

PD-ABN-316



FINTRAC INC.

**SRI LANKA  
AGRO-ENTERPRISE DEVELOPMENT PROJECT  
PROJECT NO. 383-0111**

**MID-TERM EVALUATION**  
FINTRAC CONTRACT 353-01110A-00-3003-00

**SUBMITTED TO:  
U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT  
COLOMBO, SRI LANKA**

**AUGUST 30, 1996**

***SUBMITTED BY:***

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**PROJECT IDENTIFICATION SHEET**

1. **COUNTRY: SRI LANKA**
2. **PROJECT NUMBER: 383-0111**
3. **PROJECT DATES:**
  - A. **FIRST PROJECT AGREEMENT:** 5/21/92
  - B. **FINAL OBLIGATION DATE** FY 98
  - C. **MOST RECENT PROJECT ASSISTANCE  
COMPLETION DATE (PACD)** 9/30/98
4. **PROJECT TITLE: THE AGRO-ENTERPRISE PROJECT**
5. **ESTIMATED COSTS:**

A.	AID BILATERAL FUNDING (GRANT)	\$14,000,000
B.	HOST COUNTRY	\$20,500,000
	<b>TOTAL</b>	<b>\$34,500,000</b>
6. **IMPLEMENTATION MODE: A.I.D. COOPERATIVE AGREEMENT --  
OREGON STATE UNIVERSITY (OSU)**
7. **PROJECT DESIGNERS: USAID/COLOMBO  
GOVERNMENT OF SRI LANKA  
AGRICULTURAL COOPERATIVE  
DEVELOPMENT INTERNATIONAL**
8. **RESPONSIBLE MISSION OFFICIALS:**
  - A) **MISSION DIRECTORS: DAVID A. COHEN 1993-PRESENT  
RICHARD M. BROWN 1990-1993**
  - B) **ANR DIRECTOR GARY BAYER 1995-PRESENT  
GARY ALEX 1990-1995**
  - C) **PROJECT OFFICERS LIONEL JAYARATNE 1992-PRESENT  
RICHARD NISHIHARA 1993-PRESENT**
9. **PREVIOUS EVALUATION CHEMONICS NOVEMBER 1994**

**ACRONYMS**

<b>ABLE</b>	<b>American Business Linkage Enterprise</b>
<b>ADB</b>	<b>Asian Development Bank</b>
<b>AEIF</b>	<b>Agro-Enterprise Investment Fund</b>
<b>AgENT</b>	<b>Agro-Enterprises Project</b>
<b>BIC</b>	<b>Business Information Center</b>
<b>COP</b>	<b>Chief of Party</b>
<b>DAI</b>	<b>Development Alternatives, Inc.</b>
<b>DCOP</b>	<b>Deputy Chief of Party</b>
<b>DOA</b>	<b>Department of Agriculture</b>
<b>DRC</b>	<b>Domestic Resource Cost</b>
<b>EDB</b>	<b>Export Development Board</b>
<b>EOPS</b>	<b>End of Project Status</b>
<b>FTJE</b>	<b>Full time job equivalents</b>
<b>GSL</b>	<b>Government of Sri Lanka</b>
<b>IESC</b>	<b>International Executive Service Corps</b>
<b>MARD</b>	<b>Mahaweli Agricultural and Rural Development Project</b>
<b>M&amp;E</b>	<b>Monitoring and Evaluation</b>
<b>MIS</b>	<b>Management Information System</b>
<b>NDB</b>	<b>National Development Bank</b>
<b>OSU</b>	<b>Oregon State University</b>
<b>PACD</b>	<b>Project Assistance Completion Date</b>
<b>PRSA</b>	<b>Policy Reform Support Activity</b>
<b>TIPS</b>	<b>Technology Initiative for the Private Sector</b>
<b>UNDP</b>	<b>United Nations Development Program</b>
<b>USAID</b>	<b>U.S. Agency for International Development</b>

## EXECUTIVE SUMMARY

### I. PROGRESS TOWARD PROJECT'S GOALS AND OBJECTIVES

USAID/Sri Lanka's Country Program Strategy for FY 1996-2000 has as an objective: "Increased private sector employment and income." AgEnt activities in the areas of financial training, marketing overseas, technological assistance for agricultural production and processing, and microenterprise strengthening all directly support USAID's strategy. AgEnt is, in fact, the only Mission Project focused on the Agriculture Sector. The Project has also been venturing into the area of policy dialogue to remove constraints by providing assistance to Task Forces in the Department of Agriculture, but the level of effort in this area has been modest to date.

The Project's goals, purpose, and objectives are very much worthwhile and should be maintained. However, some of the key assumptions upon which they were based have not proven correct or, in other cases, the project's activities have been based on different assumptions -- e.g. that the GSL will protect domestic markets rather than opening them up to foreign competition.

In the four years of the Project, AgEnt has made good progress towards achieving the objectives outlined at the beginning. Current projections indicate that, by the PACD, AgEnt will achieve the following: investment: \$31.2 million (target \$20 million); and new jobs of 21,365, including direct (full time job equivalent) and indirect (target 13,000). It is important to recognize that the Project's accomplishments will be made without a significant component originally envisaged for the Project: a \$6 million World Bank Agro-Enterprise Investment Fund (AEIF).

The Project has devoted considerable resources to develop new product varieties/crops in Sri Lanka in the hope that some of them will prove profitable and provide new opportunities for Sri Lankan farmers. At this point in time, it is too early to come to a definite conclusion on most of them.

### II. SERVICE DELIVERY

The team met with more than 30 AgEnt customers, who generally expressed great appreciation and satisfaction with AgEnt assistance. There were a couple of exceptions, but those involved clients who had already received substantial assistance from AgEnt and expected more.

The cost/benefit ranking in the grant program demonstrates that AgEnt has obtained the best results in terms of additional investment and sales in poultry, processed foods, piggery, spices & essential oils, aquaculture and floriculture. In terms of job creation, the most dynamic sectors include piggery, processed foods, spices and essential oils, vanilla, floriculture and maize.

Based on these project results, AgEnt should consider giving higher priority to those sectors with least cost-to-benefit ratios and lower priority to those with high cost-to-benefit ratios, SO LONG AS THE HIGH BENEFIT SECTORS STILL NEED AgEnt ASSISTANCE. Some sectors, such as poultry and ornamental fish, will probably continue to experience high growth without AgEnt assistance. In these sectors and when working with large clients, AgEnt should continue to place greater emphasis on

the assistance impact on employment/outgrowers or on leadership needed to spread an activity (e.g. feed grains).

### **III. AGRIBUSINESS DEVELOPMENT TO THE YEAR 2000**

The team identified various types of constraints which will continue to have an adverse impact on the project's agribusiness activities unless they are removed or neutralized. They fall into three categories: policy, production constraints, and marketing. AgEnt has been making good progress in removing some of the production and marketing constraints and should continue its good work in these areas. However, more needs to be done in the area of policy. Unless important policy constraints are removed, many AgEnt clients will find it difficult to remain competitive.

#### **Organization of Technical/Administrative units**

The team reviewed the current organization of AgEnt and concluded that service delivery can be improved through a radical reorganization of AgEnt. Proposed changes are outlined below in the Section on recommendations.

### **IV. SUSTAINABILITY**

AgEnt's current sustainability plan envisages the formation of an Agricultural Development Trust with two separate operational units: an AgEnt Services Unit and a Production Holding Company for investment.

The AgEnt Services Unit would be able to generate some income from a variety of fees and commissions for services. However, without donor funding from some source, it is apparent that the AgEnt Services Unit will face an uphill battle in achieving the goal of sustainability. On the other hand, the projected Production Holding Company, in which AgEnt plays a more active management role and takes equity positions, shows more promise of eventually generating enough revenue to cover costs.

The team concludes that AgEnt's sustainability plan leads the project in a positive direction toward limited sustainability. In any event, AgEnt efforts toward cost recovery will make both AgEnt employees and client more conscious of the cost and benefits of the various services and lead to greater emphasis on those which give the most value.

#### **LESSONS LEARNED**

1. Although traditionally risk averse, Sri Lankan farmers respond well to growing a product which is profitable and has a stable, guaranteed market. Prominent examples of success include the outgrowers for the poultry and ornamental fish industries.
2. When working in sectors which depend upon the GSL to protect them from market competition, there is always the risk that the GSL will change policy abruptly. For example, if the GSL reduces tariff protection because the urban cost of living is rising too rapidly, farmer clients may suffer, as in the possible case of the farmers who invested in onion storage.
3. AgEnt needs to explore carefully opportunities for tying in farmer production to value-added processing. In some instances, such as gherkins, the fresh product is not

competitive on the international market. However, if processed locally, then the final product can compete in markets overseas.

4. In development of a product, quality is a necessary but not sufficient condition for success. Good, attractive packaging and labelling is just as important. This is clearly demonstrated in AgEnt's good work with a small spice producer.

5. Project design should not assume that another donor will contribute the resources necessary to achieve project goals. For example, in the current phase of AgEnt, the \$6 million World Bank AEIF failed to materialize. Similarly, it would be a mistake to assume that another donor will provide an endowment to help institutionalize AgEnt beyond the year 2000.

#### **PRINCIPAL RECOMMENDATIONS**

1. Based on the excellent results to date, USAID should extend and provide additional funding for the Project until the year 2000.

2. The team recommends that the Project's organization be changed radically for the work ahead to the year 2000. The changes proposed include:

- A. The creation of an Agricultural Development Trust which would receive funds from Project activities. The Trust would have a non-profit status.
- B. The creation of a Production Holding Company to manage and take equity positions in production companies with which the Project is working -- e.g. the Vanilla Processing Company. An expatriate advisor would be in charge of the Production Holding Company.
- C. Transformation of the current AgEnt organization into a wholly Sri Lankan operation. A Sri Lankan Manager would directly supervise the Chiefs of four divisions: Production/Agro-Processing, Marketing, Business Development, and Administration. AgEnt would also have two field offices: one in Kandy for the North and another in the South if there are enough clients.
- D. An expatriate Chief of Party would lead a Technical Advisory Unit to provide both long-term and short-term technical assistance for the Project.

3. AgEnt needs to develop a policy dialogue strategy which will involve as many private sector organizations as possible in educating key GSL officials and persuading them that changes in policy are required for the advancement of Sri Lankan agriculture. AgEnt should coordinate closely with USAID's Policy Reform Support Activity (PRSA).

4. AgEnt should continue to work with large companies under two specific terms: a) if AgEnt can obtain equity; or b) if a significant impact can be made on outgrowers.

## I. PROJECT RESULTS

### A. RELEVANCE TO MISSION'S DEVELOPMENT STRATEGY

The AgEnt Project directly supports USAID/Sri Lanka's Country Program Strategy for FY 1996-2000 and in particular the objective: "Increased private sector employment and income," achievement of which calls for the following:

"USAID assistance will address the major constraints to access and opportunity in the private sector: inconsistent government policies and regulations, insufficiently developed financial markets, inadequate economic infrastructure; limited access to new markets and technologies; government interference in the agricultural sector; and a shortage of trained private sector managers. USAID will help strengthen both the rural and urban economies through small and microenterprise development, financial markets development, promoting economic liberalization and privatization, transferring new technology and skills, finding new and expanded markets, strengthening formal market institutions and mechanisms, and encouraging free market agricultural reforms."

Project activities in the areas of financial training, marketing overseas, technological assistance for agricultural production and processing, and microenterprise strengthening all directly support USAID's strategy outlined above. The Project has worked very closely with the Task Forces to support the GSL's priority areas of development. This offers AgEnt an opportunity to influence policy and move it in a positive direction. More effort should be devoted to this area in the future.

The Project's goals, purpose, and objectives, in general terms, are very much worthwhile and should be maintained. However, some of the key assumptions upon which they were based have not proven correct or, in other cases, the project's activities have been based on different assumptions.

**Assumption:** GSL remains committed to open markets through economic reform, deregulation, privatization, and trade liberalization.

The team has been told that the GSL remains committed to open markets, privatization, and trade liberalization. However, during the team's visit, the President denounced various private management companies for allegedly stripping privatized companies of assets at the expense of worker interests. This naturally calls into question at least some of the GSL's commitment to privatization.

In the selection of some crop sectors, the Project has assumed that the GSL would continue to provide protection -- not open markets -- for domestic production of certain crops/products such as onions and maize. At least in the case of onions, the GSL changed its policy position suddenly. The GSL's main priority appears to be to provide food at low prices to the urban population, even if this policy will affect farmers adversely. The constant tug-of-war between the Ministries of Trade and Agriculture can result in abrupt changes in import policies and affect the competitiveness of local production.

**Assumptions:** Private sector investment will increase in response to GSL open market measures, and this new investment will produce more, better paying, sustainable jobs.

**Progress toward social and political stability will be maintained.**

The intensification of the war, combined with a serious drought and power shortages, have led to a general deterioration of the political, economic, and investment climate.

**Assumption: Sri Lanka's major export products remain competitive and access to international markets is maintained.**

Sri Lanka's major export products such as tea, rubber, coconut, and garments have remained reasonably competitive, but not necessarily in terms of cost of production. The team has been told that, as the world's textile quota system is gradually removed, Sri Lanka's garment industry will have difficulty competing just on the basis of price. Countries like China and Bangladesh have much lower labor costs. According to the Sri Lankan Industrial Association, the Sri Lankan rupee is overvalued by at least 13 percent, which makes it more difficult to remain competitive against China and India, whose currencies are undervalued. According to Domestic Resource Cost (DRC) indices, most crops grown in Sri Lanka do not have a comparative advantage.

At this juncture, the Project has had more of an impact on production for the domestic market (e.g. poultry, maize, potatoes, onions) than on the export side of the equation (ornamental fish, herbs, spices, coir). If the GSL remains committed to opening the domestic market to international competition, then products like maize and potatoes could face trouble down the road, particularly since the Cost of Living Committee continues to have substantial influence on import regulations.

#### **B. PROGRESS TOWARDS USAID'S EMPLOYMENT, GROWTH, AND INCOME OBJECTIVES**

The AgEnt Project is making a strong contribution to USAID's employment, growth, and income objectives. Based on progress to date as shown by these figures and field verification, the team recommends that the AgEnt Project be extended to the year 2000.

The latest Monitoring and Evaluation (M&E) report for the Project (see summary in Annex A), shows the following progress toward those objectives, as projected for CY 1996:

**Employment: 5130 direct, 3475 outgrowers, and 3630 indirect jobs**

**Growth: direct investment of \$10.6 million and indirect investment of \$2.3 million**

**Sales (proxy for income growth): \$27.7 million**

Looking forward, the life of project (LOP) results for five years are likely to meet the following targets:

<b>Number of expansions of agroenterprises:</b>	<b>300</b>
<b>Total direct cumulative investment</b>	<b>\$20 million</b>
<b>Total direct jobs (FTJE)</b>	<b>13000</b>

New/improved technologies/equipment introduced	100
New markets entered	40
New crops/products introduced	40

The Project will fall probably short of meeting the following targets by PACD in 1998:

Total annual sales above baseline	\$50 million
Number of new startups:	50
Equity/Debt mobilized	\$9 million
Financial institutions with new financing instruments for agro-enterprises	5
New outgrower/contract grower programs	20

The original Project Paper envisaged a \$6 million World Bank Agro-Enterprise Investment Fund (AEIF) which would be combined with AgEnt grants to produce large deals with sizeable agro-enterprise companies. The AEIF never materialized. Furthermore, AgEnt soon discovered that few large companies were interested in investing in the rather risky agribusiness sector. So, the role of the Financial unit necessarily changed from one of "deal-making" to one of service delivery (training and assistance to clients in the development of business plans). AgEnt has already taken this change into account and revised downward M&E targets (see Annex A).

### C. BEHAVIORAL CHANGES OF AgENT CLIENTS IN INVESTMENT, PLANNING, AND MANAGEMENT

The Project has made a significant impact and changed the behavior of clients in various product areas. Examples are given below:

#### -- ONION STORAGE

In Sri Lanka, the "big" onion harvest takes place in the very short period of September-October and as a result there is an oversupply and prices drop. In order to help farmers increase the prices they receive for their onions, the Project has helped them build storage sheds so that they can offer their product for sale after the peak supply period. Last year, this program was a tremendous success. Instead of receiving 10 rupees/kilo, the farmers managed to obtain between 18 and 39 rupees/kilo. The success of this program also encouraged the banks to extend credit to farmers for the construction of onion storage sheds and so they are now helping many farmers duplicate what has been done with AgEnt grants.

In 1996, there could be a problem with this program. The GSL has announced that it will permit unrestricted imports of onions. Unless the GSL changes its mind, it is likely that onion storage will not lead to the type of price increase enjoyed in 1995. India can deliver a kilo of onions to Sri Lanka at a cost of no more than 8 rupees.

## -- MAIZE

AgEnt is working with approximately 475 lead farmers in six districts in the maize belt of Sri Lanka to change the way they plant maize and thereby improve their productivity. These lead farmers in turn work with 15-20 follow-on farmers, and therefore spread the effect. Maize farmers in Sri Lanka have been accustomed to planting maize at low density, planting other crops between the maize, using no fertilizer, tilling the land only superficially, and using only the locally available open pollinated seed. With AgEnt's encouragement, they have planted hybrid and improved open pollinated maize spaced closely together, used fertilizer, and tilled the land to a depth of at least 8 inches. In terms of maize production, the results have been quite dramatic. Instead of producing only 1,000 kilos/hectare, the yields of trial plots indicate that farmers can produce around 6,000 kilos/hectare. This should have a very pronounced impact on how farmers plant maize in the future. The market demand for maize is increasing both as a "corn on the cob" commodity as well as a feed grain for the poultry and dairy industry.

### D. CUSTOMER SATISFACTION

The team met with a fairly large number of AgEnt customers, who generally expressed great appreciation and satisfaction with AgEnt assistance. There were a couple of exceptions. One client who had received repeated grants of assistance complained that lately AgEnt has been less responsive, "because their hands are tied by the USAID bureaucracy." The team suspects that AgEnt had decided that it was time for this particular client to graduate from the AgEnt program. Another client, also a beneficiary of various grants, complained that AgEnt was not being responsive to assistance requests from his outgrowers. It turned out that the outgrowers had never presented requests for assistance to AgEnt.

### E. INTEGRATION OF GENDER CONCERNS

AgEnt has an especially designed program for the development of Women Agro-Enterprise Entrepreneurs and has made a strong effort to include women clients in all of its activities. After identifying women entrepreneurs with high potential, the Project proceeded to adopt a suitable program of assistance, including business advisory services, training, technology transfers, and market/product development and promotion. AgEnt hosted an Export/Domestic Marketing seminar attended by 200 women and, following the screening of applications, awarded 20-25 direct assistance packages to qualified women entrepreneurs.

The team visited two women micro-entrepreneurs who received assistance from AgEnt and both had been so successful that their enterprises had moved up into the small scale category in terms of annual sales. Both now face a bright future and AgEnt can justifiably take credit for giving them support when they really needed it.

Another activity which has a very high participation of women is the vanilla program. Approximately 40 percent of the "lead" farmers enrolled in the program are women, many of whom occupy leadership positions in their community.

AgEnt has recently integrated the Women's Program into the Marketing Division. The team believes this a positive move because it will ensure that consideration of gender be extended to a wider range of clients.

## **F. ENVIRONMENTAL IMPACT**

AgEnt requires that a client provide environmental impact information upon submission of a project. This information in turn is sent to USAID for review by the environmental officer. The team recommends that USAID review its internal systems to ensure that environmental considerations involving AgEnt are reviewed promptly. This system, plus onsite inspections of projects, should provide satisfactory environmental safeguards for the project. Environment concerns have thus far kept AgEnt from providing support to the shrimp farming industry.

At times, the grant is itself aimed at protecting the environment. A poultry client received a grant for an environmental study and wastewater treatment system and a similar grant for another poultry client is under consideration at the present time.

Annex K lists the chemicals used by Project clients.

## **II. SERVICE DELIVERY**

### **A. EFFICIENCY**

#### **COST/BENEFIT ANALYSIS**

The purpose of this analysis is to provide Project managers a general indication of how the different sectors rank in terms of benefits measured by income, additional investment, and employment. Even if a detailed internal rate of return analysis were done for each grant (AgEnt does have these figures), the end result at a Sectoral level would only be an approximate guideline at the aggregate level. The team used sales figures as a proxy for income, since figures for the latter are unavailable. Another limitation is that industrial and oilseed crops are relatively new to Sri Lankan farmers and cultivation of these crops were initiated recently on an experimental basis. Therefore, the sales and investments in these crops are understandably low and so it cannot be concluded that their ultimate impact on incomes, investments and employment will be low. Even though it is a traditional crop, maize ranks relatively low because farmers have little experience with the new planting methods.

Within these limitations, the team looked at the data and ranked sectors by relative cost effectiveness in terms of sales (proxy for income), investment, and employment. The results are summarized below:

## IMPACT OF GRANTS COMPONENT ON SALES THROUGH END OF 1995

SECTOR	VALUE OF SALES(\$)	SALES AS A % OF GRANTS	RANK
Aquaculture	583,000	372	5
Floriculture	156,000	251	6
Maize	12,000	43	9
Poultry	4,106,000	1,367	2
Processed Foods	3,695,000	2,258	1
Spices & Essence Oil	821,000	1,185	3
Industrial Crops	4,000	4	11 <sup>*</sup>
Vanilla	0	-	12 <sup>*</sup>
Piggery	23,000	397	4
Oilseeds	4,000	49	8 <sup>*</sup>
Vegetables	12,000	8	10
Other	142,000	117	7

\* These are introduced on an experimental basis. It is too early to judge the sales performance because little or no sales had taken place by the time of the study.

Source: Team calculations based on AgEnt data.

This table shows that the highest impact of the grant money on sales was on the processed foods, poultry, spices & essential oil, piggery, aquaculture and floriculture sectors. As mentioned in the footnotes to the table, the poor performance of industrial crops, vanilla, and oil seed sectors are due to the fact that these are new crops which were planted only recently on an experimental basis at present.

## IMPACT OF GRANTS COMPONENT ON INVESTMENT THROUGH END OF 1995

SECTOR	VALUE OF INVESTMENT (\$)	INVESTMENT AS A % OF GRANTS	RANK
Aquaculture	916,000	585	5
Floriculture	299,000	481	6
Maize	8,000	29	9
Poultry	7,472,000	2,488	1
Processed Foods	3,577,000	2,187	2
Spices & Essence Oil	436,000	630	4
Industrial Crops	2,000	2	11
Vanilla	111,000	171	8
Piggery	93,000	1605	3
Oilseeds	1,000	12	10
Vegetables	1,000	1	12
Other	349,000	288	7

Source: Team calculations based on AgEnt data

This table provides information on the impact of the grant component on additional investment generated in the various sectors. The column entitled "Value of Investment" shows the total investment in each sector as a result of AgEnt's intervention and the next column "Investment as a % of grants" shows the percentage multiplier effect of AgEnt's grant. The best performing sectors are poultry, processed foods, piggery, spices & essential oils, aquaculture and floriculture. It turns out that these sectors are also the high performing sectors with respect to additional sales generated.

### COST OF JOB CREATION UP TO THE END OF 1995

SECTOR	COST PER JOB (\$)	RANK
Aquaculture	196	8
Floriculture	53	5
Maize	89	6
Poultry	104	7
Processed Foods	19	2
Spices & Essence Oil	21	3
Industrial Crops	3,340	11 *
Vanilla	51	4
Piggery	18	1
Oilseeds	4,065	12 *
Vegetables	472	9
Other	658	10

\* These are at an experimental stage.

