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OIC INTERNATIONAL

OPPORTUNITIES INDUSTRIALIZATION CENTERS INTERNATIONAL, INC.

REPORT OF THE GAMBIA OIC FEASIBILITY STUDY

MARCH 2, 1981
to
APRIL 2, 1981

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REPORT

OF THE

GAMBIA OIC

FEASIBILITY STUDY

FOR A

PHASE TWO PROJECT

MARCH 2, 1981

TO

APRIL 2, 1981

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THE FEASIBILITY STUDY REPORT

OF THE

GAMBIA OIC PHASE II PROJECT

MARCH 2, 1981

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PREFACE

A. The Gambia Phase II feasibility study covered by this report was undertaken in accordance with the year One Implementation Plan of the OICI Institutional Support Grant No. AID/SOD/PDC - G-0430.

The primary objective of this study team was to investigate the feasibility of and need for the continuation/expansion of The Gambia OIC Agricultural Training Project at Farafenni, North Bank Division.

A secondary objective was to evaluate project outputs to date and to develop a program design that would be more relevant and conducive to the Gambia.

B. The following tasks were to be completed:

- To ascertain the relevancy of the program.
- To redesign the project, if necessary.
- To critically evaluate present deficiencies and make recommendations.
- To assess the project impact on the local community.
- To seek cooperation and inputs from GOG and AID Banjul.
- To develop and design a proposal with significant input from GOG and USAID Banjul, that would be mutually agreeable to all parties.

This study was conducted between March 2, and April 2, 1981. Although initiated by OICI there was significant participation from GOG and USAID Banjul.

The study team consisted of the following members:

1. C.L. Mannings, Ph.D. Former Program Advisor, TGOIC, Agricultural Training and Development Specialist Central Office -- Team Leader.
2. Rosemary Burke, Program Officer, Central Office.
3. Noel Thompson, Agricultural Economist Consultant, Auburn University Extension Service.
4. Adelaide Sosseh, Education Department, Republic of Gambia.
5. S.S. Darbo, Rural Development Program, Ministry of Agriculture, Republic of The Gambia.
6. Amadou Lowe, Department of Youth & Sports, Republic of The Gambia.

The team was also assisted by:

1. A. Taal, Economist, Ministry of Economic Planning and Development.
2. E. Jagne, Loan Officer, Ministry of Finance and Trade.

The team's initial week of activities were centered in and around Banjul. Visits were made to the various relevant government ministries and departments, private voluntary organizations, parastatal organizations, the Management Committee of (GOIC) and USAID. The purpose of these meetings was to determine the relevancy of the program; to initiate government discussions in the direction of rural development; to ascertain whether GOIC objectives were in agreement with the philosophy of the government; and to determine the best way to develop future effective linkages in support of the project.

Initially, the team held a very frank and fruitful meeting with USAID Banjul and The GOIC Management Committee. AID Banjul expressed its concerns about Phase I and II and certain factors that would be critical to consideration of

Phase II funding. The Committee expressed its concerns about the project and the government financial position. All parties agreed that if the project is to be successful each party must carry their share of the financial and manpower burden. It should be noted that all parties agreed that a meeting of this nature would be quite beneficial if held at least quarterly.

There were frank and honest discussions held at all the government departments visited. There was no disagreement about the relevancy of GOIC or whether it was in line with the government's objectives. Agreement was 100% on both issues. There were varying opinions on the specific role of GOIC in The Gambia, its target population, its curricula (whether the program should be involved in animal traction or mechanization) and if the top management of GOIC should be required to have an agricultural background.

There was sincere and justifiable concern about the future of the resettlement program. It was unanimously expressed that the resettled trainees should be provided with a financial package to purchase the necessary inputs to commence a small farm. Another major concern was that GOIC Phase I was operating in isolation and Phase II should not be in isolation. There was the desire to develop linkages with GOIC such that it would be an integral part of The Gambia's total rural and agricultural development program.

