept, but not synonymous with it, was government-established export and investment promotion centers. ProChile is one of the most successful, vying for that honor with the Thai Board of Investment. More recently examples include PROMPEX in Peru, PROEXPO in Colombia, and PROMEX in Argentina. While not usually involved in production matters, these entities all played a useful role in identifying promising opportunities, developing profiles, conducting market studies and assisting entrepreneurs in making buyer contacts and attending trade shows. In some instances, e.g., Bancomext in Mexico, banks have carried out those same functions.

## **E. Resources**

### **E1. Readings**

Beirlein, James G., and others. *Principles of Agribusiness Management*. Waveland, 1995.

Austen, James E. *Agroindustrial Project Analysis: Critical Design Factors*. World Bank, 1992  
Downey, W. David. *Agribusiness Management*. McGraw Hill, 1987.

Newman, Michael A., and Walter J. Wills. *Agribusiness Management and Entrepreneurship*. Interstate Publishers, 1994.

Goldberg, Ray A. *Agribusiness Management for Developing Countries: Latin America*. Harvard University Press, 1974.

Jaffee, Steven, with Peter Gordon. "Exporting High-Value Food Commodities: Success Stories from Developing Countries," World Bank Discussion Paper 198, 1993.

Jaffee, Steven. "Southern Africa Agribusiness: Gaining Through Regional Collaboration," World Bank Technical Paper No. 424, 1999.

Keesing, Donald B., and Andrew Singer. *How Support Services Can Expand Manufactured Exports*. World Bank WBS 544, 1990.

Keesing, Donald B., and Andrew Singer. *Development Assistance Gone Wrong: Failure in Services to Promote and Support Manufactured Exports*. World Bank, 1992.

McKean, Cressida. *Export and Investment Promotion: Findings and Management Implications from a Recent Assessment*. A.I.D. Evaluation News 4 (3).

Mullenax, John and Joe Carvalho. *Evaluation of the IDEA Project*. USAID/REDSO/ESA. 1999.

Lanza, Kenneth A. *Institutionalizing Export and Investment Promotion Organizations: The Case of Costa Rica's CINDE*. Center for International Development Research, Duke University, 1995.

Belassa, Bela. *The Role of Catalysts in Export Development*. World Bank, 1989.

Brown, James G. *Agroindustrial Investment and Operations*. EDI, World Bank, 1994.

## **E2. Relevant Internet Links**

AgroInfo Americas: <http://agroinfo.org>

Global Agribusiness Information Network (GAIN): <http://www.fintrac.com/gain/>

International Food Policy Research Institute (IFPRI):  
<http://www.cgiar.org/ifpri/2020/welcome.htm>

Hungarian Agribusiness Centre: <http://www.agrinet.hu/>

Agribusiness Development Center (Escuela Agrícola Panamericana, El Zamorano) in Honduras:  
<http://msstate.edu/archives/casp/adc.html>

Bangladesh Agribusiness On-line: <http://www.agrobengal.org/>

International Food and Agribusiness Management Association (IFAMA): <http://www.ifama.org/>

Fundación Chile: [http://www.fundch.cl/fc/fc/invertir/fcinv03\\_en.htm](http://www.fundch.cl/fc/fc/invertir/fcinv03_en.htm)

Corporación PROEXANT in Ecuador: <http://www.ecuadorsur.com/proexant/index.html>

Comisión para la Promoción de Exportaciones in Peru (PROMPEX): <http://www.sea-world.com/prompex/index.html>

Costa Rican Investment Development Board: <http://www.cinde.or.cr/>

Madagascar Commercial Agricultural Promotion (MADCAP) Project:  
<http://www.chemonics.com/madagasc.htm>

Jamaica Small Business Export Development Project:  
<http://www.chemonics.com/jamaica.htm#sbed>

Phillippines Agribusiness Systems Assistance Program:  
<http://www.chemonics.com/philippi.htm#asa>

West Indies Tropical Produce Support Project (TROPRO):  
<http://www.chemonics.com/ecarib.htm>

National Agri-marketing Association: <http://www.agribusiness.com/htmlfile/coweb.htm>

Des Moines Agribusiness Park: <http://www.instrm.org/dialogue/dialog23/desmoin/desmoin.htm>

Center for Agribusiness and Economic Development in Georgia:  
<http://www.agecon.uga.edu/~caed/caed-hp.htm>

Center for Agricultural Business (Purdue University)  
<http://news.uns.purdue.edu/UNS/html4ever/9808.Downey.CAB.html>

Rural Industries Research and Development Corporation in Australia:  
<http://www.rirdc.gov.au/home.html>

Agribusiness Commercialization and Development Center (Pacific Northwest National Labs):  
<http://www.pnl.gov/news/1994/94-08.htm>

Fundación Salvadoreña de Desarrollo Económico y Social (FUSADES):  
<http://americas.fiu.edu/fusades/CD/index.html>

Agency of Agri-food Business and Marketing Development in the Ukraine:  
<http://www.aamd.lvivnet.com/>

Agribusiness Information Centre in India: <http://www.agroindia.org/>

Agricultural Issues Center (University of California at Davis): <http://aic.ucdavis.edu/>

Pacific Agricenter: <http://agribusiness.org/>

Journal of Agribusiness: <http://www.agecon.uga.edu/~jab/jabs.htm>

Virginia Agribusiness Council: <http://vvac.org/vac/>

### **E3. People and Institutions**

Within the United States, some of the best-known consulting firms that work in international agribusiness management include the following:

Chemonics International: <http://www.chemonics.com/>

Fintrac: <http://www.fintrac.com/gain/>

Development Alternatives, Inc.: <http://www.dai.com/corp/ANR/Agbiz.htm>

Cargill Technical Services: <http://www.cargill.com/cts/>

Abt Associates: <http://208.240.92.46/areas/saro-agriculture.html>

Deloitte Touche Tohmatsu: <http://www.deloitte.com/services/consulting.html>

ACDI/VOCA: <http://www.acdivoca.org/>

Agland Investment Services <http://www.aglandinvest.com/index.htm>

Sigma One Consulting <http://www.smec.com.au/agri/agrihome.htm>

Market & Technology Partners: [mtpinc@bellsouth.net](mailto:mtpinc@bellsouth.net)

Plans & Solutions: <http://www.plans-and-solutions.com>

Other firms specializing in agribusiness are in each major region of the world.