As for job creation, the best performing sectors include piggery, processed foods, spices and essential oil, vanilla, floriculture and maize. The relatively high cost of job creation in the poultry sector could be due to the heavy investment in modern machinery. Here again the industrial crops and oilseeds perform poorly, but this may be due to the fact that no commercial scale farming of these crops has begun thus far.

## POSSIBLE COST REDUCTION IN OPERATIONS

AgEnt is discharging its responsibilities in a cost effective manner, but it needs to keep in mind that USAID's support will run out in the year 2000 and any operations after that will have to be funded in some other manner. AgEnt should review regularly its staff requirements to ensure that actual staff levels are consistent with those requirements. AgEnt should also, wherever possible, continue to try to reach small farmers through "integrators" rather than directly. Working through an integrator reduces costs both in terms of money and time.

Based on project results, AgEnt should consider giving higher priority to those sectors with least cost-to-benefit ratios and lower priority to those with high cost-to-benefit ratios, **SO LONG AS THE HIGH BENEFIT SECTORS STILL NEED AgENT ASSISTANCE**. Some sectors, such as poultry and ornamental fish, will probably continue to experience high growth without AgEnt assistance.

Lastly, in providing grants to large clients, AgEnt should continue to place greater emphasis on the direct impact of assistance on employment/outgrowers. In the team's view, providing technologically advanced equipment is NOT a sufficient reason to provide a grant to a large company, if the equipment itself will not result directly in growth of jobs/outgrowers. In some instances, AgEnt appears to approve grants for equipment to "establish a relationship" with a big company, with a view that down the road another grant will be given which more closely support the project's objectives. Furthermore, in some instances the team received the impression that the large client would have purchased the equipment with or without AgEnt's grant. In all of these instances, the team believes that a grant should not be approved.

## ORGANIZATION OF TECHNICAL /ADMINISTRATIVE UNITS

### Existing Organization of AgEnt

Annex B shows the latest organizational chart of AgEnt. One is struck by the following:

- There are some people in AgEnt (e.g. Administration/Financial and Grants units) who report to the expatriate Chief of Party (COP) and not to the Deputy Chief of Party (DCOP). This has placed a heavy administrative burden on the COP and limited the DCOP's opportunity to oversee all of AgEnt's operations.
- There are no Division Chiefs. This makes it difficult to assign full responsibility for a particular Division's performance.
- There are many different small units which have some degree of autonomy. For example, the Grants unit reports directly to the Chief of Party and the Training, MIS Coordination, and Business Information units report to the Deputy Chief of Party.
- At the present time, AgEnt only has an office in Colombo and technical staff members spend much of their time travelling around the country visiting clients/projects. In this way, much "quality" time is lost.

The team has been informed that the reason for having the Administrative and Grants units report directly to the COP is a desire by OSU to have "its own man" controlling

expenditure of funds. The team believes that the COP can undertake spot checks from time to time instead of having responsibility for permanent supervision of these units.

### Team Proposal for Reorganization

The team considered various options for improving AgEnt's organization to streamline operations, establish clearer lines of authority and responsibility, and create a structure which would support limited sustainability. In the end, the team decided to recommend a radical restructuring of AgEnt as shown in Annex C.

In the proposed new structure, the Project would have four units: a) an organization named AgEnt which would continue to provide the full current range of services; b) an Agricultural Development Trust which would receive funds from Project activities. The Trust would have a non-profit status; c) a holding company which would manage production companies established by the Project -- e.g. a vanilla processing company; and d) an expatriate technical advisory unit headed by a Chief of Party. The proposed structure of these units is summarized below:

#### AgEnt Services Unit

-- The AgEnt Services Unit would be headed by a Sri Lankan manager who would focus his energies on project administration. Below him, there would be four divisions: Production/Agro-Processing, Marketing, Business Development, and Administration. Each Division would have a Chief who would supervise the other staff in the division and have full responsibility for the performance of that Division. Chiefs selected should be from existing Sri Lankan staff.

-- The Grants, Training, and MIS Coordination units would be incorporated into the Business Development Division and the Business Information Center into the Marketing Division. The Administrative/Financial Operations Unit should become a full-fledged Division.

-- The team recommends that AgEnt establish two "bare bones" field offices to service clients: one in Kandy for the North and one perhaps in the South if there are sufficient clients to service. Each of these offices should be staffed with a maximum of one manager. The manager would promote and screen potential new clients, and work with AgEnt extension officers to provide services to clients. This individual would have a secretary, a driver and vehicle. The cost of these offices should have minimal impact on the budget because the reassignment of personnel from Colombo and reduction in per diem expenses would offset much of the cost of renting and staffing these offices. The team also recommends that USAID explore the possibility of having these offices shared by TIPS.

#### Agricultural Development Trust

The Agricultural Development Trust is a fund which would be created to receive income generated from services provided on a fee basis by AgEnt and from dividends generated from the Production Holding Company (see next section) equity shares in various production companies. The Trust would have non-profit status and any accumulations would be used only for purposes authorized for the Project.

### Production Holding Company

The Project would create a non-profit holding company to manage: one or more production companies established by AgEnt -- e.g. vanilla processing company. The holding company would be staffed by an expatriate agribusiness advisor, a local counterpart, and a secretary. The production companies would have their own staff. In the case of the vanilla processing company, the extension officers working in vanilla would also become part of the vanilla processing factory. Few other temporary workers would be required during the three-month period each year when the vanilla processing factory would need to be operational. USAID should be aware that, without a vanilla processing company, the current group of vanilla outgrowers could end up producing a crop without a market. This would have a disastrous impact on the reputation of AgEnt. Therefore, AgEnt and USAID need to explore urgently all possible options to make the vanilla processing company a reality.

### Expatriate Technical Advisory Unit

The expatriate technical advisory unit would be headed by a Chief of Party who would provide long-term technical assistance while at the same time obtaining and supervising short-term technical experts brought in for Project assistance. The Chief of Party should have enough broad-based agribusiness experience and the perspective to identify quickly the type of expertise needed by AgEnt clients and the Production holding company. The Chief of Party would have an administrative assistant/secretary and receive other needed administrative support from AgEnt. He would have supervisory authority over the Agricultural Development Trust and AgEnt Services unit.

### Expatriate Continuity

There is also the issue of continuity of expatriate technical assistance. In the earlier years of the Project, extensive dissension among the expatriate advisors, and between AgEnt and USAID, began to have a negative impact on the Project. A review of this problem by USAID and the contractors resulted in a Memorandum of Understanding dated September 18, 1995 in which the principal parties agreed that a) all of the incumbent expatriate advisors would depart by year-end 1996; and b) there would only be a replacement for the Marketing Advisor, who would also assume the Chief of Party responsibilities. Upon arrival, USAID asked the team to review this agreement.

The team reviewed the Memorandum of Understanding, met with most of the Advisory Board members, and interviewed all of AgEnt personnel. On the basis of these discussions, the team concludes that the incumbent Chief of Party is a dedicated, hardworking professional who is totally committed to the goals of the Project. Unfortunately, his personal relations with some important expatriate co-workers and USAID have suffered because of personality conflicts, including his defense of the former Marketing Advisor who was competent but very abrasive. As a result of this situation, the team believes it is necessary to "clear the air" and therefore recommends:

a) the appointment of the new Marketing Advisor as head of the Technical Advisory Unit and Chief of Party;

b) reassignment of the incumbent Chief of Party as head of the Production Holding Company. He has a wealth of experience accumulated during the years he has worked for AgEnt and has been a major contributor to the momentum of the Project. The incumbent Chief of Party would initially be responsible for closing out the 1996 Work Plan, with the responsibility for developing the 1997 Work Plan falling to the new Chief of Party.

In the event that USAID does not accept the creation of a Production Holding Company, the team recommends that USAID:

a) assign the new Marketing Advisor as head of the existing AgEnt Services Unit and Chief of Party to replace the incumbent Chief of Party as of year-end 1996.

b) immediately initiate recruitment of a broad-gauged expatriate with a strong agribusiness/business development background.

#### **COOPERATION AGREEMENT WITH OREGON STATE UNIVERSITY**

USAID requested that the team review the current Cooperative Agreement with Oregon State University (OSU) to determine ways to improve its functioning. According to professionals involved in the Project, USAID originally entered into a cooperative agreement with OSU because of concern over administration of the grant component of the Project. This has resulted in a contractual arrangement in which OSU is legally responsible. Because of the teaming agreements between OSU and the sub-contractors, most of the long-term personnel are provided by Development Alternatives, Inc. (DAI). USAID has experienced some delays in responses from OSU regarding personnel matters. OSU explains that these delays have been caused by OSU efforts to find the best personnel for the job and not a result of administrative procedures.

OSU maintains close supervisory contact with the Chief of Party. OSU, and particularly Dr. Colin Sorhus, has provided close support to the general direction of AgEnt services. Oregon State took special responsibility for creation of the Business Information Center, which is considered to be one of the better resources available in Sri Lanka for agribusiness oriented problems.

In terms of overhead, OSU's involvement does not increase the Project's costs. OSU has a modified indirect cost rate structure which prohibits the charging of overhead on top of billings of its subcontractors. In addition, OSU has one of the lowest indirect cost rates -- 25% or much lower than the industry standard.

The team met with the Chief of Party of the Technology Initiative for the Private Sector (TIPS) Project and was struck by the extensive support available from the International Executive Service Corps (IESC). TIPS can call on IESC to undertake ABLE market studies and to provide retired experts at relatively low cost for technical assistance to clients. AgEnt receives no comparable support from OSU, but few, if any institutions have the backstopping capability of IESC. In fact, the Project is currently using many of IESC's support services, such as those provided by ABLE.

The team does not recommend that the extension of the Project be opened to bidding by other institutions. This could lead to delays and disruptions of the Project.

#### **CLIENT EVALUATION AND SCREENING FOR GRANTS**

AgEnt's evaluation and screening process is shown in Annex D. It is a very thorough and long process. AgEnt tries to provide some kind of assistance to all clients, even if only to redirect them to the appropriate Department of Agriculture extension officer. Clients, who show potential to receive a grant, are asked to submit a great deal of information which forms the basis of a business plan. AgEnt decides on what kind of assistance it will be able to provide and at what phases of development of the client's business.

While the process tends to be somewhat "bureaucratic" and slow, the team believes that the evaluation/screening system is working well because it forces the client to think about what needs to be done to achieve business goals.

#### **B. EFFECTIVENESS**

##### **INTRODUCTION OF NEW PRODUCTS/CROPS**

The Project has devoted considerable resources to develop new product varieties/crops in Sri Lanka in the hope that some of them will prove profitable and provide new opportunities for Sri Lankan farmers. At this point in time, it is too early to come to a definite conclusion on most of them. However, from team visits to the field, the team ascertained that the following prospects exist:

##### **-- Vanilla.**

There is a good market opportunity for the development of vanilla in Sri Lanka. It is a crop which has been grown "wild" in Sri Lanka for many years and, with help from AgEnt, could develop into a significant cash crop for small farmers and also help generate foreign exchange from exports. Figures on production costs and export prices look good.

Originally, AgEnt had hoped that a local private company would continue the development of vanilla outgrowers and set up a facility to "cure" vanilla for export. Since this has not happened, AgEnt has decided that it will establish a company to work with vanilla outgrowers and operate the processing facility, thereby providing the missing link in the chain to send the product from the farmer to the importer/processor at the other end. This will naturally increase AgEnt's stake and risk but the amount of money involved is relatively small because the National Development Bank and a large multinational buyer of vanilla have agreed to put up part of the money. Furthermore, AgEnt's share of any income from this venture would contribute to AgEnt's sustainability.

##### **-- Pyrethrum**

AgEnt is supporting pyrethrum crop trials in various large tea plantations, and it is at this stage too early to say whether pyrethrum is a viable crop in Sri Lanka. However, basic conditions do not look promising.

In Kenya, the world's top producer of pyrethrum, large scale farmers have gradually abandoned production and small scale producers have taken over. In Sri Lanka, the project must necessarily work with large producers because mainly tea plantations satisfy the need for a considerable extension of land at high altitude. Prices of tea and other alternative crops which can be grown on tea plantations will probably yield higher returns on investment than pyrethrum. The team was directly informed by an executive of the lead company working on pyrethrum that, unless pyrethrum is at least as profitable as tea, the company will cease to work on pyrethrum. He added that results to date on pyrethrum have been disappointing.

The team also met with an executive of the company which produces repellent coils from synthetic pyrethrum and which is PERHAPS interested in buying natural pyrethrum to incorporate in its coil products. He indicated that, before any kind of commitment is made on quantity and price of pyrethrum to be purchased locally, the company needs to test samples of coils from Kenya made out of natural pyrethrum -- samples which AgEnt has agreed to obtain but has not yet delivered.

-- Sunflower

AgEnt introduced various sunflower seed varieties for production trials and results have thus far been inconclusive. In the initial trials, production costs were relatively high and the quality of the oil processed failed to meet the quality standards needed to compete with imported sunflower seed oil. The team believes further work on this product is warranted because of the potential contribution of the by-product for the feed industry. Furthermore, sunflowers are highly drought resistant and therefore could probably be grown in the Yala season in paddy fields with only residual moisture.

-- Ramie

AgEnt has assisted a tea plantation company to plant ramie on a trial basis. Unfortunately, the short-term experts provided by AgEnt (one Sri Lankan and another Philippine) were neither sufficiently knowledgeable nor open to fulfill the client's needs. Moreover, preliminary cost/revenue calculations prepared by the client show a very low net return. The prospects for this new crop therefore do not look good.

-- Herbs, spices, dried fruit/vegetables

AgEnt is working with various processor clients on herbs, spices, dried fruit/vegetables. This has proven to be a very profitable activity for most of the clients and can lead to significant income-producing linkages with small farmers. AgEnt should continue to work in this sector to strengthen/expand linkage opportunities and to find new foreign markets.

-- Tropical fruit

AgEnt has been assisting canneries working with tropical fruit and some of them have excess capacity. AgEnt should explore the development of pineapple production to establish linkages with the canneries coupled with an effort to market fresh pineapple to Dubai and other parts of the middle east. This marketing effort should be undertaken only after a careful study of the windows of opportunity in the Arab Gulf markets, and an assessment of the costs of production.

**AgEnt should undertake sector studies to expand tropical fruit production in conjunction with interested processing companies. Some possibilities include:**

- 1. Passion fruit in the southern cone of Sri Lanka**
- 2. Heart of Palm as produced in Ecuador**

**A successful fruit drink and jam processing client could serve as a nexus for contact with fruit growers. Identified growers could be assisted in the planting of improved fruit varieties, in the development of fresh market alternatives for their better quality fruit, etc. Consultants should be sought to enhance flavors in development of the client's product. There are other down-stream benefits that could be developed.**

#### **-- Ornamental Fish**

**The ornamental fish industry in Sri Lanka is very vigorous and AgEnt clients in this sector have done well. Ornamental fish exports grew around 150% between 1994 and 1995 and remains very dynamic. At the moment, Sri Lanka's portion of the world trade in ornamental fish is about 1% with a value of approximately \$5 million Further AgEnt investments in this industry should be the subject of a rigorous study of the overall industry to determine where the constraints to increased exports lie. In the case of Singapore, rapid uncontrolled growth resulted in poor disease control and damage to the reputation of that country's ornamental fish industry. To prevent this from happening in Sri Lanka, the team recommends that AgEnt give priority to training in disease control. The BIC of AgEnt should continue to build up its knowledge of the latest breeds and technologies for the industry. Further, AgEnt should probably not work with the capture and export of marine ornamental fish because of the potential damage to the reefs in Sri Lankan waters.**

#### **-- Fresh vegetables**

**AgEnt is working with various clients on fresh vegetables for the domestic and export markets. Experience to date suggests that this will be an uphill battle. Production costs in Sri Lanka are relatively high, especially when compared with India. AgEnt is now considering providing support for growing vegetables under "polytunnels" (greenhouses) to protect these products from the adverse effects of the rain. This type of production using greenhouses is expensive but will permit farmers to obtain high prices during seasons when these crops are not normally available.**

**Building upon existing studies, AgEnt should launch an effort to enhance quality products on supermarket shelves of selected vegetables and fruit in conjunction with an export program. Before entering into a quality enhancement program, AgEnt should study and evaluate all phases from production to domestic and export markets to determine the actual market requirements and costs of production. The market studies should reveal specifications as well as particular windows of opportunity in competition with Uganda, Kenya, the Middle East, and other countries.**

#### **-- Trees**

**AgEnt has initiated a very successful program with a small tree nursery client. First, the nursery itself needs technical assistance in increasing the percentage of success in plant propagation. AgEnt could work with this client to develop an adequate misting**

system, an improved irrigation technology and, ultimately, improved selection of planting materials. As the market develops, the nursery client could begin to work with outgrowers for the production of additional plant material. AgEnt could also work with this nursery in the promotion of the product. Finally, AgEnt could assist this nurseryman in development of relationships with other nursery operators in Sri Lanka.

#### **-- Milk Production**

AgEnt is launching a milk production activity working with five dairy farms in five different provinces. Among other things, AgEnt will:

- Assist dairy farmers to establish and maintain pastures to provide good quality fodder for dairy herds.
- Support a cattle breeding program using deep frozen semen of good quality bulls for artificial insemination. The Project will train inseminators.
- Develop a mobile veterinary service to inspect periodically dairy herds and maintain them in good health.
- Train farmers in effective heifer calf rearing techniques to enhance their milk production potential.
- Help establish chilling centers to collect milk.

AgEnt hopes to double the production of milk/cow of farmers who will be the beneficiaries of the Project.

#### **IMPACT ON AGRIBUSINESS INVESTMENT**

By the very nature of AgEnt grants to cover only part of the cost of investments undertaken by clients, the Project has clearly stimulated agribusiness investment (plus \$12.9 million estimated through 1996). In some cases, the client may have undertaken the full investment on his own but probably at a later date. AgEnt, therefore, at the very least accelerated the process and at times ensured that the client purchased equipment from the U.S. rather than from another country.

#### **COMPETITIVENESS OF AgENT'S PRODUCT LINES OVERSEAS**

AgEnt works with a wide range of products and the degree of competitiveness in overseas markets varies or is not yet clear. Products which are definitely competitive include coir, ornamental fish, herbs, spices, essential oils, and ethnic foods. Products intended solely for the domestic market, such as maize, poultry, sunflowers, and potatoes are not competitive internationally. Products still being tested for their competitiveness include vanilla, pyrethrum, ramie, fresh vegetables and strawberries grown in polytunnels, and tropical fruit such as pineapple. At this point, it looks like these products will face an uphill battle, particularly in light of lower costs in neighboring India. A major company told the team that India's production costs for gherkins are 20 percent lower than those in Sri Lanka but the company decided to maintain its production base in Sri Lanka anyway because it was able to make a profit by bottling the gherkins. However, the same company decided to abandon okra production because of the Indian competition and lack of opportunity for value addition

through processing. Unless there is a clear opportunity to make a profit, experience in the Mahaweli Agricultural and Rural Development Project (MARD) shows that risk aversion among farmers makes it extremely difficult to introduce new crops.

### **III. AGRIBUSINESS DEVELOPMENT TO THE YEAR 2000**

#### **A. CONSTRAINTS**

The team has identified various types of constraints which will continue to have an adverse impact on the project's agribusiness activities unless they are removed or neutralized. They are grouped below into three categories: policy constraints, technical production constraints, and marketing constraints:

##### **POLICY CONSTRAINTS:**

- **Difficulty in obtaining GSL authorization to import new seed varieties. This problem has delayed the introduction of new commercial crop opportunities.**
- **Difficulty in using land for collateral to obtain loans for investment. With encouragement from international institutions, the GSL has been wrestling with this problem for many years and has yet to come up with a solution.**
- **Price controls for certain products -- e.g. milk. These price controls may protect consumers but act as a disincentive to additional investment in dairy herds.**
- **High cost of air freight to major markets. The GSL should review Air Lanka's pricing for cargo to ensure that it is not unduly high and ensure that it faces fair competition from other airlines. If the high cost is due to taxation of jet fuel, the GSL should consider reducing such taxes.**
- **Principal constraints to investment are: a) need to improve regulatory climate; b) the war and its threat to domestic security and political stability.**

As AgEnt operates in this constrained climate, it needs to develop a policy dialogue strategy which will involve as many private sector organizations as possible in educating key GSL officials and persuading them that changes in policy are required for the good of Sri Lankan agriculture. The Project paper for AgEnt envisaged the preparation of 12 policy papers -- a tool which has been used minimally by AgEnt. The team recommends that AgEnt place greater emphasis on this area in the future and collaborate with USAID's Policy Reform Support Activity (PRSA) to provide them with practical inputs and to ensure a coordinated policy dialogue effort.

##### **PRODUCTION CONSTRAINTS**

- **Lower productivity of farm workers relative to those in neighboring countries, such as India and Thailand.**
- **Small size of farm plots.**

- Risk aversion of farmers makes introduction of new crops difficult.

AgEnt has been doing an excellent job of helping farmers remove some of these production constraints. AgEnt's crop training and technical assistance have raised both productivity and the quality of agricultural production. AgEnt has also helped with the establishment of outgrower and collection center systems. Lastly, by demonstrating the profitability of certain crops, AgEnt has encouraged farmers to diversify their production.

#### **MARKETING CONSTRAINTS**

- Low quality and insufficient information about market requirements.
- Dearth of vertically-integrated production and marketing systems.
- Poor packaging/labeling.

There is a general consensus among AgEnt clients that dearth of marketing information is one of the principal constraints facing agribusiness and that AgEnt's assistance is particularly valuable in this area. AgEnt is and should continue to explore ways to connect its clients with one another and thereby create synergies which will support the increase in sales, jobs, and investment. AgEnt has also enjoyed success in working with clients in developing good, attractive packaging and labeling. All things considered, AgEnt's marketing assistance is one of the most important and effective things it is doing. It should continue its good work in this area.

#### **OVERLAPPING OF AgENT AND TIPS ACTIVITIES**

The team discovered that AgEnt and TIPS are both working with clients in the processed food sector. This overlapping of activities creates confusion and encourages clients to play off AgEnt and TIPS against each other. Agro-processors are "integrators" who provide the principal opportunities for linkages to farmer outgrowers, and, therefore, are particularly important for AgEnt.

The team recommends that USAID establish clear guidelines for AgEnt and TIPS activities in the agro-processing sector so that each organization will know who is responsible for what -- e.g. TIPS for confectionery products and AgEnt for processed fruit and vegetables. TIPS has much wider scope and opportunity to work in the manufacturing sector and therefore, in the team's view, AgEnt should have primary responsibility for providing services to the agro-processors.

#### **B. RESOURCES NEEDED**

Annex J shows the budget for a three-year extension of the AgEnt Project and is based on the following assumptions:

- The Project will have only two long-term expatriate advisors: a Chief of Party to head the Technical Advisor Unit and another advisor to head the Production Holding Company. Assuming both these advisors have broad-gauged experience in agribusiness, the team feels that other long-term support can be adequately provided by Sri Lankan professionals.

-- The Project makes increased use of short-term expatriate assistance in all areas: agro-processing, agricultural production, and marketing. Twenty-six months/year has been budgeted for this purpose.

-- AgEnt will open two field offices which cost little more on a net basis. Some existing staff will be reassigned to these offices. Furthermore, the offices will permit savings in travel per diem.

In this context, the total 3-year budget for AgEnt to the year 2000 is about \$7.9 million. However, AgEnt will have approximately \$3 million left over by the end of the first five-year period of the Project. Therefore, the net additional cost the extension would be \$4.9 million.