The second week of the study was spent at the training center in Farafenni. During this period a comprehensive review of the program was done; interviews were held with the present TCT and local staff; the villages surrounding the center, various community leaders, present trainees and past trainees; visits were made to a select number of

trainee villages and farms in the NBD and MID to talk with their parents and the Village Alkali. Discussions were held with the Paramount Chief (NBD) and the Commissioner (NBD).

The team was able to directly assess the needs and problems at the field level. The concerns expressed by residents in the Farafenni area were similar to those heard in Banjul. The only difference was that the Farafenni group was considerably more vocal.

The project has had a noticable and significant impact upon the surrounding communities. The majority of the responses were positive and favorable; however, most villagers wished that the Center would do more toward the total development of the villages (in a second phase).

The third week of the study continued in Banjul. The necessary statistical data was collected; some additional visits were made. The majority of the time was spent compiling and synthesizing data and developing the final draft report to be submitted to GOG and USAID Banjul during this period.

The final week was spent reviewing the draft report with GOG and USAID, and discussing funding levels and specific concerns of all parties.

I. Executive Summary (Conclusions, Major Findings, Recommendations)

A. The Gambia OIC Training and Resettlement Program was funded in October 1977 for a period of five years. The total budget for this period was $1.3 million. The actual on-site infrastructure at Chamen began in January 1979. Since that period significant infrastructure has been developed, the local staff has been hired, two training sessions (years) have been completed and noticeable progress has been made toward the achievement of project objectives.

Although the project has made significant progress, it was not without problems. The proposed budget was underestimated; the production farm did not produce the expected returns; project outputs were grossly over estimated; there were problems in resettling the trainees; linkages with the relevant governmental departments were not up to par; and logistical difficulties were experienced. In spite of these varied set backs, two groups of trainees were graduated and returned to farming; over 300 acres of land were cleared and cultivated; an infrastructure of twelve buildings was constructed; and one bore well was drilled.

It was agreed by USAID Banjul, GOG and OICI that the GOIC project can make a positive contribution toward rural development in The Gambia, if the project is properly planned and managed. Thus, OICI sent a study team to The Gambia to investigate the feasibility of a revised GOIC program

USAID has been and hopefully will continue to be the primary source of financial assistance (i.e. $1.3 million over the past 3 years which completes their commitment to the existing project), while USAID has been critical of various aspects of project implementation over the past two years, in general, it has been supportive of GOIC

efforts and has, indicated a willingness to consider financing a second phase of the project if a feasible proposal is developed which is fully supported morally and financially by the Gambian Government.

The team arrived with no preconceived ideas or solutions. The tenor of discussions with local government and USAID officials was open and objective at all times. What will evolve in the remainder of this report will be the results and observations of the team when all the facts and data were synthesized.

Major Findings

1. In discussions with USAID officials it became clear they would not give their support to an extension of the Phase I activities of GOIC. Therefore it will be necessary to redesign the program for Phase II.

2. A redesign of the GOIC program will also help to alleviate several problems which existed in Phase I such as:

   a) The inability of the production farm to show a profit. (This throws serious doubts on the eventual "self sufficiency" of GOIC as proposed in Phase I).

   b) The difficulty of fully implementing resettlement plans. More than 60% of GOIC graduates lack the necessary tools and materials that are needed to begin farming.

   c) Lack of sufficient funds. In the final years of Phase I due to late start-up, inflation, under-budgetting and lack of expected government financial input, the program was operated under severe financial constraints.

d) A lack of a recognized Memorandum of Agreement with the Government of The Gambia until the last year of Phase I has severely hampered the effectiveness of management at GOIC. The original Agreement signed by the Minister of External Affairs of The Gambia prior to project funding was not recognized by the cabinet. This will be resolved in Phase II by entering into a formal agreement with the Government in advance of Phase II commencement.

e) Overemphasis on Mechanization leading to use of inappropriate technology for rural Gambia. The motorized cultivators purchased are neither appropriate nor adaptable to The Gambia situation and are too expensive to be easily afforded or operated by rural farmers. It has been painfully discovered that animal traction with improved implements as was originally proposed would be more feasible and appropriate.