#### IV. SUSTAINABILITY

##### ASSESSMENT OF PROJECT SUSTAINABILITY PLAN

AgEnt's current sustainability plan envisages the formation of an Agricultural Development Trust with two separate operational units: one for services and another for investments. Each of these units would strive to generate income to pay for AgEnt's services and operations.

The services unit has four divisions: the Business Development and Financial Management, Production Advisory Services, Marketing and Product Development Advisory Services, and Business Information Center. These divisions have been charged with developing business plans with the goal of becoming more sustainable through fees for technical services rendered. However, since most clients in Sri Lanka have become accustomed to having such services subsidized, it is highly unlikely that they will be willing to pay fees high enough to cover the full cost of the services provided. Therefore, this unit will have to continue to be subsidized with funds from elsewhere, either from donors or from funds generated by other units in AgEnt.

The investment unit has a mandate to develop the production and commercialization of selected crop/product sectors in partnership with the private sector. There are two principal reasons for the creation of such a unit:

-- AgEnt can be more effective in "pushing" the development of new crop sectors by participating directly and operationally as one of investment partners.

-- By taking equity in a project, AgEnt would be entitled to a share of the profits, income which would help sustain the Project and its services. There would be exit strategies which would allow AgEnt to sell its shares back to its local partners at fair market value and deposit these funds in the Agricultural Development Trust for future reinvestment in the equity of other promising new ventures.

The team concludes that AgEnt's sustainability plan leads the project in a positive direction. AgEnt has already introduced fee for services from the Business Information Center and this should be extended to other services, gradually making

both AgEnt employees and clients more conscious of the cost and benefits of the various services and leading to greater emphasis on those which give the most value. However, without donor funding from some source (USAID has already made it clear that it can neither provide additional funding beyond the year 2000 nor an endowment), it is apparent that the AgEnt services unit will face an uphill battle achieving the goal of sustainability.

The projected Production Holding Company, in which AgEnt plays a more active management role and takes equity positions in production companies of clients, shows more promise of achieving sustainability by the year 2000. In any case, there would be the following positive impacts:

- Replacement of some outright grant with equity participation would help counteract the pervasive Sri Lankan mentality that some businesses are entitled to "free" assistance.
- Reduction of the amount of project outflows as outright grants.
- Generation of income from AgEnt's share of dividends from its equity participation in various companies.

At least in the export sector, AgEnt's equity program would face competition from the Export Development Board (EDB), which has a similar equity program. The EDB's equity program is very generous to the recipient company because it gives the company the option of repurchasing EDB's shares at any time in the future at the original nominal face value of the shares. Given sufficient time and inflation, this means that the EDB will probably receive only a fraction of the real value of its shares when the client company exercises its option to buy back EDB shares.

**Conclusion:** AgEnt's sustainability plan moves the project in a positive direction and, if nothing else, will help ensure as much cost recovery as possible. At the very least, the Project will achieve a form of sustainability through the continued successful growth and development of many AgEnt clients after the Project ends.

## **ALTERNATIVE APPROACH**

### **INSTITUTIONALIZATION OF AgENT**

During the evaluation, the team reviewed institutions in Sri Lanka to determine whether any might be able to incorporate AgEnt's functions after the project ends in the year 2000. Agri-Dev, which has a similar mandate, is an extremely weak institution, with far too many liabilities. Various existing agricultural or trade associations have a focus which is too narrow. In the team's view, none of these institutions provides a suitable platform for AgEnt-type activities. There is one option to explore at a future date. The team was informed that the World Bank will give priority to the creation of a semi-private institution which will try to develop "non-traditional" crops and products. However, this option is a hypothetical one at this point.

Under the circumstances, the team recommends that the AgEnt Services Unit continue to develop as much as possible new sources of income, in addition to those instruments

outlined in the Project's sustainability plan. For example, the team recommends that AgEnt be authorized to generate income from the following new sources:

**1. Commissions from the sale of imported inputs.**

AgEnt could become an importer/commission agent for a wide variety of products needed for the development of the various crops/products with which it works. This could include good quality seed, plants, environmentally friendly chemicals, machinery, and other materials needed in the production process. This activity would ensure the availability of good quality inputs for AgEnt clients and produce a surplus to cover deficits in other areas.

**2. Fees for helping clients find equipment, technology, and joint venture partners.**

AgEnt could generate fee income from clients seeking its help finding equipment, technology, and possible joint venture partners abroad. This is a very important service for the development of agribusiness companies and one for which AgEnt should be appropriately compensated.

**3. Loan guarantee fees**

AgEnt could charge a small guarantee fee to help clients obtain loans from the banks. Team discussions with the banks found them favorably disposed toward this type of mechanism because it would minimize bank risk in rural credit operations. AgEnt would provide a useful service to the banks by supervising the use of money -- something which the banks cannot currently do -- and thereby justify its fee. Since AgEnt's guarantee would reduce the risk to banks, they might be willing to decrease their interest rate. If so, the cost of the total operation (interest and guarantee fee) should be about the same as a loan without AgEnt involvement. If the guaranteed loan program works well on a pilot basis, AgEnt could gradually replace some of its grants with guaranteed loans.

**4. Alliances with other development institutions.**

AgEnt could also seek funding to continue its mandate from Sri Lanka and international development institutions, such as National Development Bank (NDB), the Export Development Board (EDB), the World Bank, the Asian Development Bank (ADB), and the United Nations Development Program (UNDP). All of these institutions should have an interest in supporting the type of activities sponsored by AgEnt. In a meeting at the UNDP, the team was told that the UNDP's focus for the next five years will be poverty alleviation and that this may provide opportunities for the UNDP and AgEnt collaborate in rural areas.

**5. Commissions for export consortium and quality control**

AgEnt could charge a small commission for assistance to small producers to participate in an export consortium to sell products and fill orders on a consolidated basis. AgEnt would do the quality control before shipment and thereby help build up Sri Lanka's reputation for quality.

## 6. Fees for preparation of business plans/feasibility studies

AgEnt could charge fees for assisting clients to prepare business plans/feasibility studies which they could then use to take to a private bank to obtain financing.

## 7. Training fees

AgEnt could charge fees for its financial, marketing, and production training programs.

## V. CONCLUSIONS AND RECOMMENDATIONS

### A. PROJECT RESULTS

#### Conclusion:

AgEnt has shown excellent results to date and made good progress toward achievement of Project goals and objectives, with the possible exception of financial ones which assumed erroneously that AEIF would be created.

#### Recommendation:

Based on the excellent results to date, USAID should extend and provide additional funding for the Project until the year 2000.

### B. SERVICE DELIVERY

**Conclusion:** The team believes that AgEnt's administration can be improved so that technical staff can focus more on delivery of services to clients.

#### Recommendations:

1. The team recommends that the Project's organization be changed radically for the work ahead to the year 2000. The changes proposed include:
  - A. The creation of an Agricultural Development Trust which would receive funds from Project activities. The Trust would have a non-profit status.
  - B. The creation of a Production Holding Company to manage and take equity positions in production companies with which the Project is working -- e.g. the Vanilla Processing Company. An expatriate advisor would be in charge of the Production Holding Company.
  - C. Transformation of the current AgEnt organization into a wholly Sri Lankan operation. A Sri Lankan Manager would directly supervise the Chiefs of four divisions: Production/Agro-Processing, Marketing, Business Development, and Administration. AgEnt would also have two field offices: one in Kandy, and another in the South if there are sufficient clients to be serviced. USAID should explore the possibility of TIPS sharing these offices with AgEnt.

**D. An expatriate Chief of Party would lead a Technical Advisory Unit to provide both long-term and short-term technical assistance for the Project. He would also have a supervisory role over the Agricultural Development Trust and the AgEnt Services Unit.**

- 2. AgEnt has employed several excellent Sri Lankan part-time consultants for production. AgEnt should consider the employment of additional part-time consultants instead of more long-term Sri Lankan staff. This would also help keep the staff "lean" for a more sustainable institution.**
- 3. More than 90% of the AgEnt staff were interviewed on a one-on-one basis, including junior staff. There are a number of highly qualified and well motivated staff members. Each staff member was requested to provide her/his vision of AgEnt. The response was varied in terms of clarity as well as quality. The team recommends that AgEnt develop a concerted effort to orient the entire staff. This could be accomplished by staff orientation, field trips and in-house training.**

### **C. AGRIBUSINESS DEVELOPMENT TO THE YEAR 2000**

**Conclusion: AgEnt has made good progress in dealing with constraints in the areas of production and marketing. It has done relatively little in areas where the constraints are policy-related.**

#### **Recommendations:**

- 1. AgEnt needs to develop a policy dialogue strategy which will involve as many private sector organizations as possible in educating key GSL officials and persuading them that changes in policy are required for the good of Sri Lankan agriculture. The Project paper for AgEnt envisaged the preparation of 12 policy papers -- a tool which has been used minimally by AgEnt. The team recommends that AgEnt place greater emphasis on this area in the future. AgEnt should coordinate closely with AgEnt's Policy Reform Support Activity (PRSA).**
- 2. AgEnt should only do further work with large companies under two specific terms a) if AgEnt can obtain equity; or b) if a significant impact can be made on outgrowers.**
- 3. Both up-stream and down-stream linkages should be rigorously identified for each client. Future new initiatives should focus on enhancement of a clustering of activities in various sectors as well as in various regions of the country. There are clear opportunities in the areas of herbs/spices, tropical fruit, and tree nurseries.**
- 4. AgEnt should emphasize and take advantage of opportunities for vertical integration and examine constraints such as land availability, etc. A major feed mill, for example, has now started its own poultry farms. Globalization may still be distant from Sri Lanka's small agricultural economy, but it would be wise to see how this economy can fit in with the rest of the world.**

5. Some micro-sized companies have achieved success with well placed assistance from AgEnt. Further assistance to such successful companies is recommended if the owner demonstrates a commitment to significant expansion that will demand more raw product or to an export marketing program that will increase foreign exchange income to Sri Lanka.

6. Several of the organizations visited should consider development of web sites on the internet to promote the international marketing of their products. According to the Daily News of August 13, cybermarketing has come to Sri Lanka. It is claimed that 50 million people in 150 countries are being reached through the internet at very reasonable costs per day.

7. Feed production programs should be energized and led by competing feed mills with technical support from the DOA, Department of Animal Health and Production, and other relevant organizations/institutions. AgEnt could finance some aspects of DOA extension participation if necessary.

8. If a study does not already exist, AgEnt should finance a consultant to do a sector study to determine which crops could be grown in Sri Lanka to provide grains or by-products to manufacture feed for the poultry and dairy industries. AgEnt has initiated work through the DOA with maize production. That work should be intensified using extension facilities from feed mills when available. Crops such as sorghum, soybeans, cassava\*, sunflowers, etc. should also be considered. Sorghum varieties might thrive in the Yala season paddies where residual moisture is probably sufficient to produce a crop. Trials should be carried out in conjunction with committed feed mill companies who would buy the crop.

\*Cassava is processed to produce animal feed in Thailand and is exported to Germany. There was a limited amount of experience with this product as an animal feed in Ecuador as well.

#### **D. SUSTAINABILITY**

##### **Conclusion:**

AgEnt has developed a plan which could lead to limited sustainability. While the AgEnt Services Unit will face an uphill battle in its cost recovery efforts, the Production Holding Company has a good chance of eventually generating enough income to be sustainable.

##### **Recommendations**

1. Allow the AgEnt Services unit to proceed with its cost recovery program. If it manages to make an alliance with another donor or institution by the year 2000, an option for continued outside support might develop.
2. Authorize the creation of a Production Holding Company as well as the Vanilla Processing Company.

## VI. SUCCESS STORIES AND LESSONS LEARNED

The team visited more than thirty AgEnt projects and potential projects in various parts of the country. See the list in Annex G.

### Tomato processing

The team visited a client with a very small, primitive operation that is collecting tomatoes from 1000 outgrowers in the surrounding region. The proprietor also purchases all of the production of single strength tomato juice from another processing company. AgEnt's initial input to this project in 1993 was the supply of nine varieties of processing tomatoes. Four of the varieties provided proved successful, and in 1994 AgEnt provided an additional 11 processing tomato varieties. He supplies 1000 bottles of sauce per month to the Swiss Cheese Company, and cannot meet the demand.

This tomato processing company should be studied to see how it can grow, with its outgrowers, into an increasingly expanded producer of tomato based products for the Sri Lankan market. AgEnt could continue to work with this company in the improvement of a quality output as well as in the increase of yields of tomatoes and other crops they might find worthy of processing in the region. As this growth occurs there might occur opportunities for export of some processed items, although it is doubtful that tomatoes would find an export market. It was learned from Hayleys that fresh gherkin production is now dubious because of prices, but quality, *processed* gherkins from Sri Lanka are finding a market in Japan, France, Holland and elsewhere.

Fruit and vegetable processing opportunities in Sri Lanka should be emphasized for a number of reasons: 1) More than 40% losses are experienced in the movement of fruit and vegetable from the point of production to the market here in Sri Lanka; 2) Processing will diminish the problem of periodic marketing gluts caused by seasonal production.

### Oil Seed Processing

The small oil seed processing plant seen in Mawanella was very interesting. This small company is processing oil from castor beans, from rubber seed, from nim seed, from soy beans as well as a miscellany of other seeds. The processes are quite simple in using various presses to press out the oil. More than 4000 people collect rubber seed in the rubber plantations of that area. These collectors are paid upon delivery of the product to the processing company. The proprietor works with 800 out-farmers in the production and collection of castor beans. He was processing 100 metric tons of soybeans under contract for the Eastern Traders during the team visit.

The operation has potential for further expansion. AgEnt might be able to determine a world market for castor oil which is sold for high altitude aircraft lubrication. Local soybean production might be stimulated if the processing of the soybean could utilize the by-product for the animal feed industry

One serious concern is the poisonous nature of castor bean oil. The owner/operator is aware of the problem and cleans the machinery with caustic soda after pressing castor bean.

## **Bandaranayake Exports**

**Coconut husks are used in Sri Lanka to produce rope. The dust resulting from obtaining the fibers used in rope production, has generally accumulated in large heaps. This company has been very innovative in creating a use for this product. They are compressing the material in bricks of various densities for shipment to various foreign markets. The material is useful in the plant nursery business for its qualities of moisture retention. Some of the Japanese customers are now requesting that the material be inoculated with a fertilizer mix.**

**A second material being produced by this company is based on the excess coconut husks available in Sri Lanka. The husks are chopped into small pieces for use in Japan's dairy industry. These chopped pieces serve to absorb the urine and manure and can then be added to farm fields with added value as a composting material.**

**Several poultry industries are concerned with the disposition of chicken manure. Perhaps a linkage with Bandaranayake Exports could be established to incorporate chicken manure in the coir bricks.**

## **Angel Aquarium**

**World trade in ornamental fish apparently exceeds \$500 million. Sri Lanka, currently, exports about 1% of the total world trade. The ornamental fish come from both fresh water and marine sources. AgEnt is working with the production of fresh water ornamental fish.**

**Production of ornamental fish is labor intensive. Technologies used are relatively simple, and outgrowers can raise the fish in mud ponds. Angel Aquarium, one of several ornamental fish producers visited by the team, is primarily a breeder of ornamental fish. As a breeder, his goal is to continually develop new variations of ten or more breeds of fish that are interesting for the ornamental fish trade. He distributes the young fish with feed to 5 outgrowers for production to a certain age. The fish are then collected and exported either by Angel Aquarium or by another exporter. In 1992, Angel Aquarium was wiped out by a 100 year flood. AgEnt helped him get back on his feet with nets to protect the fish from birds as well as with several other items.**

**The ornamental fish sector is obviously thriving. AgEnt should probably devote most of its energies elsewhere, although working with this rapidly growing industry is attractive, particularly in the increase of outgrowers.**

## **The Carlton Herb Company**

**This small company was interesting because it is a "mini" vertically integrated company with a lot of potential. Located near Bandarawela, this 26 acre tea plantation is owned and operated by an enterprising Sri Lankan. As in larger tea plantations, there is always some space that is out of tea production and can be used to produce other crops. He chose to produce a number of different herbs. Through AgEnt, the owner was able to procure a number of herb seed varieties. He was also assisted by the AgEnt consultant for pyrethrum, Tom Davis Ph.D., who is a major producer of herbs in England.**

A serendipitous encounter with a Japanese in Colombo provided him an export market for his dried herbs. He believes he can develop good income working with at least 10 different herb varieties.

The up-stream and down-stream opportunities in this project are very interesting. Assuming the market is strong, Carlton Herbs might be willing to undertake production improvements to obtain optimum yields and to adopt appropriate equipment for propagation of cuttings. Also, perhaps, a domestic market for his fresh herbs will emerge. Should the market develop, Carlton Herbs could then develop additional production through outgrowers.

### **Mandarin Farms**

The team visited a number of poultry projects being assisted by AgEnt. Mandarin Farms is a possible new project for AgEnt, and the team was invited to a preliminary visit. The farm is located in the southern part of Sri Lanka. This is an area of Sri Lanka, apparently, that has suffered a great deal from economic stagnation, and the Government of Sri Lanka is considering various initiatives in order to try to develop the area.

Currently, Mandarin farms has about 100,000 layers in cages. He is the only major grower with cages. Other poultry farmers are producing their chickens on floors covered with litter. One advantage of this method is that the eggs roll to the outside of the cage when laid and are clean. Another advantage is the accumulation of manure which can be processed and used in agriculture as a fertilizer.

Perhaps, the most interesting aspect of this operation is the production of its own feed. Mandarin Farms buys, preferably, locally produced maize and other grains. They add the supplements needed for a balanced diet and are very pleased with the results. Some of their maize is imported because of domestic shortages.

As development begins in the south, maize production might be an important component. If so, Mandarin farms could become a principal engine of growth in the maize industry in buying maize not only for its own production, but for poultry and dairy industries farther to the north.

### **Maize Production**

The team believes AgEnt's Maize project is a success in the making.

AgEnt, the Department of Agriculture and the feed mills believe that maize production in Sri Lanka can be drastically increased. At the present time, average maize yields may reach 1000 kg per acre. Using improved open pollinated or hybrid varieties, farmers can expect yields of 6000 kg per acre.

AgEnt is splitting the cost of the program with the feed millers. The feed millers supply the supervisory agricultural extension people to assist the Department of Agriculture Extension agents working with 475 farmers with each planting 1000 square meters of trials that compare the yield of normally used varieties versus open pollinated improved varieties and hybrids. Kits supplied to the farmers by the extension agents contain the directions for planting as well as the fertilizer required. The demonstration program is to be expanded in the next two seasons.

The financing of DOA extension activities, combined with the guaranteed market provided by the millers should begin to increase the maize supply required by the poultry, shrimp and dairy industries in Sri Lanka. AgEnt has played a truly catalytic role in this activity.

### Janapriya Spices

The owner of Janapriya Spices began her company in 1984 when she became frustrated by the lack of small packages of spices in the store. She went to the State Trading Corporation and bought large quantities of cloves and cardamom. These were re-packaged in small packets, and she began selling them in one store.

Demand for her product grew, and she negotiated with a supermarket for shelf space. There was no competition for her 10 gram packages of spices, and she expanded her business to include 26 different spices.

She began to lose market share when a competitor entered the market with a similar product. It was at this point she encountered AgEnt at a Women's Workshop in 1993. AgEnt assisted her with an improved label, and she began to recoup her losses.

Since then, Janapriya has continued to grow. She started with one worker, and now has 10 people working in her kitchen "factory". Her market has now expanded to other cities in Sri Lanka, and her annual income has grown substantially. She hopes to begin exports soon, and her marketing targets are Japan, Bahrain and Saudi Arabia

### Lessons Learned

#### 1. Onion Storage Project

AgEnt successfully initiated the Big Onion Storage Project. Historically in Sri Lanka, there are short-term over supply problems when most of the domestic onion crop matures during a very short time frame creating a market glut and resultant low prices. AgEnt assisted 45 farmers in the construction of simple onion storage sheds where onions could be stored up to 4 months before marketing. Instead of selling during the over-supply period, these farmers were able to wait, and sold at excellent prices. Commercial banks have demonstrated an interest in the onion storage scheme and it is possible they will initiate a credit scheme to assist farmers to construct additional onion storage sheds in the future.

On July 27, 1996 during the visit of the evaluation team to Sri Lanka, the Daily News carried the following story:

*Licence, duties on all essential imports removed. Attempt to bring down cost of living. Duties reduced from 55% to 25% on essential food items. Specific items to be imported include rice, potatoes, onions, chillies, dhal, etc. These are short term program effects. Long term effects include increase in local production, intensive cultivation and other steps.*

The lesson here may be that onion storage investments are for nought because onion prices will be at least partially controlled by the import of less expensive onions from India.

## **2. Value Added Exports**

**The team has consistently been led to believe that the production of gherkins in Sri Lanka is not profitable. It was reported that most gherkin production is now based in India where labor costs are lower.**

**In a conversation with Hayley's CEO, it was learned that one of their companies is producing 15,000 bottles per day of gherkins for export to Japan, Holland and France.**

**Hayleys is a large, multi-national company with a history in Sri Lanka that dates back to the last quarter of the 19th century. They are committed to Sri Lanka; and, they are committed to the development, maintenance and diversification of their markets.**

**Clearly, Sri Lankan export of fresh vegetables requires a strong sponsor linked into the increasingly globalized trade of all fresh produce. Deep pockets also help.**

## **3. Income is truly the stimulus to growth**

**AgEnt can learn a lot from its assistance to the ornamental fish industry. A primary lesson may be that alert Sri Lankans respond to market opportunities. The ornamental fish industry has grown rapidly and will probably continue to grow rapidly.**

**4. In development of a product, quality is a necessary but not sufficient condition for success. Good, attractive packaging and labelling is just as important. This is clearly demonstrated in AgEnt's good work with a small spice producer. In that instance, the client had developed a high quality product for the local market. However, a competitor with an inferior product entered the market with a good-looking package and label and began taking away the market from the client. With AgEnt's help in developing an attractive label, this client was able to more than capture the share of the market which was originally lost.**

**5. Project design should not assume that another donor will contribute the resources necessary to achieve project goals. For example, in the current phase of AgEnt, the \$6 million World Bank AEIF failed to materialize. Similarly, it would be a mistake to assume that another donor will provide an endowment to help institutionalize AgEnt beyond the year 2000.**

PD-ABN-316



FINTRAC INC.

**SRI LANKA  
AGRO-ENTERPRISE DEVELOPMENT PROJECT  
PROJECT NO. 383-0111**

**MID-TERM EVALUATION**

**ANNEXES**

**FINTRAC CONTRACT 353-01110A-00-3003-00**

**SUBMITTED TO:  
U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT  
COLOMBO, SRI LANKA**

**AUGUST 30, 1996**

***SUBMITTED BY:***

**RICHARD PETERS  
RANDOLPH REED  
S.M.P. SENANAYAKE**

ANNEX A

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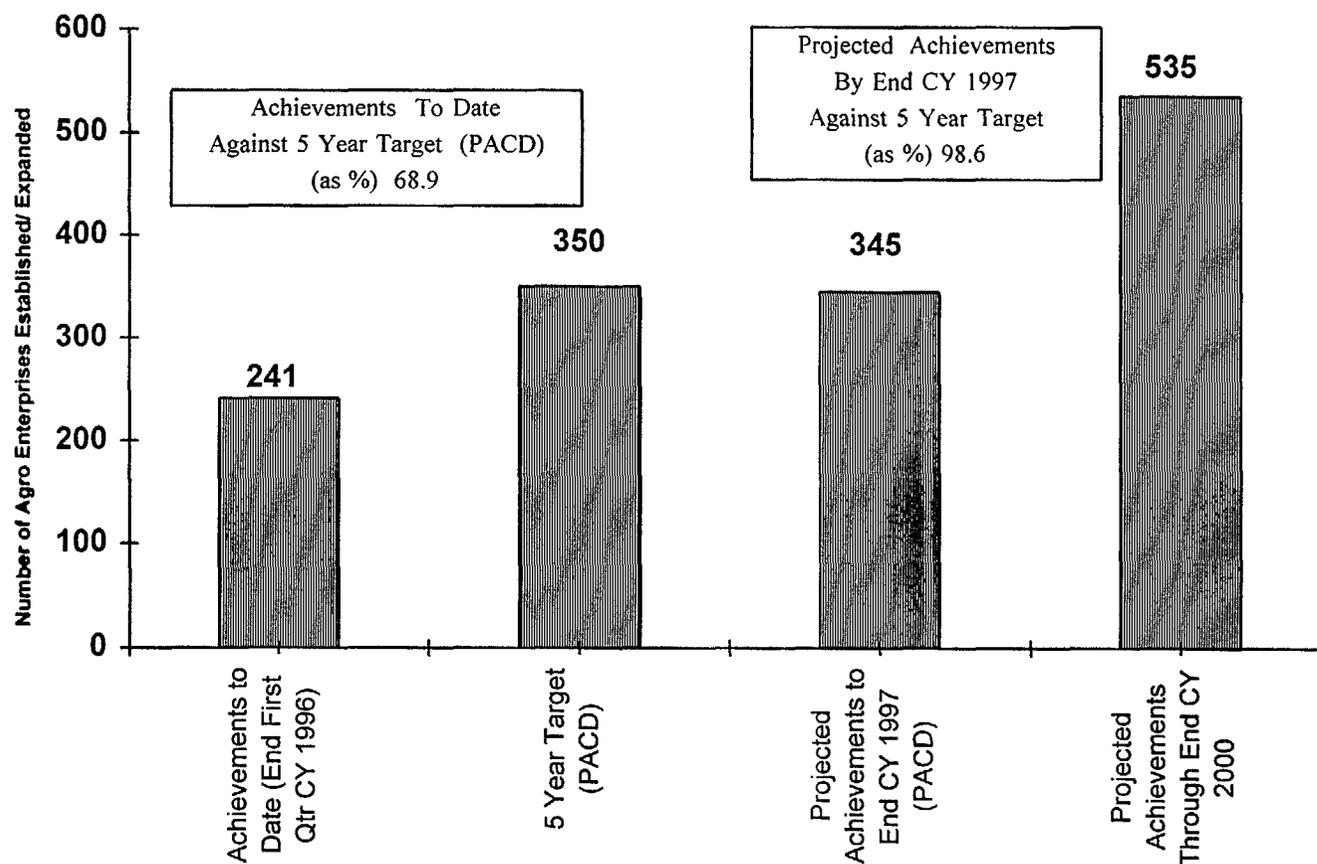
**SUMMARY OF MONITORING  
AND EVALUATION REPORT**

**PROJECT RESULTS**  
**Number of Agro-Enterprises Established/Expanded**  
**Through AgEnt Interventions**

<b>Total Achievements Resulting from AgEnt Interventions</b>	<b>Verified Achievements CY 93/94</b>	<b>Verified Achievements CY 95</b>	<b>Projected Achievements CY 96</b>	<b>Projected Achievements CY 97</b>	<b>5 Year Targets</b>	<b>Verified Achievements To date (First Qtr CY 96) Against 5 Year Targets (as %)</b>	<b>Projected Achievements By End CY 97 Against 5 Year Targets (as %)</b>	<b>Projected Achievements Through End of CY 2000</b>
● <b>Number of New Start-ups</b>	6	5	10	10	50	28.0%	60.0%	60
● <b>Number of Expansions</b>	164	50	50	50	300	75.7%	105.0%	475

## PROJECT RESULTS

### Number of Agro-Enterprises Established/ Expanded Through AgEnt Interventions



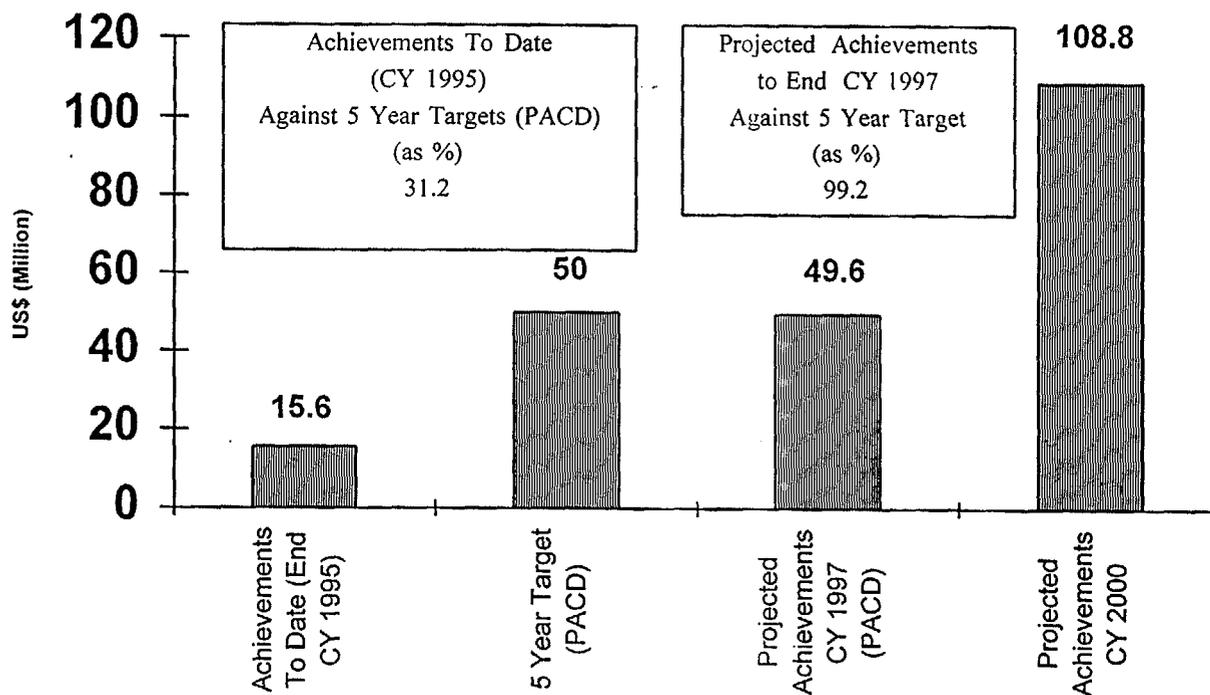
**PROJECT RESULTS**  
**Annual Client Sales Above Baseline**  
**(US\$ Millions)**

Total Direct Achievements of AgEnt Assisted Agro-Enterprises	Verified Achievements CY 93/94	Verified Achievements CY 95	Projected Achievements CY 96	Projected Achievements CY 97	5 Year Targets	Verified Achievements Todate (First Qtr CY 96) Against 5 Year Targets (as %)	Projected Achievements By End CY 97 Against 5 Year Targets (as %)	Projected Achievements CY 2000
• Total Annual Sales Above Baseline	6.3 (2.6)	15.6 (7.0)	27.7 (14.0)	49.6 (25.7)	50	31.2%	99.2%	108.8 (62.5)
- Export Sales out of Total	4.0	8.0	14.1	25.3				55.5
- Domestic Sales Out of Total	2.3	7.6	13.6	24.3				53.3
- Value Addition Sales Out of Total	2.8	7.2	12.3	22.0				50.5

Note: Numbers in parenthesis are achievements directly attributable to Project interventions.

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**PROJECT RESULTS**  
**Annual Client Sales Above Baseline**  
**(US\$ Millions)**



**Note: First Quarter '96 Sales have not been incorporated as Sales Achievements must be calculated on an annual basis.**

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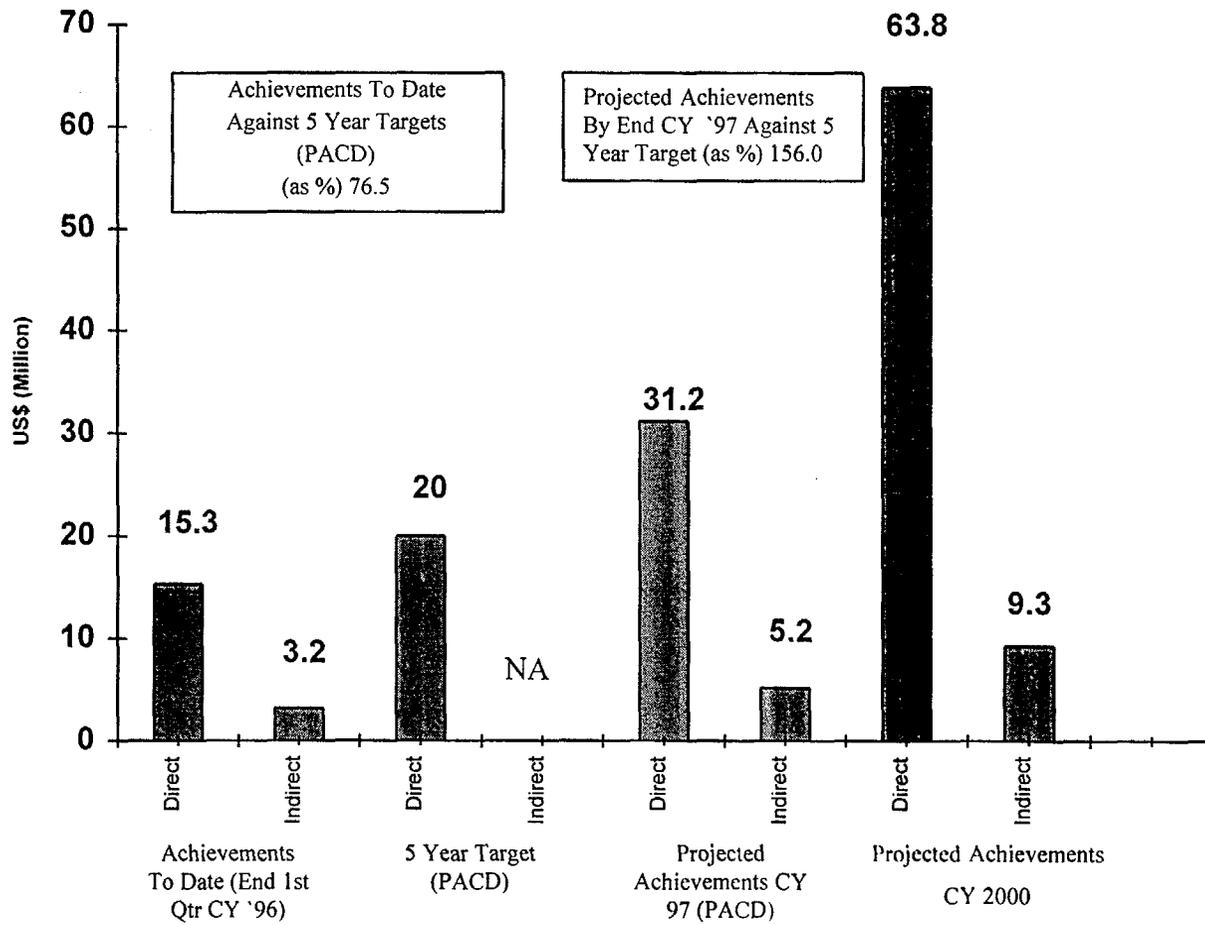
**PROJECT RESULTS**  
**Cumulative Client Investments Less Baseline**  
**(US\$ Millions)**

<b>Total Direct Achievements of AgEnt Assisted Agro-Enterprises</b>	<b>Verified Achievements CY 93/94</b>	<b>Verified Achievements CY 95</b>	<b>Projected Achievements CY 96</b>	<b>Projected Achievements CY 97</b>	<b>5 Year Targets</b>	<b>Verified Achievements ToDate (First Qtr 96) Against 5 Year Targets (as %)</b>	<b>Projected Achievements End of CY 97 Against 5 Year Targets (as %)</b>	<b>Projected Achievements CY 2000</b>
• Total Direct Cumulative Investment Less Baseline	8.0 (3.6)	15.1 (7.3)	19.7 (10.6)	31.2 (16.6)	20.0	76.5%	156.0%	63.8 (35.8)
- Factory Level Investment Out of Total	6.2	10.7	11.2	14.9				25.1
- Farm Level Investment Out of Total	1.8	4.4	8.5	16.3				38.7
<b>Total Indirect Achievements Resulting from Growth of AgEnt Assisted Agro-Enterprises</b>	<b>Verified Achievements CY 93/94</b>	<b>Verified Achievements CY 95</b>	<b>Projected Achievements CY 96</b>	<b>Projected Achievements CY 97</b>	<b>5 Year Targets</b>	<b>Verified Achievements ToDate (First Qtr 96) Against 5 Year Targets (as %)</b>	<b>Projected Achievements End of CY 97 Against 5 Year Targets (as %)</b>	<b>Projected Achievements CY 2000</b>
• Total Indirect Cumulative Investment Less Baseline Due to Increased Raw Material Requirements of AgEnt Assisted Agro-Enterprises	1.0 (0.5)	3.2 (1.9)	4.0 (2.3)	5.2 (3.2)	0	NA	NA	9.3 (6.7)

Note: Numbers in parenthesis are achievements directly attributable to Project interventions.

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**PROJECT RESULTS**  
**Cumulative Client Investments Less Baseline**  
**(US\$ Millions)**



Cumulative Increased Employment Less Baseline  
(Numbers of Direct and Indirect FTJE)

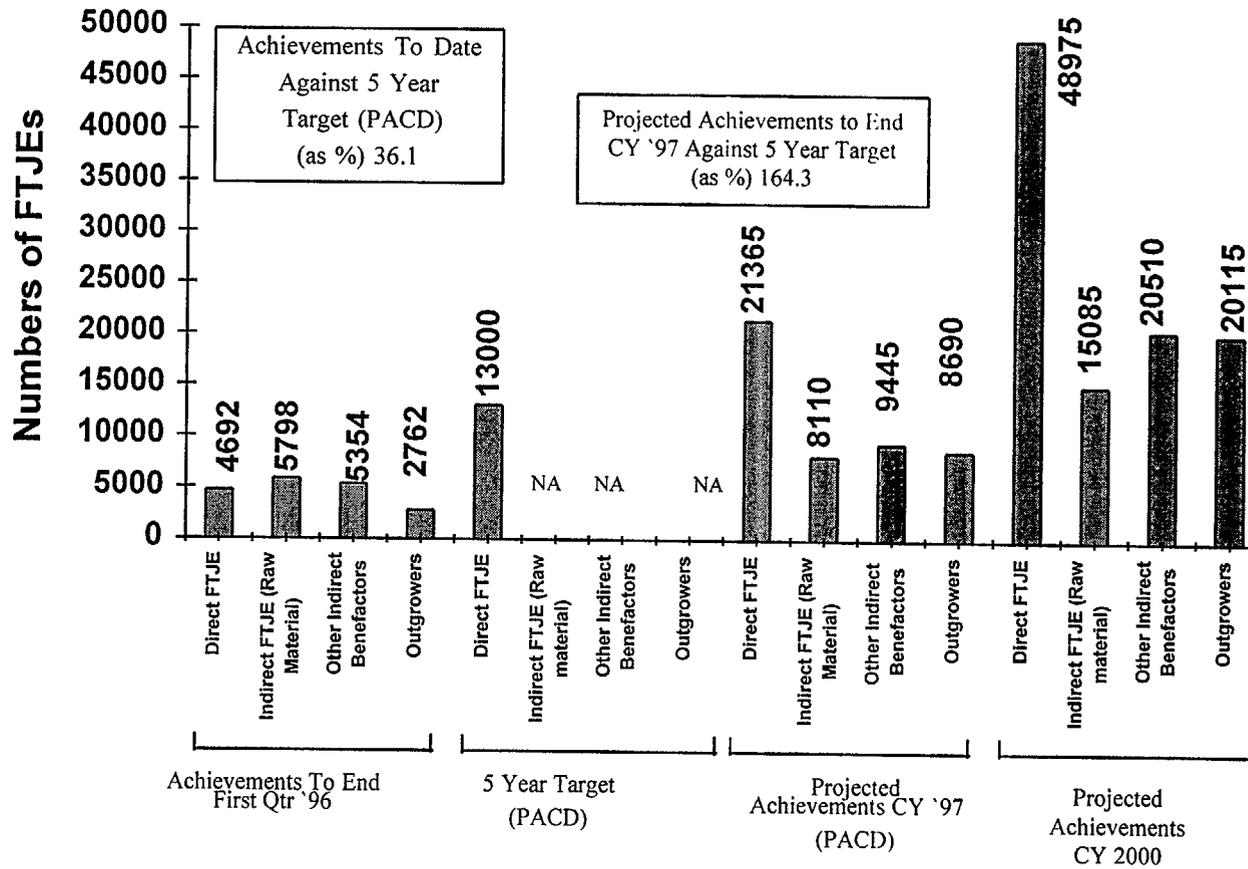
Total Direct Achievements of AgEnt Assisted Agro-Enterprises	Verified Achievements CY 93/94	Verified Achievements CY 95	Projected Achievements CY 96	Projected Achievements CY 97	5 Year Targets	Verified Achievements Todate (First Qtr 96) Against 5 Year Targets (as %)	Projected Achievements by End CY 97 Against 5 Year Targets (as %)	Projected Achievements Through End of CY 2000
• Total Direct Full Time Job Equivalents (FTJE)	1837 (862)	4370 (2003)	10030 (5130)	21365 (9940)	13000	36.0%	164.3%	48975 (22100)
- Factory FTJE Out of Total	1121	2588	3000	4180				8470
- Farm FTJE Out of Total	716	1782	7030	17185				40500
• Numbers of Outgrowers	1091 (783)	2524 (1631)	5500 (3475)	8690 (5130)	0	NA	NA	20115 (10000)
Total Indirect Achievements Resulting From Growth of AgEnt Assisted Agro-Enterprises	Verified Achievements CY 93/94	Verified Achievements CY 95	Projected Achievements CY 96	Projected Achievements CY 97	5 Year Targets	Verified Achievements Todate (First Qtr CY96) Against 5 Year Targets (as %)	Projected Achievements by End CY 97 Against 5 Year Targets (as %)	Projected Achievements Through End of CY 2000
• Total Indirect Full Time Job Equivalents (FTJE) Due to Increased Raw Material Requirements of AgEnt Assisted Agro-Enterprises	4577 (1292)	5766 (2577)	5780 (2860)	8110 (4175)	0	NA	NA	15085 (9285)
• Total Indirect Benefactors From the Demonstration Effect of Client/ AgEnt Applied Practices/ Technologies (coefficient of 0.1)	645 (235)	1018 (430)	1585 (770)	2950 (1390)	0	NA	NA	6410 (3155)

<ul style="list-style-type: none"> <li>• <b>Total Indirect Benefactors From the Backward/Forward Linkages Tied to the Activities of AgEnt Assisted Agro-Enterprises (coeff. of 0.2)</b></li> </ul>	1420 (477)	2240 (1008)	3490 (1765)	6494 (3110)	0	NA	NA	14100 (6915)
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Note: Numbers in parenthesis are achievements directly attributable to Project interventions.

## PROJECT RESULTS

### Cumulative Increased Employment Less Baseline (Numbers of Direct and Indirect FTJE)



Note: FTJE Full Time Job Equipment

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**PROJECT RESULTS**  
**New Crops/Products/Markets/Technologies Introduced/Entered**  
**by Agent Assisted Agro-Enterprises**

<b>Total Direct Achievements of AgEnt Assisted Agro-Enterprises</b>	<b>Verified Achievements CY 93/94</b>	<b>Verified Achievements CY 95</b>	<b>Projected Achievements CY 96</b>	<b>Projected Achievements CY 97</b>	<b>5 Year Targets</b>	<b>Verified Achievements Todate (First Qtr CY96) Against 5 Year Targets (as %)</b>	<b>Projected Achievements By End CY 97 Against 5 Year Targets (as %)</b>	<b>Projected Achievements Through End of CY 2000</b>
• New Crops/Products Introduced	26 (14)	23 (13)	15 (10)	15 (10)	80 (40)	63.8%	98.8%	125 (75)
• New Markets Entered	61 (12)	33 (19)	15 (10)	15 (10)	125 (40)	75.2%	99.2%	170 (75)
• New/Improved Technologies/Equipment Introduced	57 (57)	12 (12)	20 (15)	20 (15)	110 (100)	68.2%	99.1%	170 (150)

Note: Numbers in parenthesis are achievements directly attributable to Project interventions.