The team found an infrastructure at the GOIC training center, that is well placed and contains quite valuable assets. The following is a list of total project assets including equipment and infrastructure:

	Category	Purchased/Value Price
A.	Land (183.27ha at D200/ha)	D 36,654.00
B.	Farm Equipment	147,907.14
C.	Poultry/Livestock Equipment	9,939.94
D.	General purpose Training & Office Equipment	122,223.41
E.	Construction/Material Handling Equipment	9,478.06
F.	Work shop Equipment	12,886.78
G.	Buildings/Facilities	196,986.78
	Total	D536,075.50
		335,047.18

This established infrastructure has a great potential and the capacity for aiding the Gambian government's efforts in rural development.

C. Recommendations

1. The GOIC program should be redesigned and reoriented to reflect the concerns and lessons learned from Phase I.

   a) The program should be re-oriented to focus exclusively on training and away from any profit-oriented production activity. This will include producing food for the residency program and animal feed as well as more extensive student plots. However, the idea of running a farm for a profit must be removed completely from the program design as past experience has shown it is not feasible (see report by agricultural economist for analysis and projections of production farm type of activity - Appendix I).

   b) The target group of beneficiaries should be broadened to respond to the needs of the rural people rather than to only school leavers. It should be noted that the definition of "youth" in the Gambia includes all those who are 50 years old or less. There is a great need for agricultural skills training among the rural youth which could be satisfied in part by GOIC. The target beneficiaries should be rural youth in general and school leavers or drop-outs within the broader category but not exclusively.

   c) The curriculum of GOIC must also be re-written to reflect the orientation towards the needs of rural people. This includes more practical work and very little classroom theory as literacy levels will be quite low in many cases. The emphasis on mechanization should be removed and replaced by appropriate technology and animal traction. In addition a broad spectrum of activities should be included: animal husbandry, crops, beekeeping, vegetable production and poultry to further diversify the skills of rural people and provide additional sources of income.

   d) A resettlement package should be included in the program design and budget including expanded followup visits to GOIC graduates to help increase the rate of resettlement.

e) A community outreach component should also be included in the Phase II program design to integrate GOIC into the rural framework. The farming communities surrounding the GOIC center should be assisted by the center whose aim is to train rural people in agricultural skills. Vegetable gardens, wells, clearing and plowing additional land are all needs expressed by local community leaders through the social benefits survey conducted by the feasibility study team. Labor, willingness and motivation are readily available for community projects.

f) The title of the project should be changed to reflect the emphasis on training and community outreach. The Gambia O.I.C. Rural Training and Demonstration Center would be an appropriate title.

2. The team recommends that the GOIC project be formally transferred from the Ministry of Agriculture to the Ministry of Education. As the sponsoring ministry, Education would be responsible for the institutionalization of GOIC. The Department of Youth and Sports would be charged with this direct responsibility. Technical assistance would come from the Ministry of Agriculture and other concerned Ministries.

3. The Phase II program design should be in line with the GOG's expressed needs to have a project which they can feasibly finance and manage on their own after 1985. Thus expensive technology should be avoided.

4. The primary purpose of Phase II should be a focus on institutionalizing the program within the government structures. It is important to develop functional linkages with government. A formal Memorandum of Agreement should be signed covering the Phase II period.

5. The Gambia OIC has a well established infrastructure and management capability. It is recommended that Phase I be extended for 3 months i.e. thru December 1981. In this regard, since funding is a critical issue, it would be more efficient to have a four year Phase II beginning in January 1982. This should allow adequate time for the Government of Gambia to plan its own phase-in of program control within the four year time period. Implementation and establishment of the Phase II program design can be accomplished within the four year period as considerable background has already been developed and can facilitate further expansion easily.

II. Fiscal and Economic Analysis Summary

A. The Government of The Gambia, through its representatives on the GOIC committee and in the various ministries visited (Health, Education, Agriculture and Economic Planning) has expressed its total support for the program, an activity which is vitally needed in The Gambia. The Government has expressed its willingness to fund the program at the end of the Phase II period (1985). However it was made clear that the program designers should bear in mind the capacity of The Gambia to absorb a program in the future which may be beyond their fiscal capability.

B. Although the Government has supported the program through its formal recognition in the Memorandum of Agreement it cannot immediately contribute substantial funds due to its desparate financial situation. The Gambia is an agricultural country and obtains nearly all its revenues from one crop - groundnuts and its by-products. Due to the drought which has existed in The Gambia (part of the Sahelian Zone)

for the past consecutive 4 years, the production of crops both for consumption and export has been severely reduced.

The 1980 season has been worse than the previous poor harvests. (45,000 tons of groundnuts as compared to 70,000 tons in 1979). In addition to this production crisis, the world price for groundnuts has been falling for many of the past few years although recently it has begun to rise. A report from the Central Bank of The Gambia (July-September '80) portrays this state of affairs:

> "The export duty collections on groundnuts in this quarter of 0.14 million (dalasis) were 95% less than the collections in the same period of 1979, mainly because the values of these exports were 30% lower."

Other evidence of the results of the poor harvest are also given:

> "Exports (including re-exports declined from D20.4 million in the 2nd quarter to as low as D9.4 million or by 54%. Compared with the corresponding quarter of 1979 also, exports were down, by 68% mainly due to the fact that only 65,000 metric tons of groundnuts were delivered to the GPMB (Gambia Produce Marketing Board) in the 79/80 season compared to almost 119,000 MT in 78/79. Unseasonal rainfall and low quality seedings used for planting (a legacy of last season's crop having a high incidence of black and mouldy nuts) are stated to account for such low deliveries. To add to these difficulties the prices for groundnut oil, and oil cake in the world market were substantially lower than in 78/79."*

* Central Bank of The Gambia
Bulletin - Quarterly 3
July - September, 1980

C. Although GOIC has had major problems such as any new concern experiencing growing pains, it is achieving its major objective which is to train young Gambians in agricultural techniques and resettle them into the farming occupation. This fact was established in the Joint Evaluation conducted in May 1980 by OICI, USAID and GOG representatives.

D. The problem areas in which the Government of The Gambia perceives that GOIC can intervene to various degrees are:

1. Rural Urban Drift - this has been a major problem for the Government in urban areas where it contributes to social problems and unemployment as well as in the rural areas where it is felt to be a cause of the lower crop production when young men leave their land. The extent of this problem is not known but it is a serious preoccupation expressed by many Government Ministries - i.e. Youth and Sports, Social Welfare, Community Development, Education and Agriculture.

2. Lack of Crop Production and Diversification - GOG is not only concerned with the low yields but the lack of certain produce which could be grown yet is currently being imported. Vegetables, in particular, which are imported in vast quantities from the bordering country, Senegal, to service the tourist hotels in Banjul, could be grown in Gambia. Some large irrigated vegetable gardens do exist in Banjul but most vegetable gardening is on a small scale for home or local market consumption. Much of this is, of course, due to the lack of adequate infrastructure and/or the means to create it.

Imports of basic consumables are considerable including: meat, dairy products, cereals, fruits and vegetables, coffee, tea and fish. For a country based on agriculture this is indeed alarming.