**PROJECT RESULTS**  
**Total Direct Achievements by AgEnt in the Financial Sector**

Total Direct Achievements Resulting from AgEnt Interventions	Verified Achievements CY 93/94	Verified Achievements CY 95	Projected Achievements CY 96	Projected Achievements CY 97	5 Year Targets	Verified Achievements Todate (First Qtr CY96) Against 5 Year Targets (as %)	Projected Achievements By End CY 97 Against 5 Year Targets (as %)	Projected Achievements Through End of CY 2000
<ul style="list-style-type: none"> <li>• Equity/Debt Mobilized Directly Through the Efforts of the AgEnt Project on Behalf of the Assisted Agro-enterprises</li> <li>- Number of Investment Packages Completed</li> <li>- Amount of Equity/Debt Mobilized (US\$ MN)</li> </ul>	0	2	5	5	44	4.5%	27.3%	30
<ul style="list-style-type: none"> <li>- Number of Investment Packages Completed</li> <li>- Amount of Equity/Debt Mobilized (US\$ MN)</li> </ul>	0	.02	.05	.06	9.0	0.2%	1.4%	.5
<ul style="list-style-type: none"> <li>• Other Equity/Debt Mobilized As a Result of AgEnt Interventions in Select Sectoral Work (ie Onion Storage)</li> <li>- Number of Individuals</li> <li>- Amount Mobilized (US\$ MN)</li> </ul>	9	10	11	12	0	NA	NA	85
<ul style="list-style-type: none"> <li>- Number of Individuals</li> <li>- Amount Mobilized (US\$ MN)</li> </ul>	.003	.004	.005	.006	0	NA	NA	.05
<ul style="list-style-type: none"> <li>• Financial Institutions with New Financing Instruments</li> </ul>	0	1	0	1	5	20.0%	40.0%	4

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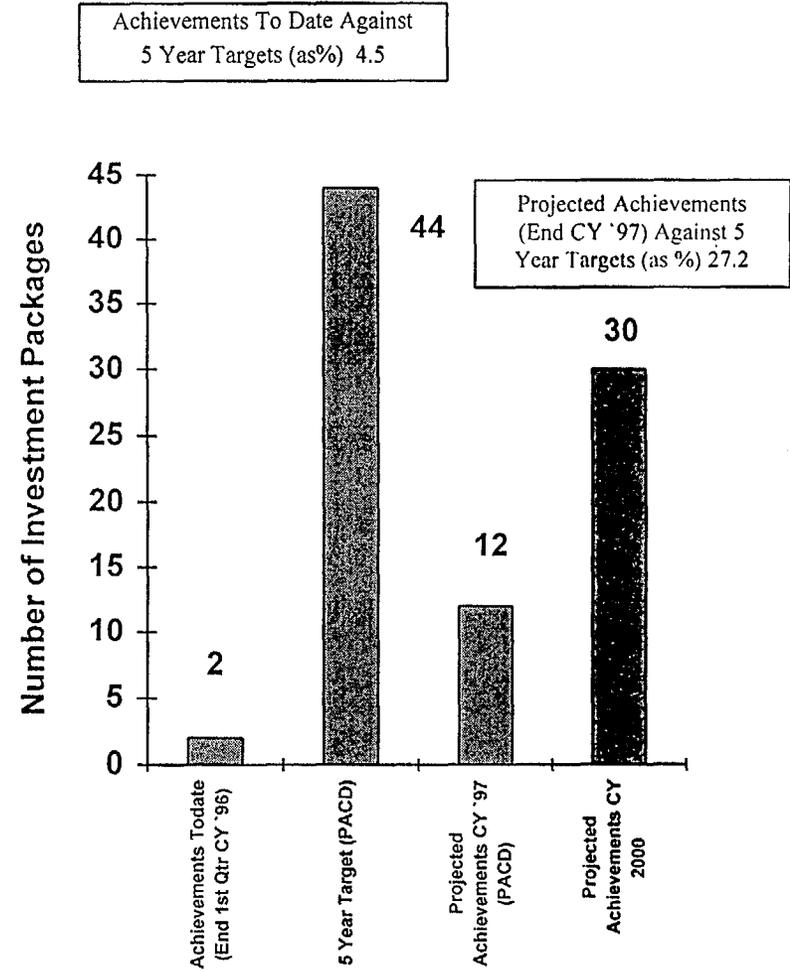
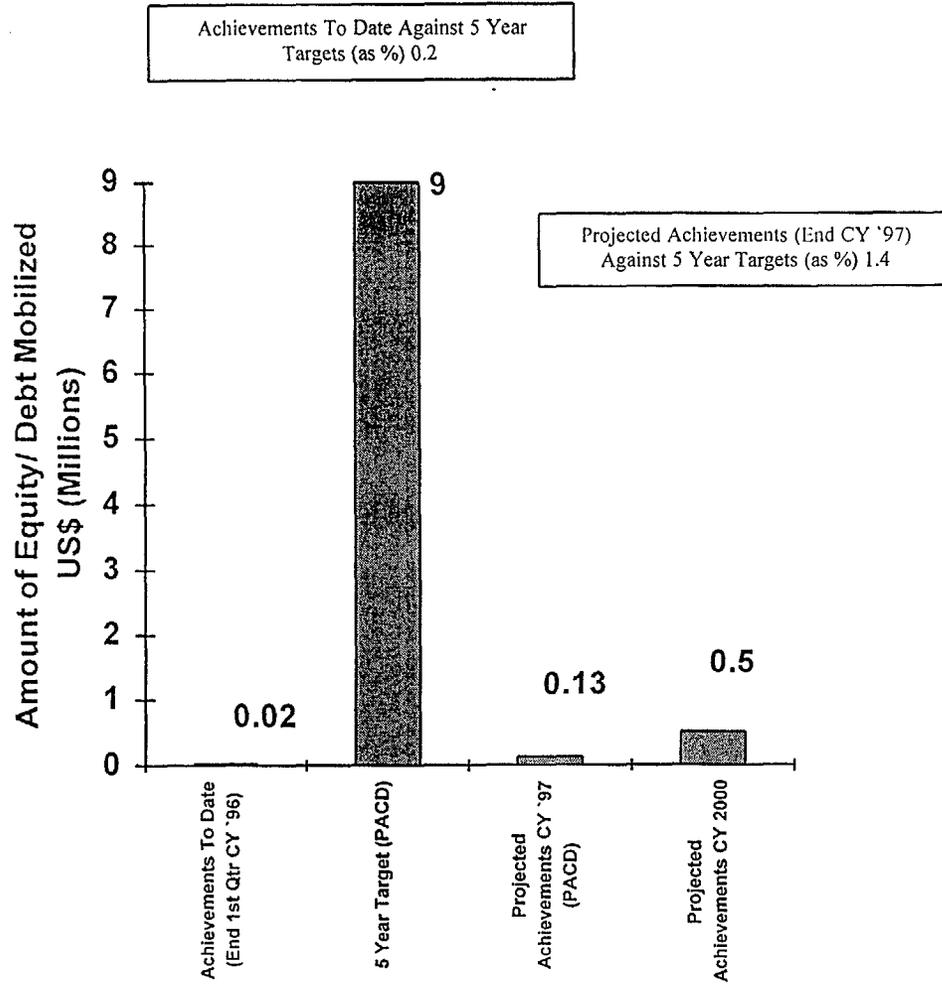
● Enterprises Established Through Project Prepared "Potential Investment Profiles"	NA	NA	1	1	5	NA	20.0%	5
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Note: The original Project targets were 250 completed investment packages resulting in US\$12 million of investment approved total cost. These targets were adjusted by the Project's Finance Division in 1994 bringing the number of investment packages down to a total of 50 with the investment approved total cost remaining at US\$12 million. In 1995, the Finance Division again adjusted the targets downward to 44 completed packages with an investment approved total cost of US\$ 9 million.

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PROJECT RESULTS  
Total Direct Achievements by AgEnt in the Financial Sector

*out check this*



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**PROJECT RESULTS**  
**Increased Agro-Enterprise Lending By Commercial Financial Institutions**  
**(US\$ Millions)**

<b>Increased Agro-Enterprise Lending by Commercial Financial Institutions</b>	<b>Verified Achievements CY 93/94</b>	<b>Verified Achievements CY 95</b>	<b>Projected Achievements CY 96</b>	<b>Projected Achievements CY 97</b>	<b>5 Year Targets</b>	<b>Verified Achievements Todate (First Qtr CY96) Against 5 Year Targets (as %)</b>	<b>Projected Achievements By End CY 97 Against 5 Year Targets (as %)</b>	<b>Projected Achievements CY 2000</b>
• Amount of Increased Lending	31.98	16.92	17.4	17.9	0	NA	NA	19.7

Note: The amounts given in the table are reported by the Commercial Financial Institutions as total annual increased agro-enterprise lending. A portion of the total is attributable to AgEnt interventions, but it is not possible to determine the exact amount.

5

**PROJECT OUTPUT  
Initial Consultations**

Achievements Related to Initial Consultations	Verified Achievements CY 93/94	Verified Achievements CY 95	Projected Achievements CY 96	Projected Achievements CY 97	5 Year Targets	Achievements To Date (First Qtr CY96) Against 5 Year Targets (as %)	Projected Achievements To End CY 97 Against 5 Year Targets (as %)	Projected Achievements By End CY 2000
● Initial Consultations	505	369	300	300	1500	63.6%	98.3%	2100
● Additional Meetings	1182	1389	1000	1000	4500	73.9%	101.6%	7000

Note: The original Project target for initial consultations was 3120. The Project determined that this target needed to be adjusted downward as the priority was to screen and identify those clients that had the commitment, creativity and drive to succeed rather than striving to achieve a high number of initial consultations simply to meet an arbitrarily set target.

Note: In the design of the Project there was no target established for Additional Meetings, however, it was determined to be important to establish such a target for two reasons, the first to recognize the extensive time required to service clients and, secondly, to establish a target to stress the importance of client follow-up.

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**PROJECT OUTPUT**  
**Shared Investment Grant Programme**  
**(Number and Amount)**

Summary of Shared Investment Grant Programme	Verified Achievements CY 93/94	Verified Achievements CY 95	Projected Achievements CY 96	Projected Achievements CY 97	5 Year Targets	Achievements ToDate (First Qtr CY 96) Against 5 Year Targets (as %)	Projected Achievements by End of CY 97 Against 5 Year Targets (as %)	Projected Achievements Through End of CY 2000
<ul style="list-style-type: none"> <li>• Amount of Shared Investment Grants (US\$ Million)</li> <li>- Client Contribution</li> <li>- AgEnt Contribution</li> </ul>	.657	.693	.600	.600	2.5	58.1%	102.0%	4.5
	.681	.437	.500	.500	2.5	47.5%	84.7%	4.0
<ul style="list-style-type: none"> <li>• Number of Shared Investment Agreements</li> </ul>	268	142	150	150	700	62.0%	101.4%	1000

**PROJECT OUTPUT**  
**Trialling Programme and**  
**Establishment of Outgrower Initiatives**  
**(Number of Trials and Initiatives)**

<b>Total Direct Achievements of the Project's Trialling Programme and Efforts to Establish Outgrower Initiatives</b>	<b>Verified Achievements CY 93/94</b>	<b>Verified Achievements CY 95</b>	<b>Projected Achievements CY 96</b>	<b>Projected Achievements CY 97</b>	<b>5 Year Targets</b>	<b>Achievements To Date (First Qtr CY 96) Against 5 Year Targets (as %)</b>	<b>Projected Achievements by End CY 97 Against 5 Year Targets (as %)</b>	<b>Projected Achievements Through End of CY 2000</b>
● Production Trials	24	24	20	20	100	48.0%	88.0%	140
● Post Harvest Handling Trials	3	7	6	6	20	50.0%	110.0%	30
● Processing Trials	1	2	3	3	25	20.0%	36.0%	25
● Marketing Trials	3	5	5	5	20	55.0%	90.0%	40
● Outgrower/ Contract Grower Initiatives	2	4	5	10	20	40.0%	105.0%	50

**PROJECT OUTPUT**  
Dissemination of Information

<b>Total Direct AgEnt Achievements Related to Dissemination of Information</b>	<b>Verified Achievements CY 93/94</b>	<b>Verified Achievements CY 95</b>	<b>Projected Achievements CY 96</b>	<b>Projected Achievements CY 97</b>	<b>5 Year Targets</b>	<b>Verified Achievements ToDate (First Qtr CY96) Against 5 Year Targets (as %)</b>	<b>Projected Achievements By End CY 97 Against 5 Year Targets (as %)</b>	<b>Projected Achievements Through End of CY 2000</b>
• Pieces of Information Disseminated	2475	23214	3600	3800	10000	300.8%	331.0%	45,500
• Number of Individuals Provided with Information	1107	2810	800	800	3600	119.3%	153.3%	8000

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**PROJECT OUTPUT  
Training Programme**

Total Direct AgEnt Achievements Related to Training	Verified Achievements CY 93/94	Verified Achievements CY 95	Projected Achievements CY 96	Projected Achievements CY 97	5 Year Targets	Verified Achievements ToDate (First Qtr CY96) Against 5 Year Targets (as %)	Projected Achievements By End CY 97 Against 5 Year Targets (as %)	Projected Achievements Through End of CY 2000
<ul style="list-style-type: none"> <li>• Number of Participants Trained in Each of the Following Areas:</li> <li>- Marketing Related</li> <li>- Processing Related</li> <li>- Production Related</li> <li>- Business/Financial Management Related</li> </ul>	833	464	300	300	480	276.9%	395.2%	2800
	134	119	200	200	585	54.9%	111.6%	1250
	3834	814	1500	1500	5505	97.5%	138.9%	12000
	327	311	250	250	861	85.6%	132.2%	1900

Note: Number of Financial Institution staff trained has been incorporated into the Business/Financial Management related training.

**PROJECT OUTPUT**  
Project Reports

<b>Total Direct Achievements of AgEnt Related to Reporting</b>	<b>Verified Achievements CY 93/94</b>	<b>Verified Achievements CY 95</b>	<b>Projected Achievements CY 96</b>	<b>Projected Achievements CY 97</b>	<b>5 Year Targets</b>	<b>Achievements ToDate (First Qtr CY96) Against 5 Year Targets (as %)</b>	<b>Projected Achievements By End CY 97 Against 5 Year Targets (as %)</b>	<b>Projected Achievements Though End of CY 2000</b>
● Special Technical Consultant Reports	35	14	15	15	100	51.0%	79.0%	115
● Reports on Revised Appraisal Procedures for Agro-Enterprise Financing	-	-	1	1	2	-	100.0%	2
● Reports on New Financing Instruments	-	-	1	1	2	-	100.0%	3
● Policy Studies	-	1	-	1	2	50.0%	100.0%	3
● Feasibility Studies	-	-	2	2	10	-	40.0%	10
● Annual Workplans	2	1	1	1	5	60.0%	100.0%	8
● Quarterly Reports	8	4	4	4	20	65.0%	100.0%	32
● Annual/Final Reports	2	1	1	1	5	60.0%	100.0%	8

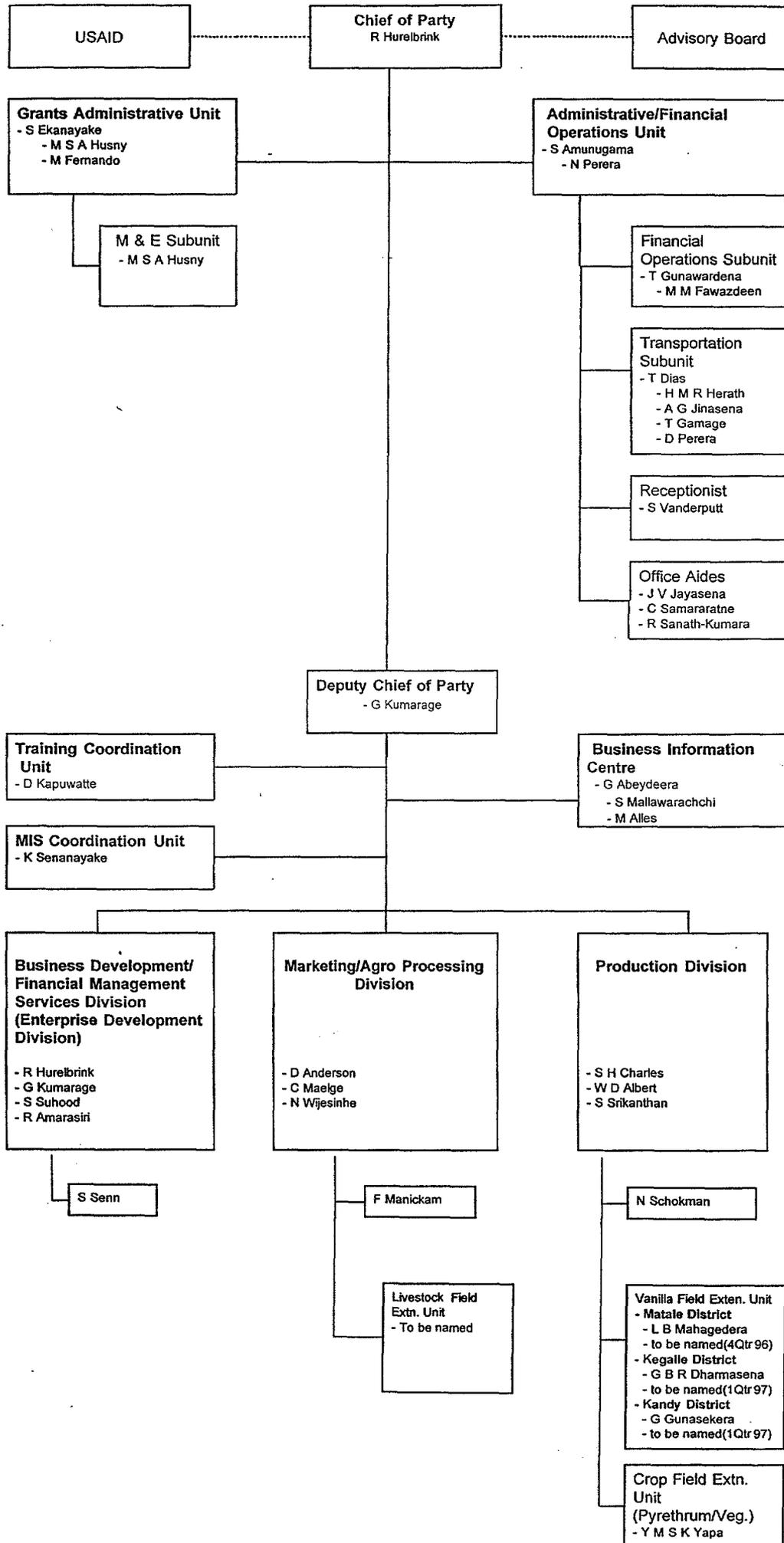
Note: The Fourth Quarter Report provides cumulative information for the year and thus serves as the Annual Report for that year.

ANNEX B

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PRESENT AgENT ORGANIZATIONAL CHART

### 1.3 AgEnt ORGANIZATION CHART



ANNEX C

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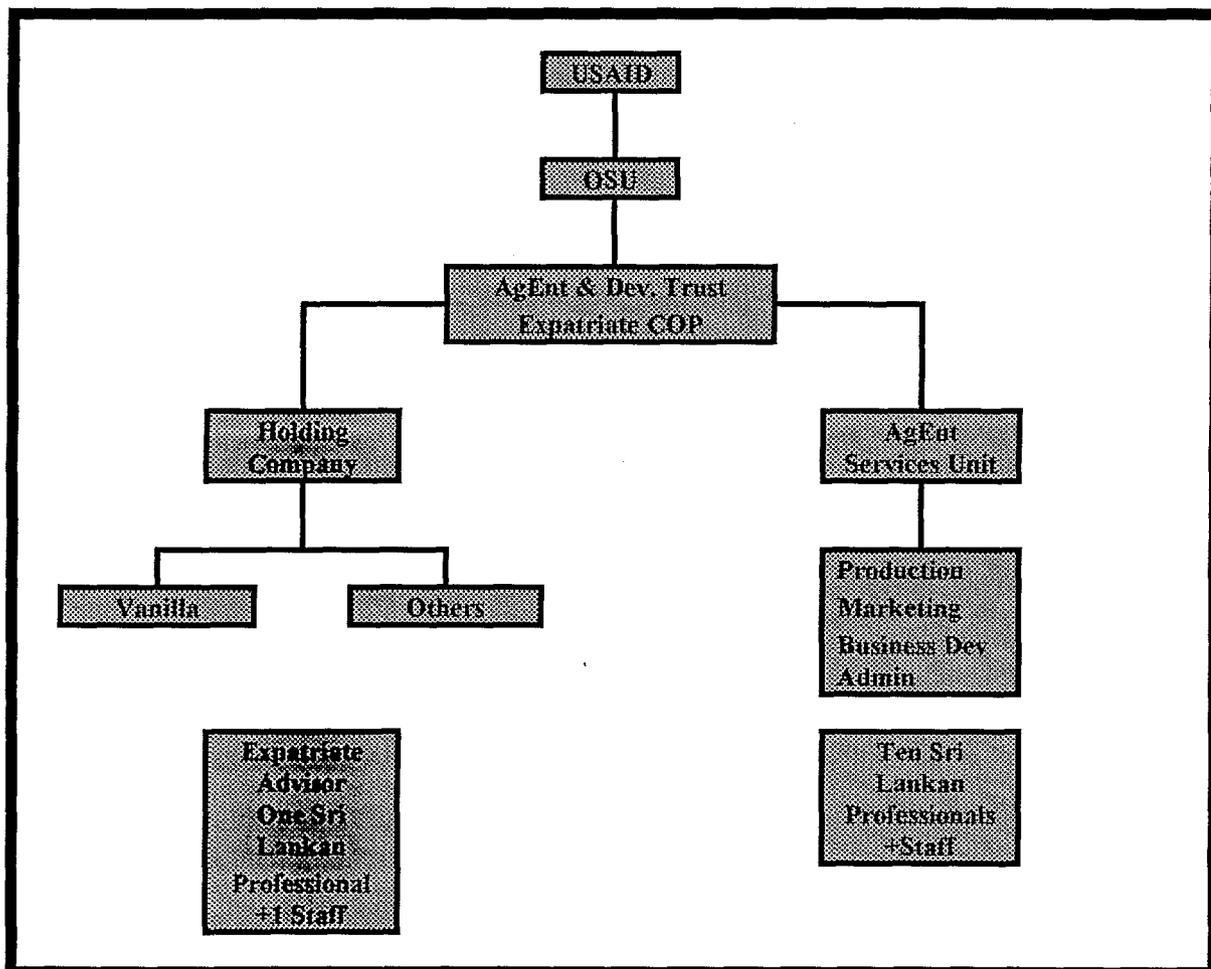
**EVALUATION TEAM PROPOSAL FOR FUTURE  
AgENT ORGANIZATION STRUCTURE**

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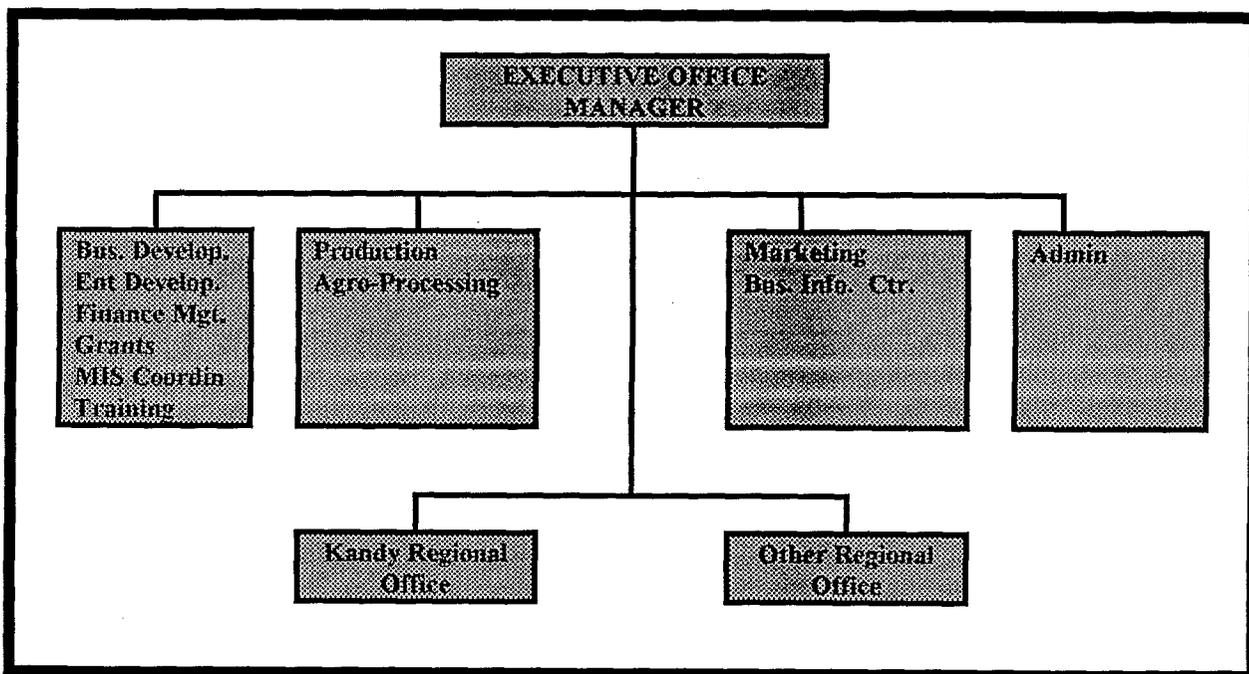
**ANNEX C**  
**EVALUATION TEAM PROPOSAL FOR FUTURE**  
**AgENT ORGANIZATION STRUCTURE**

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**OVERALL CONCEPT**



AgENT SERVICES UNIT



ANNEX D

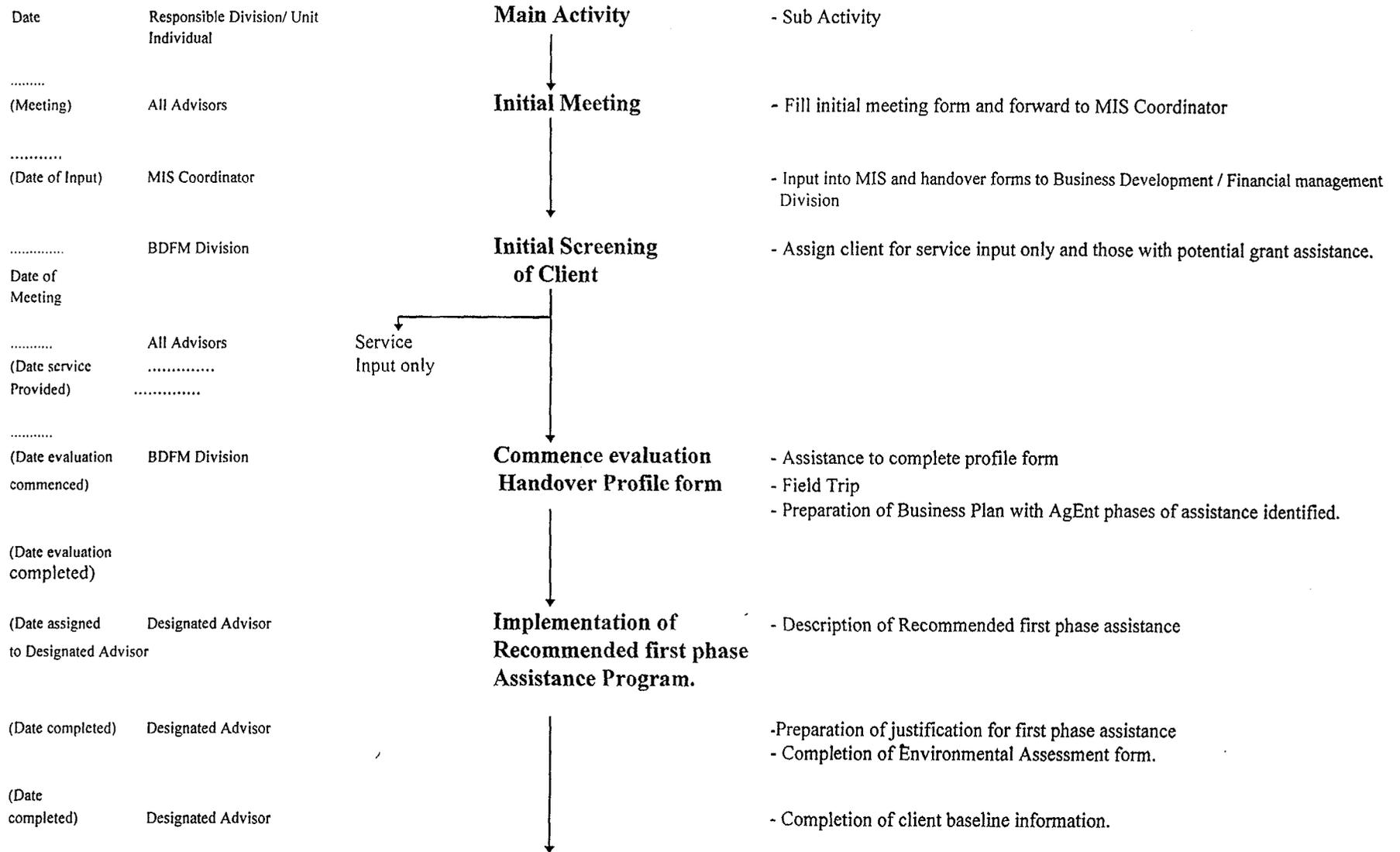
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**CLIENT EVALUATION CHECKLIST**

### 3.3.1 EVALUATION PROCEDURE

1. AgEnt clients who seeks assistance can be categorized as those who needs service assistance and those who have potential for shared investment grant assistance.
2. It has been recognized that each category requires a different type of approach in assistance.
3. Those clients for service assistance are supported by Advisors by extending assistance and guidance.
4. Those with potential for AgEnt shared investment grant are assisted in a more systematic manner to develop a business.
5. Development of a business venture needs a multifaceted approach in which economic, financial, technical, market considerations are weighed together in a composite analysis that requires both qualitative and quantitative evaluations.
6. Given that a project has to satisfy criteria relating to its efficiency as a business operation, financial evaluation may be viewed as the most critical factor affecting investment decisions.
7. Hence, those with potential for investment grants are initially managed by the Business Development/ Financial Management Division. A comprehensive assistance package for consideration by the AgEnt team are prepared with the support of other Divisions.
8. The initial assistance given to a potential grantee is the development of a concise business plan. Client is made to ponder more about the present and future path his business would take, as a business plan is developed.
9. In the process, Advisors also identify at each stage of business development, the different form of assistance that AgEnt could extend.
10. At the end of the exercise, there is a clear plan of business development laid out for a period of 3-5 years. The profitability and commercial viability of the business is also assessed.
11. The client is then managed by the relevant Advisors who are henceforth responsible for the implementation of assistance, managing and developing the business of the client on a hands on basis.
12. All assistance by AgEnt are therefore systematically planned out and thereby avoids adhoc assistance.
13. The flow-chart of Managing an AgEnt client, Evaluation Procedure Checklist and the initial meeting form are attached.

## AgEnt Client Evaluation Checklist



Service Input only

Designated Adviser  
 Technical Review Committee  
 (Date of Decision)

MIS Coordinator  
 Designated Advisor

**Submission to Technical Review Committee**

- Committee Decision
- Approval                      Disapproval
- Update MIS as active client if approved.
- Update client status report in client database by Advisor - summary of decision on Approval/ Disapproval.
- Evaluation Checklist and profile to Grants Admin. Unit

Comments  
 .....  
 .....

(Date Commenced) Grant Admin. Unit

(Date Completed) Designated Advisor

(Date Completed) Designated Advisor

(Date Completed) Designated Advisor

(Date Commenced) Grant Admin. Unit

(Date Completed) Designated Advisor

(Date of Submission) Grant Admin. Unit

(Date Signed) Grant Admin. Unit

**Grant Agreement Preparation**

- Outline basic terms of grant agreement
- Budget preparation
- Review of vendor quotations (3)
- Preparation of Draft Agreement
- Assign Grant Number
- Approval of Draft Agreement
- Submission to USAID for their information
- Client signature
- Client status update with Grant Number and Date Grant signed in client Database.
- Submission to OSU for signature

(Date of Submission) Grant Admin. Unit

(Date Commenced) Grant Admin. Unit

(Date Commenced) Grant Admin. unit

(Date Completed)

(Date Completed) M&E Sub Unit

**Grant Agreement Execution**

- Review of original documentation pertaining to investment
- Administering documentation follow-up
- Reinspection of equipment/end product
- Client Status Report Update.
- Reimbursement
- Client Status Report Update
- Monitoring & Evaluation.

(Date Complete) Grant Admin. Unit/ & E Sub Unit

Quarterly Basis M & E Sub Unit

**Completion of First Phase Assistance Under Grant Agreement**

Quarterly Basis M & E Sub Unit

Designated Advisor

**M & E Client Quarterly follow-up**

**Determination of Next Appropriate Phase of Assistance**



**AgEnt PROJECT ENVIRONMENTAL CHECKLIST**  
*(To be submitted to the AgEnt Office by prospective project proponents)*

Client No: \_\_\_\_\_  
Grant No's.: AG-\_\_\_\_\_

- a. Name of the Company:
- b. Nature of proposed business (as described in the company register's business registration):
- c. Location of the proposed activity:(please attach at least 1:50000) map with the exact location marked):
- d. Nature of support sought under AgEnt project:
- e. 1. Does on-going or planned activity (ies) result (s) in: the discharge of:
  - i. any liquid waste to the environment
  - ii. large quantities of waste/used water (resulting from washing or production process)
  - iii. fumes/vapors to the outside environment (land or water body)
  - iv. noise production

If the answer to any one above is yes, please give details of the type, amount, and nature of wastes and provide a description of the affected environment or ecosystem.

2. Have you applied for an Environment Production license (EPL) from the Central Environmental Authority (CEA). If yes, answer question 3.

Yes/No

3. Have you ever been inspected by the CEA or any other local authority at any stage of project development or implementation?

Yes/No

if yes, answer following:

- i. Have you been denied an EPL for current operations:
- ii. Have you been asked to make any improvements to the existing waste production stream:
- iii. Are you seeking any funds under the present proposal to carry out mitigating measures recommended by the authorities.

Contd....2/

Page No.:2

- f. Is the proposed is a new activity listed under the "Prescribed Projects" gazetted under the EIA regulation of Sri Lanka (under National Environmental Act 1980/1988)?

(This information may be obtained from the EIA unit of the Central Environmental Authority)

- g. In your view, would the project have any positive or negative impacts an the following resources)

1. Water resources (eg. ocean, lagoons, streams, rivers, wetlands, tanks, etc)
2. Forest resources
3. Wildlife reserve (eg. Sanctuaries, National Parks, Nature Reserves)
4. Local Communities (eg. enhanced living, displacements)
5. Air
6. Specific faunal or floral species

If you know of any impact of current or planned activities on any of the above resources please give details to the extant known:

Certified correct by:..... (Project proponent)

**OFFICE USE ONLY:**

Comments by COP/ AgEnt Office

USAID project Officer's Comments:

Clearance:/ Recommendation by Environmental Officer, USAID/Sri Lanka

# Client Baseline Information Report



Confidential  
(for Internal use only)

Base as at: .....

Company Name: .....

Client No: .....

Grant No's: .....

Note : Please indicate the following statistics for the part of your operation that relates to the AgEnt assisted activities/activity.

EMPLOYMENT				
Number of Permanent Employees	Area of Involvement	Male	Female	
	Production			
	Processing			
	Marketing			
	Administration			
Number of Casual Employees	Production			
	Processing			
	Marketing			
	Administration			
Monthly Payroll in Rs.	Permanent			
	Casual			
<b>SALES- Export, Average Annual Sales</b>				
* (Indicate Unit of Measure)	Product/Crop	Volume/Qty *	Value in Rs.	
	1			
	2			
	3			
	4			
<b>SALES- Domestic, Average Annual Sales</b>				
* (Indicate Unit of Measure)	1			
	2			
	3			
	4			
	<b>OUTGROWERS (as at the above date)</b>			
* (Indicate Unit of Measure)	Product/Crop (Please list)	Number of	Volume/Qty *	Value in Rs.
	1			
	2			
	3			
<b>INVESTMENT (as at the above date)</b>				
		Value (Rs)		
	Land			
	Buildings			
	Vehicles			
	Plant Equipment/ Machinery			
	Infrastructure			
Others				
<b>VALUE ADDED PRODUCTION, AVERAGE ANNUAL</b>				
	Name of value added	Volume/Qty in Kg, -----, etc.	Value in Rs.	
	1			
	2			
	3			

Name and title of person completing \_\_\_\_\_

Certified by Financial Authority \_\_\_\_\_

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ANNEX E

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**SUMMARY OF AgENT/CLIENT SHARED  
INVESTMENT ACTIVITY**

**SUMMARY OF AgEnt/CLIENT SHARED INVESTMENT ACTIVITY**  
through June 30, 1996

<b>Product Sector</b>	<b>AgEnt Contribution (US Dollars)</b>	<b>Client Contribution (US Dollars)</b>	<b>Percent of Total Contribution by Product Sector</b>
Aquaculture - Aquatic Plants	1693	1963	0.14%
Aquaculture - Edible Fish	7349	7379	0.53%
Aquaculture - Ornamental Fish	147677	120993	9.59%
Floriculture - Cut Flowers	12408	13505	0.92%
Floriculture - Cut Foliage and Rooted Cuttings	49383	65102	4.09%
Floriculture - Others	396	836	0.04%
Fresh Fruits - Other Exotics	8421	8421	0.60%
Fresh Vegetables - High Value Export Vegetables	74999	71265	5.22%
Fresh Vegetables - Other Vegetables	76172	57906	4.79%
Industrial Crops - Pyrethrum	54677	27152	2.92%
Industrial Crops - Ramie	38862	37237	2.72%
Livestock Feed - Maize	27741	29957	2.02%
Livestock Production - Dairy	2275	2275	0.16%
Livestock Production - Piggery	5796	27938	1.20%
Livestock Production - Poultry	300291	339958	22.85%
Miscellaneous - Agromachinery	70659	337659	14.57%
Miscellaneous - Coir Products	4102	4102	0.29%
Miscellaneous - Feed Milling	17122	17122	1.22%
Miscellaneous - Others	26843	25341	1.86%
Oilseed Crops - Sunflower	8129	9071	0.61%
Processed Foods	17673	40743	2.09%
Processed Foods - Cashew	3820	2583	0.23%
Processed Foods - Coconut Products	13142	10368	0.84%
Processed Foods - Dairy Products	6692	8875	0.56%
Processed Foods - Dried Fruits	25344	20434	1.63%
Processed Foods - Ethnic Products	96898	97536	6.94%

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Processed Foods - Others	12292	12292	0.88%
Spices/Herbs/Flavourings/Essential Oils/Oleoresins - Ginger	21994	11022	1.18
Spices/Herbs/Flavourings/Essential Oils/Oleoresins - Other	69261	89995	5.68%
Spices/Herbs/Flavourings/Essential Oils/Oleoresins - Vanilla	64989	35169	3.58%
Total	1,267,370	1,534,199	100.0%

Total AgEnt/Client Shared Investment to date: US\$ 2,801,569/00

Percent of AgEnt Contribution: 45%

Percent of Client Contribution: 55%

Total number of grants awarded: 471

Average value per grant: US\$ 5,948/00

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ANNEX F

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**LIST OF PERSONS INTERVIEWED**

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**ANNEX F**  
**LIST OF PERSONS INTERVIEWED**

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Gayatri Abeydeera, Business Information Center  
AgEnt  
Colombo, Sri Lanka

Malcolm Alles, Documentation Clerk  
AgEnt  
Colombo, Sri Lanka

P.R. Amarasiri, Financial Advisor  
AgEnt  
Colombo, Sri Lanka

Shirley Amunugama, Administrative/Finance Manager  
AgEnt  
Colombo, Sri Lanka

David Anderson, Marketing Advisor  
AgEnt  
Colombo, Sri Lanka

Mohamed A. Arif, Production Manager  
Ceylon Agro-Industrial Ltd.  
Seeduwa, Sri Lanka

D.M. Ariyaratne, Secretary  
Ministry of Agriculture, Lands and Forestry  
Colombo, Sri Lanka

Madanakondarachchiralalage (Joseph) Arsecularatne, Proprietor  
Mandarin Farm  
Maggonna, Sri Lanka

Sujani Arsecularatne, Daughter  
Mandarin Farm  
Maggonna, Sri Lanka

Sureni Arsecularatne, Daughter  
Mandarin Farm  
Maggonna, Sri Lanka

Sriyani Arsecularatne, Wife  
Mandarin Farm  
Maggonna, Sri Lanka

Wavita Vidanalage Don Albert, Production Advisor  
AgEnt  
Colombo, Sri Lanka

Mohamed Aroos Ali, Partner  
Hijra Poultry Hatchery  
Beruwala, Sri Lanka

Kamalini Balasuriya, DHA  
USAID Project Office  
Sri Lanka, Colombo

S.N.S.B. Bandaranayake  
Bandaranayake Exports (Pvt) Ltd

Gary Bayer, ADO  
USAID Mission  
Colombo, Sri Lanka

M.Z. Caffoor, Agronomist  
Ceylon Agro-Industries Ltd.  
Seeduwa, Sri Lanka

S.H. Charles, Production Advisor  
AgEnt  
Colombo, Sri Lanka

David Cohen, Director  
USAID Mission  
Colombo, Sri Lanka

Kanthi Cooray, Owner  
Janapriya Spcies  
Wattala, Sri Lanka

K. Sakthi Dasan, Finance Manager  
Link Natural Products (Private) Limited  
Kapugoda, Sri Lanka

Hiran De Alwis, Manager  
Labookellie, Mackwoods Plantations (PVT) Ltd.  
Nuwar Eliya, Sri Lanka

Mario De Alwis, Managing Director  
Ma's Tropical Food Processing (Pvt) Ltd.  
Dambulla, Sri Lanka

Asoka De Silva, Deputy General Manager  
People's Bank  
Colombo, Sri Lanka

Tissa De Soyza, Ag Marketing Specialist  
USAID  
Colombo, Sri Lanka

Thusitha Dharmawardane, DHA  
USAID Project Office  
Colombo, Sri Lanka

Tyronne Dias, Transport Officer  
AgEnt  
Colombo, Sri Lanka

Shyamalie Ekanayake, Grants Manager  
AgEnt  
Colombo, Sri Lanka

M. Falil, Project Officer  
ANR-USAID  
Colombo, Sri Lanka

Mohamed Fawazdeen, Accounts Assistant  
AgEnt  
Colombo, Sri Lanka

Erwin J. Fernando, Managing Director  
Aqua Plants Lanka  
Moratuwa, Sri Lanka

Henricus Fernando, Chairman  
Hiran International Dehydration Co (Pvt) Ltd  
Moratuwa, Sri Lanka

Jinasiri Fernando, Director of Plant Protection and Seed Certification  
Department of Agriculture  
Kandy, Sri Lanka

Kumudu Fernando, Phd, Deputy Director Research  
Department of Agriculture, RARDC  
Bandarawela, Sri Lanka

Manoj Fernando, Accounts Assistant Grant Division  
AgEnt  
Colombo, Sri Lanka

Rohan L. Fernando, Managing Partner  
Angel Aquarium  
Wellawatte, Sri Lanka

Rohan M. Fernando, Director/General Manager  
Aitken Spence Plantation Managements (Pvt) Ltd.  
Colombo, Sri Lanka

Shantha Fernando, Software Engineer  
Information Laboratories (Pvt) Ltd.  
Ratmalana, Sri Lanka

Brian Forbes, Consultant  
Development Banking  
Colombo, Sri Lanka

Siripala Gamage, Big Onion Storage  
Central Province  
Galewala, Sri Lanka

Tilak Gamage, Driver  
AgEnt  
Colombo, Sri Lanka

Maithree Gankande, The Superintendent  
Court Lodge Tea Estate  
Kandapola, Sri Lanka

Gnanasena Goonapienuwala, Managing Director  
Chinthana fruit processing company  
Anuradhapura, Sri Lanka

Ginige  
Eoas International  
Ratmalana, Sri Lanka

D.G. Gunaratne, Proprietor  
Tharanga Horticulture Nursery

Mahinda Gunasekera, Project Officer  
USAID-ANR  
Sri Lanka, Colombo

G.A. Gunatilaka, Farmer  
Gunatilka Estate  
Saliyapura, Anuradhapura

Thanujani Gunawardena, Project Accounts Specialist  
AgEnt  
Colombo, Sri Lanka

Deepthi Harshani, Director of Tissue Laboratory  
CIC Agri Biotech (PVT) Ltd.  
Nuwara Eliya, Sri Lanka

H.M.R. Herath, Driver  
AgEnt  
Colombo, Sri Lanka

Rohan Horadagoda, Director  
Carlton Herb Company  
Bandarawela, Sri Lanka

Richard Hurelbrink, COP  
AgEnt  
Colombo, Sri Lanka

Ahamed Husny, Grants Account Specialist  
AgEnt  
Colombo, Sri Lanka

Mohamed Imtiaz, Chairman  
Midland Breeders (PVT) Ltd.  
Gampola, Sri Lanka

Sarath Jayakody, Factory Manager  
Link Natural Products (Private) Limited  
Kapugoda, Sri Lanka

Lionel Jayaratne, Project Management Specialist  
USAID Mission  
Colombo, Sri Lanka

G. Jayasena, Office Aide  
AgEnt  
Colombo, Sri Lanka

Nimal Jayasuriya, Managing Partner  
Foreconns Canneries  
Beruwala, Sri Lanka

Avanthi Jayatilaka, Project Management  
USAID Mission  
Colombo, Sri Lanka

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P. Jayawardena  
Meenaella Farms  
Hakgala, Nuwara Eliya, Sri Lanka

S.D.G. Jayawardena PhD, Director  
Horticultural Research and Development Institute, Department of Agriculture.  
Gannoruwa-Peradeniya, Sri Lanka

A. Jinasena, Driver  
AgEnt  
Colombo, Sri Lanka

Lim Beng Joo, Ph.D., General Manager  
Ceylon Agro-Industries Ltd.  
Colombo, Sri Lanka

Delal Kahandawela PhD  
Department of Agriculture, Sita Eliya Farm  
Nuwara Eliya, Sri Lanka

Spencer T. King, CEO  
International Executive Service Corps  
Colombo, Sri Lanka

R. Sanath Kumara, Office Aide  
AgEnt  
Colombo, Sri Lanka

Chandana Kumarage  
National Enterprise Bank  
Colombo, Sri Lanka

Gamini Kumarage, Deputy COP  
AgEnt  
Colombo, Sri Lanka

Richard J.D. Law, CEO  
Honkong and Shanghai Banking Corporation, Ltd.  
Colombo, Sri Lanka

Jon D. Lindborg, Chief Private Sector  
USAID  
Colombo, Sri Lanka

Charmarie Maelge, Marketing Department Advisor  
AgEnt  
Colombo, Sri Lanka

S. Mallawaarachchi, Business Information Center Assistant  
AgEnt  
Colombo, Sri Lanka

Fiona Manickam, Executive Secretary  
AgEnt  
Colombo, Sri Lanka

Justin Meemanage, Chairman, Managing Director  
Wet Pets  
Andiambalama, Sri Lanka

Sunil Mendis, Chairman & Chief Executive  
Hayleys Group  
Colombo, Sri Lanka

Merle R. Menegay, Agricultural Marketing Economist  
World Bank Consultant  
Colombo, Sri Lanka

Asoka Mivanapalana, Ornamental Fish Consultant  
AgEnt  
Colombo, Sri Lanka

Faiz Mohideen, National Planning Department  
Min of Finance & Planning  
Colombo, Sri Lanka

Philip Mowbray, Production Advisor  
AgEnt  
Colombo, Sri Lanka

E. Nanthini, Researcher  
DOA  
Nuwara Eliya

Abdul Nasar, Accountant  
CIC Agri Biotech (PVT) Ltd.  
Nuwara Eliya, Sri Lanka

Richard Nishihara, Project Officer  
USAID Mission  
Colombo, Sri Lanka

RM Nissanka, Owner  
Mahake helwewa  
Mawanella, Sri Lanka

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Mangalika Nugaliyadde, PhD, Entomology  
Department of Agriculture  
Nuwara Eliya, Sri Lanka

Devapriya Nugawela PhD, Managing Director  
Link Natural Products (Private) Limited  
Kapugoda, Sri Lanka

Michael S. Owen, Econ  
US Embassy  
Colombo, Sri Lanka

Malcolm R. C. Peiris FIPM  
Free Lanka Management Company (Pvt) Ltd.  
Managing Agents for Pussellawa Plantations Limited  
Pussellawa, Sri Lanka

Iris Pelpola, Owner  
Mahaweli Canneries  
Kandy, Sri Lanka

Bedgar Perera, Director of Agricultural Development  
Ministry of Agriculture  
Colombo, Sri Lanka

D.A. Perera, Managing Partner  
EOAS International  
Ratmalana, Sri Lanka

Desmond Perera, General Mgr.  
Maxie House  
Kosgas Junction, Sri Lanka

Douglas Perera, Driver  
AgEnt  
Colombo, Sri Lanka

Keith Perera, Director of Procurement  
Reckitt & Colman of Ceylon Ltd.  
Colombo, Sri Lanka

L.G. Perera, Assistant General Manager  
Development Finance Corporation of Ceylon  
Colombo, Sri Lanka

M.N.M.M. Perera, Managing Director  
Maxie House  
Kosgas Junction, Sri Lanka

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Niroshie Perera, Administrative Assistant  
AgEnt  
Colombo, Sri Lanka

Ratnapala Perera, Big Onion Storage  
Central Province  
Galewala, Sri Lanka

P. Ian Pieris, Deputy Chairman  
ARPICO  
Colombo, Sri Lanka

P.F.S. Premasiri, Production Manager  
Ceylon Agro-Industries Ltd.  
Seeduwa, Sri Lanka

Lasantha Punchihewa, Owner's Nephew  
Mandarin Farm  
Maggonna, Sri Lanka

Gamini Ratnayake  
Walewela Tomato Growers Association  
Walewela, Sri Lanka

M. Glenn Rutanen-Whaley, Environment Officer  
USAID  
Colombo, Sri Lanka

S.M. Samararatne, Messenger  
AgEnt  
Colombo, Sri Lanka

Shrimali Senn, Executive Secretary  
AgEnt  
Colombo, Sri Lanka

Khema Senanayake, MIS Coordinator  
AgEnt  
Colombo, Sri Lanka

Noel Senanayake, Purchasing Manager  
Nestle Lanka Limited  
Colombo, Sri Lanka

Piyadasa Senanayake, Evaluation Associate  
University of Colombo Lecturer  
Colombo, Sri Lanka

S.J.R. Senarath, Assistant General Manager  
Bank of Ceylon  
Colombo, Sri Lanka

Chula Senewiratne, Executive Director  
Kilani Valley Canneries Ltd.  
Kaluagalia Hanwella

Mohan Siribaddana, Project Officer  
USAID-ANR  
Colombo, Sri Lanka

D.N. Sirisena, Soil Scientist  
DOA  
Nuwara Eliya, Sri Lanka

Bruce Spake, Former MARD COP  
Development Alternatives, Inc.  
Colombo, Sri Lanka

S. Srikanthan, Vanilla Project Manager  
AgEnt  
Colombo, Sri Lanka

Salma Suhood, Financial Advisor  
AgEnt  
Colombo, Sri Lanka

Lionel Suraweera, Big Onion Storage  
Central Province  
Galewala, Sri Lanka

Q. Suriyaaratchchi, Country Mgr  
International Executive Service Corps & AgriDev Board Chm.  
Colombo, Sri Lanka

Abey Suriya, Ag. Extension, Assistant Director,  
DOA  
Dambulla, Sri Lanka

Yohan Suriyabandara, Extension Officer  
Keell's Okra & Baby Corn Project  
Dambulla, Sri Lanka

Arne Svinnigen, Chairman & Managing Director  
Green Farms Limited Sri Lanka  
Colombo, Sri Lanka

H.B. Tennekoon  
General Manager of AgriDev  
Colombo, Sri Lanka

Sunethra Vanderputt, Receptionist  
AgEnt  
Colombo, Sri Lanka

Srimevan Weerasekara, Aquaculturist, Pathologist  
Wet Pets (PVT) Ltd.  
Andiambalama, Sri Lanka

Rushika M. Weeratunga, Owner  
Koffee Exotique  
Ratmalana, Sri Lanka

Wicky Wickramaatunga, Managing Director  
Agriworld (PTE) Ltd.  
Nugegoda, Sri Lanka

Tissa Wickremasinghe, Chairman/Managing Director  
Prime Food Products (Pvt) Ltd.  
Kandy, Sri Lanka

Dushantha R.M. Wickremasinghe, Production  
Keells Aquariums (PVT) Ltd.  
Ja-Ela, Sri Lanka

Lasantha Wickremesooriya, Director  
Keells Aquariums (PVT) Ltd.  
Ja-Ela, Sri Lanka

Ranjit Wijesinha, Marketing Advisor  
AgEnt  
Colombo, Sri Lanka

L.C.R. de C. Wijetunge, Director Corporate Affairs  
Nestle Lanka Limited  
Colombo, Sri Lanka

Piyal Weerasooriya, Nursery Executive  
CIC Agri Biotech (PVT) Ltd.  
Nuwara Eliya, Sri Lanka

D. Wijesundera, Deputy General Manager  
Hatton National Bank  
Colombo, Sri Lanka

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**LIST OF PROJECTS VISITED BY  
EVALUATION TEAM**

**Annex G: List of Projects Visited by Evaluation Team \* =Sector [See last page]**

#	Company Name	* =Sector	Size	Grant Item	\$ Cost
1	Chinthana Import & Export (Pvt) Ltd.	1	Micro	Attend IFCON'93 Food convention/exhibition in India	\$617
				Attend Thailand Food Fair'95	\$474
				Establish pioneering enterprise in fruit processing-equipment	\$2092
				Attend Propak '96 Thailand	\$406
				<b>Total</b>	<b>\$3589</b>
2	Forecourts Canneries	1	Medium	Thai Fair	\$474
				Brochures & Labels	\$2268
				Propak '96 Thailand	\$406
				<b>Total</b>	<b>\$3148</b>
3	Kelani Valley Canneries	1	Small	Design & Print Brochures	\$268
4	Janapriya Spices	1	Micro	Product labels	\$2175
				AHARA '95 in India	\$996
				Food Processing Machine	\$515
				<b>Total</b>	<b>\$3686</b>
5	Koffee Exotique	1	Micro	Coffee Grinding Machine	\$1102
6	MA's Food Processing Factory	3	Small	Participation at IFCON'93 Food Fair	\$578
				Purchase Powder Filler & accessories	\$4,587
				Purchase Thermal Bar Coding Mach	\$2,100
				<b>Total</b>	<b>\$7,265</b>
7	Mahaweli Canneries	2	Small	Dryer	\$5000
				Thai Food Fair '96	\$474
				IFCON '93	\$520
				<b>Total</b>	<b>\$5994</b>
8	Prime Food Products	2	Micro	Attend IFCON '93	\$624
				Feasibility Study in India	\$672
				Thai Food Fair '95	\$474
				Travel to source India equipment	\$712
				<b>Total</b>	<b>\$2482</b>

**Annex G: List of Projects Visited by Evaluation Team (continued)**

#	Company Name	*	Size	Grant Item	Cost
9	Hiran International	2	Medium	Thai Food Fair '95	\$813
				Samples to Anuga Fair '93	\$124
				Stand space at Anuga	\$876
				Travel Anuga world Food Market	\$1600
				Fruit Dryer	\$4095
				Maldive Promotional	\$388
				Design & print brochure	\$2040
				Total	\$9936
10	Link Natural Products (Pvt) Ltd	3		Print Promotional Brochure	\$602
				Design Cartons & Labels	\$194
				Photography changes of product display prints	\$441
				Purchase a Book	\$49
				Fine Food '95 Sydney	\$3,459
				EAOS Conference, Istanbul	\$1635
				Purchase Chromatograph	\$22,500
				Total	\$28,880
11	EOAS International	3	Small	Evaluate latest production, export marketing, trends. Aligned with spices, essential oils and Oleoresin IFEAT France	\$1509
				Brochures	\$2040
				Cinnamon Leaf Still	\$10,000
				Distillation Assembly Unit	\$3823
				Fine Food '95 Sydney	\$3459
				Congress in Istanbul	\$1635
				Total	\$22,466
				12	Keppetipola Rubber Industries
13	Carlton Herb Company	3	Micro	Introduce Herb varieties	\$75
				Introduce Strawberry plants	\$354
				Total	\$409
14	Tharanga Nursery	4	Micro	Shade Netting for plant nursery	\$396
15	Bandaranayake Export	5	Small	Market Study in USA to export coconut fibre briquettes	\$342
16	Keell's Aquarium	6	Medium	Freshwater filtration sponge filters	\$33
				Broodstock enhancement	\$69
				Monitor fresh water quality	\$391
				Total	\$493

**Annex G: List of Projects Visited by Evaluation Team (Continued)**

#	Company Name	* Size	Grant Amount	\$ Cost
17	Angel Aquarium	6	Small	Broodstock enhancement \$73 Anti-predator netting \$6185 Valves/air delivery system \$58 Technological improvement to an ornamental fish farm <u>\$1997</u> Total \$8313
18	Wet Pets	6	Small	Optimization of Stocking Densities - Equipment \$3296
19	Aqua Plant Lanka	6	Micro	Promotional tour to Europe \$949 Export Promotion Brochures <u>\$1014</u> Total \$1,963
20	Midland Breeders	7	Small	Ventilation systems for Hatchery \$23,284
21	Maxi House	7	Micro	Meet US Suppliers of poultry processing equipment & purchase \$2115 Install poultry processing equipment \$36,050 TA to install equipment \$10,000 Install Sri Lankan incinerator \$5,000 Poultry exposition USA \$1626 Build effluent treatment plant \$5,000 Total \$59,791
22	Hijra Farms	7	Medium	Purchase incubators \$45,659
23	Mandarin Farm	7	Small	Grant not yet awarded
24	Arunaloka Farm Dairy	7	Small	Management advice at no cost to date. But planning a grant.
25	Meenaela Farm	8	Micro	Introduce Strawberry Mother Plants \$1,415
26	CIC Agri Biotech (Pvt) Ltd.	9		Poly Tunnels \$47,169
27	Walawela Tomato Processing Growers Society	9	Micro	Tomato Seed \$608
28	Onion Storage Project	9		Construction of Storage units \$11,600

**Annex G: List of Projects Visited by Evaluation Team (Continued)**

#	Company Name	* Size	Grant Amount	\$ Cost
29	Keell's Vegetable Export Program	9		
30	Horticulture Research & Development Institute (HORDI)	9	Varietal evaluation of 15 varieties of fresh & processing type Tomatoes Evaluation of protected culture methods of the off season vegetable production in the Mid Country wet Zone of Sri Lanka Visit to Thai Food Fair (2 HORDI technicians)	\$2,637 \$4,362 \$933
			Total	\$8,370
31	Vanilla	11	Outgrower Program	\$64,989
32	Pyrethrum	12	Research & Development	\$54,677
33	Ramie	13	Research & Development	\$38,862
34	Maize	14	Research & Development	\$32,628
35	Bank Training		Training Bank Loan Officers	\$1,094
<b>Grand Total</b>				<b>\$500,397</b>
Sector Code: (1) Processed Food - Ethnic Products (2) Processed Foods - Dried Fruit (3) Spice, Herbs, Flavourings/Essential Oils/Oleoresin/Others (4) Floriculture/Others (5) Miscellaneous/Coir Products (6) Aquaculture-Ornamental Fish/Aquatic Plants (7) Livestock Production/Poultry (8) Fresh Fruit/Other Exotics (9) Fresh Vegetables - Other Vegetables (10) Processed Foods Dairy Products (11) Vanilla (12) Pyrethrum (13) Ramie (14) Maize				

ANNEX I

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**EVALUATION SCOPE OF WORK**

# TERMS OF REFERENCE

## MID-TERM PROJECT EVALUATION JUNE 1996

### Purpose

The Purpose of the mid-term evaluation is to assess results to date in order to appropriately focus on-going activities and to provide guidance and direction for future project activities.

### Project Background

The Project Goal is to diversify and commercialize agricultural systems. The Project Purpose is to stimulate the development and expansion of private agro-based enterprises.

The AgEnt Project addresses the unmet demand for comprehensive, creative, technical and financial services required to develop Sri Lanka's agro-industrial sector. The project provides assistance to emerging and expanding agro-enterprises through a combination of technical services in production, processing and marketing, finance, research and training. It supports agro-industrial development and investment packaging to leverage an increased share of the financing available through commercial banks and other financial institutions.

The project mobilizes significant local resources through private investment from participating financial institutions and agro-entrepreneurs. Thus, the project addresses the principal constraint to development of the sub-sector.

USAID inputs include:

- \* Short and long-term US and Sri Lankan expertise, including operating costs for an information and service center;
- \* Agro-enterprise development grants;
- \* Funding for training;
- \* Equipment and materials;
- \* Market research and development; and
- \* Policy analysis and related environmental issues.

Other project inputs are:

- \* In-kind contributions from individuals and institutions; and
- \* Investment funding or owner's equity made by private agro-entrepreneurs and financial institutions.

These inputs were originally identified and delivered under 'free-standing' project. However, since April, 1996, the AgEnt Project became an activity under the Mission's new Sustainable Economic Growth Program (SEGP - 383-0120). SEGP represents the goals and objectives covering USAID/Sri Lanka's sustainable economic growth strategic objective.

The project feasibility derives from market forces that direct investment and project activities. However, the project also recognizes a link between resulting economic growth and poverty alleviation through the generation of employment. In addition, the project gives special attention to promotion of investment in women-owned enterprise or to businesses where women are the primary beneficiaries.

Professional guidance and oversight for the project is provided through an advisory board comprised of key GSL officials and private sector representatives from business and participating financial institutions. The Board advises on matters concerning implementation and helps to develop strong linkages with the agricultural, financial and agribusiness community.

The AgEnt project office in Colombo serves as an informal technical resource center for entrepreneurs. The project technical assistance team advises entrepreneurs on agribusiness development and obtains marketing, production and processing technology information for entrepreneurs as required.

The project advertises widely to announce the availability of its services and to promote agribusiness investment in targeted sub-sectors. Interested clients request assistance. Requests for information and advice are met by the project team, to the extent possible. Requests for more specialized information or assistance for R&D help are reviewed and assistance provided if the proposals meet grant assistance criteria. The project may also provide consultant services, training, marketing assistance, research and development grants, prototype equipment and management assistance. Clients are expected to jointly finance the activities and the matching contribution will depend on the cost of the activity, the ability of the client to pay and the potential benefit from the investment.

### **Previous Evaluation Findings, Conclusions and Recommendations**

Dr. Larry Morgan and Seneka Abeyaratne representing Chemonics, International formed a two person evaluation team who completed a mid-term evaluation November, 1994. The major findings and

- \* The project is making satisfactory progress in achieving project objectives and the contractor should be able to successfully complete the project within the original budget if line item adjustments are allowed to align resources to meet technical assistance needs over the remaining life of the project.
- \* Emphasis on expanding existing enterprises has resulted in a base of highly motivated and innovative clients who are serving as role models for the project's overall technical assistance program.
- \* The project design is particularly relevant to GSL and USAID strategic objectives, in view of Sri Lanka's continued progress in economic liberalization and the impending completion of USAID agricultural and enterprise development projects in the Mahaweli region.

- \* The project is reaching a broad audience of micro-small and medium sized entrepreneurs who are well positioned within their respective sub-sectors to strengthen market linkages, expand employment and output, increase export earnings, and contribute to lower overall food costs. Women and non-English speaking entrepreneurs are well represented in the project's client base and training programs.

The evaluation team noted the following " lessons ";

- \* The use of an advisory board filled mainly with agro-entrepreneurs, rather than a government agency for host country project guidance, has allowed the project to quickly focus on issues that the private sector regards as top priorities.
- \* The decision to mount an aggressive promotion campaign at project inception allowed the project to gain implementation momentum in the face of a weak entrepreneurial environment.
- \* The decision to concentrate on selecting clients from established, rather than new firms, has allowed the project to identify more productive investments and technology transfer opportunities and avoid the high failure rates normally associated with new business start - ups.

The Evaluation Team's principal recommendations were :

1. It is recommended that market development studies emphasize descriptions and analysis of market linkages, competitive standings at each market level within a particular sub-sector and firm-level or land-level comparisons of crop enterprise profitability and resource use.
2. The team should investigate downstream market development opportunities to complement successful introduction of new enterprises and business expansions upstream at the producer level.
3. The team should emphasize improved financial market performance in agro-enterprises development, rather than encouraging funding mechanisms that circumvent existing financial market inefficiencies.
4. The project logical framework should be modified to include specific purpose - level indicators that can be traced through the project's client businesses. The project M&E system is already collecting firm level employment, output, sales and investment information.
5. The team should assist the Mission in developing an environmental management strategy that is consistent with pesticide/fungicide requirements for crop production trails and the Mission's obligation to comply with basic U.S.environmental regulations.

## Statement of Work

The evaluation will consist of four components and sustainability, a topic of special interest. The four components are :

- I Project Results
- II Service Delivery
- III Agribusiness Development to the Year 2000
- IV Sustainability

The Evaluation Team will also identify, describe and assess specific met or unmet needs of Agribusiness clients in terms of a sustainability strategy.

### I Project Results

The Evaluation Team will independently carry out an assessment of project results and impact using sources such as the Project Paper, data base, work plans, periodic and special reports, the USAID strategic framework, the 1994 evaluation, observations from field visits and interviews with clients, assess the direct client benefits resulting from the assistance provided under the project and the project's impact on the targeted Agribusiness subsectors.

#### \* Relevance

- Is the project approach consistent with the Mission's development strategy ?
- Are project activities relevant to USAID's strategic framework and Sustained Economic Growth Program (SEGP)?
- Assess AgEnt's potential to make a significant contribution in meeting USAID's employment, improved income and market growth objectives ?
- Identify and describe any evidence of behavioral change among AgEnt's clients in investment patterns, planning and management?
- Describe any evidence of any structural changes, e.g., employment, markets, within the Agribusiness subsectors which AgEnt targets ?
- Does AgEnt meet client demand ? Are customers satisfied with the services provided under the project ?
- Is the project achieving its purpose level outputs on a timely basis? Assess whether the project will meet all its objectives by PACD?

(The above questions are intended to provide context and should not be viewed as all inclusive.)

### II Service Delivery

The Evaluation Team will review and assess project management to determine efficiency and effectiveness. This section of the evaluation will be carried out collaboratively with the AgEnt Technical Assistance Team, USAID Representatives and others, the Evaluation Team may choose to invite.

- \* Efficiency
  - Are project results produced at an acceptable cost?
  - Are there alternative, cost saving approaches which could be used to accomplish the same results?
  - Can the project rely more heavily on identifying and using multipliers to reach more clients?
  - Are the technical and administrative units organized for most effective programs ?
  - Are clients requests for help and service being efficiently met ?
  - Are grant requests and proposals being adequately screened against environmental, financial and technical criteria ?
  
- \* Effectiveness
  - How successful has the project been in introducing new product and crop lines ?
  - Has Agribusiness investment declined, remained stable or increased among AgEnt's clients ? How does this performance compare to the sector?
  - Is there any evidence of renewed/new confidence in the Agribusiness subsector?
  - How competitive are Sri Lanka products in the overseas marketplace ? Is demand being met ?
  - Are there unidentified opportunities for capacity building in the local and/or overseas market?

(The questions in the above two sections are intended to provide context and should not be viewed as all inclusive.)

### III Agribusiness Development to the Year 2000

The Evaluation Team will use a constraints analysis to assess the need for and project the kind of Agribusiness development assistance needed through the Year 2000. This assessment will also be carried out collaboratively with the AgEnt Technical Assistance Team, USAID representatives and other participants the Evaluation Team considers able and willing to help identify and describe constraints to sustainable growth and performance and suggesting strategies to alleviate and remove such constraints.

- \* Identify and describe constraints to investment and sustained Agribusiness growth.
- \* Suggest possible strategies to improve the investment climate.
- \* Identify and describe the financial, technical and other resources needed for such a program.

### IV. Sustainability

Based upon the findings, conclusions and recommendations for Section I-III assess the Project goals, purpose and objectives to confirm their validity to the present, up to the PACD and to the year 2000. The Team must consider the Project's role

and expected results under USAID Sri Lanka's Sustained Economic Growth Program (SEGP). Any adjustments that the Evaluation Team deems necessary will be discussed and recommended in the context of the Project and its role under SEGP.

The Evaluation Team will also review and assess the AgEnt Project current sustainability plan. The Team will recommend revisions and suggest an action plan which must be consistent with the recommended program to the Year 2000. In recommending revisions, the Team must consider the key design assumptions to determine whether these remain valid for the near and long-term future.

### **Evaluation Team Output**

The Evaluation Team will :

- \* Assess project impact
- \* Evaluate project delivery plans and results, strategies, procedures and criteria for assistance.
- \* Evaluation of the present and project impact/benefits and achievements against the PACD output targets and recommended program to the Year 2000.
- \* Confirm the validity of original project goal and purpose and determine whether these should be modified.
- \* Assess the Project's current sustainability plan.
- \* Assess the resource requirements needed to the Year 2000.
- \* Assess the extent to which gender concerns are integrated into the design and implementation of the project.
- \* Identify, list and describe success stories and lessons learned.
- \* Identify and list all agricultural chemicals being used by the project in their crop development and their grant program.
- \* Review environmental concerns screening procedures and suggest changes if needed.

The Evaluation Team Leader will be responsible for submitting a draft evaluation report no later than 25 working days after the team begins its work. Review comments will be given to the team within four working days of the draft submission. Fifty copies of the final report will be submitted to the USAID project officer. The report shall address all questions contained in the scope of work and shall include but not be limited to the following sections :

1. Title page
2. Table of contents
3. Project Identification Sheet
4. Executive Summary (This section will be used for the Agency's computerized record of evaluations and must be able to stand alone as a separate document. It is limited to 3 single - spaced pages.)
5. List of Acronyms
6. The body of the report which discusses findings

7. Conclusions and recommendations
8. Annexes covering lessons, success stories, environmental concern/findings, etc.

### **Level of Effort and Scheduled Delivery of Outputs**

As estimated 18 persons weeks of technical assistance will be required to carry out the required assessment and to prepare a final report. These 18 person weeks should consist of three people, each providing approximately 6 weeks of assistance.

The evaluation must begin on or about July 20, 1996 and will be completed no later than August 30, 1996.

A draft evaluation report will be submitted no later than 20 August, 1996.

### **Required Skills and Experience for Consultants**

The following skills/mix of skills must be available amongst the three person Team :

1. Extensive private sector commercial experience; specific experience in the development and management of commercial agro-enterprises in developing countries; regional experience desirable, particularly Sri Lanka.
2. Combination of strong skills and experience in business and financial management of commercial enterprises, particularly agriculture sector related.
3. Evaluation experience, particularly in evaluating USAID financed Agribusiness or development projects; specific experience in conducting socio-economic impact assessments.
4. USAID project design experience would be helpful.

### **Funding Source and Approvals**

All funds for this evaluation have been committed to the Cooperative Agreement. The Chief of Party, AgEnt will identify candidates for the evaluation. CVs for each proposed candidate and a budget covering the evaluation activity will be submitted to USAID for approval.

ANNEX J

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**BUDGET FOR PROJECT EXTENSION**

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TABLE 2.

USAID/SRI LANKA AGRO-ENTERPRISE PROJECT (383-0111)

Extension Through the Year 2000 Budget

2-Expats  
26-TDYs

#5

Indirect	Unit	Unit	QTY	1997-98	QTY	1998-99	QTY	1999-2000	Total
QTY	Rate	Cost							
	Indirect On-Campus Rate			0.425		0.425		0.43	
	Indirect Off-Campus Rate			0.26		0.26		0.26	
	Fringe Rate Classified			0.4		0.4		0.4	
	Fringe Rate Academic			0.32		0.32		0.32	
	Inflation Rate 3% cumulative	1.03		1.00		1.03		1.06	
	Percentage of FY			1.00		1.00		1.00	

Salaries

OSU TECHNICAL SUPPORT (OSU/TS)

TRAN-CODE

ta	ta	1100	Project Support Coordinator	A17	cn	per/month	4833	6	29000	6	29870	6	30740	88,610
ta	ta	1300	Administrative Assistant	A12	cn	per/month	2918	6	17496	6	18021	6	18546	54,063

OSU TECHNICAL ASSISTANCE/LONG-TERM/US (TA/LT/US)

ta	ta	1100	TBA	A50	off	per/month	8060	12	96720	12	99622	12	102523	298,865
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OSU TECHNICAL ASSISTANCE/SHORT-TERM/US (TA/ST/US)

Days per p/m  
22

ta	ta	1100	Short-Term Consultants	A18	on	per/day	240	6	31680	6	32630	6	33581	97,891
ta	ta	2679/80	Senior Support Staff	P10	off	per/month	700	12	8400	12	8652	12	8904	25,956
ta	ta	2679/80	Senior Support Staff	P10	off	per/month	700	12	8400	12	8652	12	8904	25,956
ta	ta	2679/80	Senior Support Staff	P10	off	per/month	700	12	8400	12	8652	12	8904	25,956
ta	ta	2679/80	Senior Support Staff	P10	off	per/month	700	12	8400	12	8652	12	8904	25,956
ta	ta	2679/80	Senior Support Staff	P10	off	per/month	700	12	8400	12	8652	12	8904	25,956
ta	ta	2679/80	Senior Support Staff	P10	off	per/month	700	12	8400	12	8652	12	8904	25,956
ta	ta	2679/80	Senior Support Staff	P10	off	per/month	700	12	8400	12	8652	12	8904	25,956
ta	ta	2679/80	Senior Support Staff	P10	off	per/month	700	12	8400	12	8652	12	8904	25,956
ta	ta	2679/80	Senior Support Staff	P10	off	per/month	700	24	16800	24	17304	24	17808	51,912

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AGENT

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ta ta	2679/80	Junior Support Staff	P11	off	per/month	200	12	2400	12	2472	12	2544	7,416
ta ta	2679/80	Junior Support Staff	P11	off	per/month	200	12	2400	12	2472	12	2544	7,416
ta ta	2679/80	Junior Support Staff	P11	off	per/month	200	12	2400	12	2472	12	2544	7,416
ta ta	2679/80	Junior Support Staff	P11	off	per/month	200	12	2400	12	2472	12	2544	7,416
ta ta	2679/80	Junior Support Staff	P11	off	per/month	200	12	2400	12	2472	12	2544	7,416
ta ta	2679/80	Junior Support Staff	P11	off	per/month	200	12	2400	12	2472	12	2544	7,416
ta ta	2679/80	Junior Support Staff	P11	off	per/month	200	12	2400	12	2472	12	2544	7,416
ta ta	2679/80	Junior Support Staff	P11	off	per/month	200	12	2400	12	2472	12	2544	7,416
ta ta	2679/80	Junior Support Staff	P11	off	per/month	200	12	2400	12	2472	12	2544	7,416
ta ta	2679/80	Junior Support Staff	P11	off	per/month	200	12	2400	12	2472	12	2544	7,416
ta ta	2679/80	Junior Support Staff	P11	off	per/month	200	12	2400	12	2472	12	2544	7,416
ta ta	2679/80	Junior Support Staff	P11	off	per/month	200	12	2400	12	2472	12	2544	7,416
ta ta	2679/80	Junior Support Staff	P11	off	per/month	200	12	2400	12	2472	12	2544	7,416
ta ta	2679/80	Extension Staff	P12	off	per/month	400	12	4800	12	4944	12	5088	14,832
ta ta	2679/80	Extension Staff	P12	off	per/month	400	12	4800	12	4944	12	5088	14,832
ta ta	2679/80	Extension Staff	P12	off	per/month	400	12	4800	12	4944	12	5088	14,832
ta ta	2679/80	Extension Staff	P12	off	per/month	400	12	4800	12	4944	12	5088	14,832
ta ta	2679/80	Extension Staff	P12	off	per/month	400	12	4800	12	4944	12	5088	14,832
ta ta	2679/80	Extension Staff	P12	off	per/month	400	12	4800	12	4944	12	5088	14,832
ta ta	2679/80	Senior Advisor Staff	P13	off	per/month	1050	12	12600	12	12978	12	13356	38,934
ta ta	2679/80	Senior Advisor Staff	P13	off	per/month	1050	12	12600	12	12978	12	13356	38,934
ta ta	2679/80	Senior Advisor Staff	P13	off	per/month	1050	12	12600	12	12978	12	13356	38,934
ta ta	2679/80	Senior Advisor Staff	P13	off	per/month	1050	12	12600	12	12978	12	13356	38,934
ta ta	2679/80	Senior Advisor Staff	P13	off	per/month	1050	12	12600	12	12978	12	13356	38,934
ta ta	2679/80	Senior Advisor Staff	P13	off	per/month	1050	12	12600	12	12978	12	13356	38,934
ta ta	2679/80	Senior Advisor Staff	P13	off	per/month	1050	12	12600	12	12978	12	13356	38,934
ta ta	2679/80	Senior Advisor Staff	P13	off	per/month	1050	24	25200	24	25956	24	26712	77,868

Subtotal Salaries 468,896 482,963 497,030 1,448,889

Fringe Benefits

ta ta	1900	OSU/TS Classified	B12	on	percent	0.3		4374		4505		4636	13,515
ta ta	1900	OSU/TS Academic	B17	on	percent	0.32		9280		9558		9837	28,675
ta ta	1900	TA/LT/US	B50	off	percent	0.15		14508		14943		15378	44,829
ta ta	1900	TA/ST/US	B18	on	percent	0.32		10138		10442		10746	31,326
ta ta	2679/80	Local Office Staff	P30	off	percent	15%		44100		45423		46746	136,269

Subtotal Fringe Benefits 82,400 84,871 87,343 254,614

Allowances

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# 7

ta ta	1209	Post Differential TA/LT/US	K50	off	percent	0.25		24180	0	24905	0	25331	74,716
ta ta	2900	Temporary Living Allowance	K51	off	per/day	63	60	4980	0	0	0	0	4,980
ta ta	2942	Educational Allowance	K53	off	K-4	5850		0	0	0	0	0	0
ta ta	2942		K54	off	5-8	21950		0	0	0	0	0	0
ta ta	2942		K55	off	9-12	21950	0	0	0	0	0	0	0

Subtotal Allowances

5500 29,160 24,905 25,631 79,696

tg tg	Training (See TABLE 2.a - Training Budget for Budget Details)						50,000	50,000	50,000	150,000
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Travel/Perdiem/Transportation

Travel

ta ta	2760/1	OSU/DAI/TS	C12	on	rnd/trip	3072	3	9216	3	9492	3	9769	28,477
ta ta	2760/1	TA/LT/US To Post	C50	off	one/way	1536	4	6144	0	0	0	0	6,144
ta ta	2760/1	TA/LT/US Frm Post	C51	off	one/way	1536	0	0	0	0	4	6513	6,513
ta ta	2760/1	TA/LT/US R&R	C52	off	rnd/trip	1110	4	4440	0	0	4	4706	9,146
ta ta	2760/1	TA/LT/US Home Leave	C53	off	rnd/trip	1354	0	0	4	5578	0	0	5,578
ta ta	2760/1	Educational Travel	C59	off	rnd/trip	1110	2	2220	2	2267	2	2359	6,850
ta ta	2760/1	Market Promotion	C54	off	rnd/trip	1423	4	5692	4	5963	4	6034	17,588
ta ta	2760/1	TA/ST/US Rnd Trip (OSU)	C13	on	rnd/trip	2100	10	21000	10	21630	10	22260	64,890
ta ta	2760/1	TA/ST/US Rnd Trip (DAI)	C14	on	rnd/trip	2100	10	21000	10	21630	10	22260	64,890
ta ta	2760/1	TA/ST/US Rnd Trip (MAS)	C15	on	rnd/trip	2100	0	0	0	0	0	0	0
ta ta	2760/1	TA/ST/US Rnd Trip (Fintrac)	C16	on	rnd/trip	2100	6	12600	6	12978	6	13356	38,934
ta ta	2760/1	local Travel TA/LT/SL 5 days/trip	C55	off	rnd/trip	150	100	15000	100	15450	100	15900	46,350
ta ta	2760/1	local Travel TA/ST/US 5 days/trip	C56	off	rnd/trip	150	26	3900	26	4017	26	4134	12,051
ta ta	2760/1	local Travel TA/ST/SL 5 days/trip	C57	off	rnd/trip	150	5	750	5	773	5	795	2,318
ta ta	2760/1	local Travel TA/LT/US 5 days/trip	C58	off	rnd/trip	150	20	3000	30	4635	20	3180	10,815

Perdiem

ta ta	2760/1	OSU/DAI/TS	C35	on	per/day	138	30	4140	30	4264	30	4388	12,793
ta ta	2760/1	TA/LT/US To Post	C70	off	per/day	300	0	0	0	0	0	0	0
ta ta	2760/1	TA/LT/US Frm Post	C71	off	per/day	300	0	0	0	0	0	0	0
ta ta	2760/1	TA/LT/US R&R	C72	off	per/day	300	0	0	0	0	0	0	0
ta ta	2760/1	Market Promotion	C74	off	per/day	201	40	8040	40	8281	40	8522	24,844
ta ta	2760/1	TA/ST/US Rnd Trip (OSU)	C33	on	per/day	138	140	19320	140	19900	140	20479	59,699
ta ta	2760/1	TA/ST/US Rnd Trip (DAI)	C34	on	per/day	138	140	19320	140	19900	140	20479	59,699
ta ta	2760/1	TA/ST/US Rnd Trip (MAS)	C35	on	per/day	138	0	0	0	0	0	0	0
ta ta	2760/1	TA/ST/US Rnd Trip (Fintrac)	C36	on	per/day	138	84	11592	84	11940	84	12288	35,819
ta ta	2760/1	local Travel TA/LT/SL 5 days/trip	C75	off	per/day	42	200	8400	200	8652	200	8904	25,956

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ta	ta	2760/1	local Travel TA/ST/US 5 days/trip	C76	off	per/day	0	130	0	130	0	130	0	0
ta	ta	2760/1	local Travel TA/ST/SL 5 days/trip	C77	off	per/day	0	25	0	25	0	25	0	0
ta	ta	2760/1	local Travel TA/LT/US 5 days/trip	C78	off	per/day	42	100	4200	150	6489	100	4452	15,141

Transportation

ta	ta	2203	TA/LT/US HHE to Post	D50	off	one/way	11100	1	11100	0	0	0	0	11,100
ta	ta	2203	TA/LT/US UAB to Post Employee	D51	off	one/way	1375	1	1375	0	0	0	0	1,375
ta	ta	2203	TA/LT/US UAB to Post 1st Depend.	D52	off	one/way	1100	1	1100	0	0	0	0	1,100
ta	ta	2203	TA/LT/US UAB to Post 2nd Depend.	D53	off	one/way	825	0	0	0	0	0	0	0
ta	ta	2203	TA/LT/US UAB to Post Add'l Depend.	D54	off	one/way	550	0	0	0	0	0	0	0
ta	ta	2203	TA/LT/US POV to Post	D55	off	one/way	0	4	0	0	0	0	0	0
ta	ta	2203	TA/LT/US HHE Frm Post	D56	off	one/way	11100	0	0	0	0	2	23532	23,532
ta	ta	2203	TA/LT/US UAB Frm Post Employee	D57	off	one/way	1375	0	0	0	0	2	2915	2,915
ta	ta	2203	TA/LT/US UAB Frm Post 1st Depend.	D58	off	one/way	1100	0	0	0	0	2	2332	2,332
ta	ta	2203	TA/LT/US UAB Frm Post 2nd Depend.	D59	off	one/way	825	0	0	0	0	0	0	0
ta	ta	2203	TA/LT/US UAB Frm Post Add'l Depend.	D60	off	one/way	550	0	0	0	0	0	0	0
ta	ta	2203	TA/LT/US POV Frm Post	D61	off	one/way	0	0	0	0	0	0	0	0
ta	ta	2945	HHE Storage Fees	D62	off	per/month	100	24	2400	24	2472	24	2544	7,416
ta	ta	2945	Origin Fees	D63	off	each	1000	4	4000	0	0	4	4240	8,240

Subtotal Travel, Per Diem, Transportation

199,949 186,230 226,335 612,515

Expendable Items

Office Supplies (SL)

c1	c1	2100	Office Supplies and Materials Admin	E50	off	per/year	40000	1	40000	1	41200	1	42400	123,600
c2	c2	2100	Office Supplies and Materials Prgm	E51	off	per/year	24000	1	24000	1	24720	1	25440	74,160
c2	c2	2105	Reference Materials	E53	off	per/year	20000	1	20000	1	20600	1	21200	61,800
c2	c2	2103	Planting Materials	E54	off	per/year	12000	0	0	0	0	0	0	0
c2	c2	4102	Livestock Breeding Stock	E55	off	per/year	5000	0	0	0	0	0	0	0
c2	c2	2111	Processing Equipment	E56	off	per/year	15000	0	0	0	0	0	0	0
c2	c2	2111	Laboratory Equipment	E57	off	per/year	12000	0	0	0	0	0	0	0
c2	c2	2111	Field Equipment	E58	off	per/year	14150	0	0	0	0	0	0	0

Non-Expendable Equipment

Equipment

c1	c1	4100	Household Furniture	I50	n/a	each	31000	1	31000	0	0	0	0	31,000
c1	c1	4100	Office Furniture	I51	n/a	each	20000	0	0	0	0	0	0	0
c2	c2	4100	Vehicles, Sedans	I52	n/a	each	10000	0	0	0	0	0	0	0
c2	c2	4100	Vehicles, 4WD JEEP	I53	n/a	each	15000	0	0	0	0	0	0	0
c2	c2	4100	Computer Equipment	I54	n/a	each	100000	0	33000	0	0	0	0	33,000

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c2	c2	1100	Misc Office Equipment	155	n/a	each	30000	0	0	0	0	0	0
c2	c2	1100	Vehicles, Sedans	156	n/a	each	10000	0	0	0	0	0	0
c2	c2	1100	Vehicles, 4WD JEEP	157	n/a	each	15000	2	30000	0	0	0	30,000

## Transportation Equipment &amp; Supplies

c2	c2	2203	Exp & Non-Exp Equip & Supplies	D10	off	per/shpmt	35630	1	10600	1	4120	1	4240	18,960
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(Note: Shipping = 20% of Ref Materials, Planting Materials, livestock, processing, laboratory field, computer equipment)

Subtotal Expendable, Non-Expendable, Transportation							408,780	188,600	90,640	93,280	372,520
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## Other Direct Costs

ta	ta	2630	Medical Exams/Innoc >12	J50	off	p/person	300	8	2400	0	0	0	0	2,400
ta	ta	2630	Medical Exams/Innoc <12	J51	off	p/person	120	0	0	0	0	0	0	0
ta	ta	2630	Medical Exams/Innoc TA/ST/US	J10	on	p/person	100	26	2600	26	2678	26	2756	8,034
ta	ta	2902	TA/LT DBA	J52	off	rate/100	2.79%	0	3373	0	3578	0	3791	10,742
ta	ta	2902	TA/ST DBA	J11	on	rate/100	2.79%	0	884	0	937	0	993	2,815
c1	c1	2200	Communications	G10	on	per/year	10000	1	10000	1	10300	1	10600	30,900
c1	c1	2102	Office Supplies	E10	on	per/year	3500	1	3500	1	3605	1	3710	10,815
c1	c1	2600	Report Production	E12	on	per/year	3000	1	3000	1	3090	1	3180	9,270
ta	ta	2902	TA/LT/SOS Evac Insurance	J53	off	per/year	120	4	480	4	494	4	509	1,483
ta	ta	2902	TA/ST/SOS Evac Insurance	J12	on	per/month	35	26	910	26	937	26	965	2,812

## Local Costs

c2	c2	2300	Info. Center Publication/Promotion	J70	off	per/year	21552	1	21552	1	22198	1	22845	66,594
c1	c1	2300	Housing	J71	off	per/month	1500	24	35000	24	37080	24	38160	111,240
c1	c1	2300	Utilities	J72	off	per/month	300	24	7200	24	7416	24	7632	22,248
c2	c2	2300	Vehicle Operating Costs	J73	off	per/year	4800	4	19200	4	19776	4	20352	59,328
c1	c1	2300	Office Rent	J74	off	per/month	5000	12	60000	12	61800	12	63600	185,400
c1	c1	2300	Office Utilities	J75	off	per/month	1100	12	13200	12	13596	12	13992	40,788

Subtotal Other Direct Costs							184,299	187,486	193,084	564,859
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## Subcontractors

ta	ta	2680	Subcontractor DAI	LXX	off	<25,000	xxx	623546	627579	636538	1,887,764
ta	ta	2680	Subcontractor MAS	MX	off	<25,000	xxx	0	0	0	0
ta	ta	2680	Subcontractor Fintrac	NX	off	<25,000	xxx	80405	82849	85296	248,550

Subtotal Subcontractors							703,951	710,528	721,834	2,136,314
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g1	g1	2680	Grants, Cash, Fixed Price, Etc.	H10	n/a	per/year	200000	1	200000	1	206000	1	212000	618,000
g2	g2		Grants TA	H11	gon	per/month	200000	1	200000	1	206000	1	212000	618,000

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Subtotal Grants Etc.

400,000 412,000 424,000 1,236,000

Total Direct Costs

2,307,255 2,229,624 2,318,537 6,855,416

Indirect Costs

OSU Campus

id id 7199 On-Campus Indirect Costs see rate above 102,446 0 105,531 0 109,895 317,672

id id 7199 Off-Campus Indirect Costs see rate above 212,748 210,285 225,455 648,486

id id 7199 Grants TA/ID rate 0 0 0 0

id id 7199 Training Indirect Costs rate 0.15 7500 7500 7500 22,500

Subcontractors

id id 7199 Subcontractor DAI off percent 0.26 6,500 xxxxxx xxxxxx 6,500

id id 7199 Subcontractor MAS off percent 0.26 6,500 xxxxxx xxxxxx 6,500

id id 7199 Subcontractor Fintrac off percent 0.26 6,500 xxxxxx xxxxxx 6,500

Subtotal Indirect Costs

342,192 323,316 342,850 1,008,358

Total Direct and Indirect Costs

2,649,447 2,552,940 2,661,387 7,863,774

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c2	c2	4100	Misc Office Equipment	J55	n/a	each	30000	0	0	0	0	0	0
c2	c2	4100	Vehicles, Sedans	J56	n/a	each	10000	0	0	0	0	0	0
c2	c2	4100	Vehicles, 4WD JEEP	J57	n/a	each	15000	2	30000	0	0	0	30,000

Transportation Equipment & Supplies

c2	c2	2203	Exp & Non-Exp Equip & Supplies	D10	off	per/shpmt	35630	1	10500	1	4120	1	4240	18,960
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(Note: Shipping = 20% of Ref Materials, Planting Materials, livestock, processing, laboratory field, computer equipment)

Subtotal Expendable, Non-Expendable, Transportation      408,780      188,600      90,640      93,280      372,520

Other Direct Costs

ta	ta	2630	Medical Exams/Innoc >12	J50	off	p/person	300	8	2400	0	0	0	0	2,400
ta	ta	2630	Medical Exams/Innoc <12	J51	off	p/person	120	0	0	0	0	0	0	0
ta	ta	2630	Medical Exams/Innoc TA/ST/US	J10	on	p/person	100	26	2600	26	2678	26	2756	8,034
ta	ta	2902	TA/LT DBA	J52	off	rate/100	2.79%	0	3973	0	3578	0	3791	10,742
ta	ta	2902	TA/ST DBA	J11	on	rate/100	2.79%	0	884	0	937	0	993	2,815
c1	c1	2200	Communications	G10	on	per/year	10000	1	10000	1	10300	1	10600	30,900
c1	c1	2102	Office Supplies	E10	on	per/year	3500	1	3500	1	3605	1	3710	10,815
c1	c1	2600	Report Production	E12	on	per/year	3000	1	3000	1	3090	1	3180	9,270
ta	ta	2902	TA/LT/SOS Evac Insurance	J53	off	per/year	120	4	480	4	494	4	509	1,483
ta	ta	2902	TA/ST/SOS Evac Insurance	J12	on	per/month	35	26	910	26	937	26	965	2,812

Local Costs

c2	c2	2300	Info. Center Publication/Promotion	J70	off	per/year	21552	1	21552	1	22198	1	22845	66,594
c1	c1	2300	Housing	J71	off	per/month	1500	24	36000	24	37080	24	38160	111,240
c1	c1	2300	Utilities	J72	off	per/month	300	24	7200	24	7416	24	7632	22,248
c2	c2	2300	Vehicle Operating Costs	J73	off	per/year	4800	4	19200	4	19776	4	20352	59,328
c1	c1	2300	Office Rent	J74	off	per/month	5000	12	60000	12	61800	12	63600	185,400
c1	c1	2300	Office Utilities	J75	off	per/month	1100	12	13200	12	13596	12	13992	40,788

Subtotal Other Direct Costs      184,299      187,486      193,084      564,859

Subcontractors

ta	ta	2680	Subcontractor DAI	LXX	off	<25,000	xxx	623546	627679	636538	1,887,764
ta	ta	2680	Subcontractor MAS	MX	off	<25,000	xxx	0	0	0	0
ta	ta	2680	Subcontractor Fintrac	NX	off	<25,000	xxx	80405	82849	85296	248,550

Subtotal Subcontractors      703,951      710,528      721,834      2,136,314

g1	g1	2680	Grants, Cash, Fixed Price, Etc.	H10	n/a	per/year	200000	1	200000	1	206000	1	212000	618,000
g2	g2		Grants TA	H11	gon	per/month	200000	1	200000	1	206000	1	212000	618,000

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Subtotal Grants Etc.

400,000 412,000 424,000 1,236,000

Total Direct Costs

2,307,255 2,229,624 2,318,537 6,855,416

Indirect Costs

OSU Campus

id id	7199	On-Campus Indirect Costs	see rate above	102,446	0	105,531	0	109,895	317,672
id id	7199	Off-Campus Indirect Costs	see rate above	212,746		210,285		225,455	648,486
id id	7199	Grants TA/ID	rate	0		0		0	0
id	7199	Training Indirect Costs	rate	0.15	7500	7500		7500	22,500
Subcontractors									
id id	7199	Subcontractor DAI	off percent	0.26	6,500	xxxxxx		xxxxxx	6,500
id id	7199	Subcontractor MAS	off percent	0.26	6,500	xxxxxx		xxxxxx	6,500
id id	7199	Subcontractor Fintrac	off percent	0.26	6,500	xxxxxx		xxxxxx	6,500

Subtotal Indirect Costs

342,192 323,316 342,850 1,008,358

Total Direct and Indirect Costs

2,649,447 2,552,940 2,661,387 7,863,774

ANNEX K

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**LIST OF CHEMICALS USED IN THE PROJECT**

## SUPPLY OF CHEMICALS

Ammonium vandate (AR)	500	gm
Potassium Sulphate (AR)	500	gm
Sulphuric Acid	2.5	Ltr
Sodium Hydroxide (AR)	500	gm
Potassium Iodide	500	gm
Acetic Acid (AR)	1.0	Ltr
Chloroform (AR)	2.5	Ltr
Starch (AR)	500	gm
Thimbles (Soxlet Ext.)	2	boxes
Iodine Solution (Price per unit BDH.GPR)	500	ml
Ethyl Alcohol - Two of (two & quarter litres)	4.5	Ltr
Petroleum Spirit 40-60 C - Two of (two & quarter Litres)		