III. Social Analysis Summary

During the feasibility study, the team visited some eight villages and spoke to the Alkali (village head) as well as some compound heads of GOIC graduates. A copy of the questionnaire is attached for information (Appendix II). The 9 villages represent 33% of the 27 villages which currently have graduates from GOIC. The 9 villages also account for 96 of the 122 graduates or about 79% of all graduates, onsite as well as offsite. It was difficult to determine both the population of all the villages and the population of the compounds because the alkali or compound heads were sometimes unable to provide a specific head count. Of the 9 villages surveyed 6 alkalis were able to estimate the number of compounds in the village: 376 were counted in the 6 villages. Only 2 compound heads would estimate the population of their compound but from other studies we can estimate the average population to be from 14 to 16 persons. The 6 villages or 376 compounds represent 5,640 persons at 15 per compound and this is only a part of the total population in the 27 villages impacted by the GOIC program graduates.

Most of the Alkalis and compound heads interviewed said they benefited from the GOIC center. Only one Alkali indicated he did not know too much about the center. Some were very specific mentioning new crops they had grown because they had seen the crops at the GOIC center. Another said: "It gives us agricultural skills and technical advice."

Most who were interviewed said they would not like the center to be moved away. When asked what they thought was happening at GOIC the responses were also positive: Some felt it was training our children", others "training them (children) to be self employed" or increase his (child) means of earning".

The survey indicates that, although most village heads in villages with graduates are well informed about GOIC and see benefits, there are a few who do not know what is happening at GOIC i.e. (Packing Village). It is noted that the trainee from this village has only been recently enrolled in the program. Perhaps this indicates some effort should be made during the regular follow-up visits to speak to the village head about GOIC and the progress of the GOIC graduates in the village.

The major concern expressed by Alkalis and compound heads was to see the GOIC program offer resettlement assistance to the graduates. This is also a concern of GOIC staff and OIC International. It is widely felt, at all levels, that the future success of GOIC will hinge upon the provision of an adequate resettlement package. The ability of the center to recruit future trainees will be severely hampered if the current graduates cannot be adequately resettled.

There is also a concern voiced by the villagers about rural urban drift. Chamen, a village of 111 has lost 10 residents who left to find jobs in the urban area, nearly 10% of its population. None of these has found work either. The desire of the alkali was that the GOIC center could somehow provide their young farmers with the incentives and skills to remain in the village. It was clear from the survey that many believed GOIC was trying to do that. The Alkali of Jumansar said: "We want GOIC project to be here so that our people who are staying at city would come back home."

Another benefit that villages which are near the project area mentioned is the economic benefits they receive from providing services to the center such as harvesting, weeding and shelling groundnut seeds. During the first growing season some D23,000

($14,375) was spent on part-time farm labour and D8,000 ($5,000) in the second season. In addition to this, permanent farm labourers and watchmen are hired from nearby villages such as Chamen. The villages concerned such as Chamen, Jumansar and Tankanto mentioned that this income was very important to them.

Although the resettlement package is a concern, GOIC has been able to provide some assistance to its graduates as well as to the surrounding villages. The tractor was mobilized to plow rice fields for Chamen as well as the land of the graduates. Seeds and fertilizer were also provided to graduates. From March - December 1980 the value of assistance to 16 graduates including plowing of 81.5 acres was D3,743. The graduates earned D5,553 in cash from their efforts.

These benefits can be considerably more if funds can be budgetted for a community outreach component as well as an adequate re-settlement package for GOIC graduates.

The target group of beneficiaries as defined for Phase I focuses on the school leaver. This group does not make up the majority of youth (as defined by GOG as 50 years and less) in the rural areas who could benefit from GOIC. There is some evidence that the school leaver is actually less inclined towards agriculture than rural youth who might not have the benefit of substantial education.

IV. The Gambia O.I.C. Proposed Program Design for Phase II

This proposed program design will not include specific details on how the program will function once it is initiated, (i.e. an Implementation Plan). Instead it will focus upon the broad outline of the team's perception of the critical links in the total design framework. Whenever necessary, explanations, charts, tables and diagrams will be included for clarification.

A. Name of Project
The project should be called The Gambia O.I.C. Rural Training and Demonstration Center.

B. Goal
The Goal of GOIC should be:
To contribute towards the improvement in the economic conditions of rural people in The Gambia.

C. Purpose
The purpose of GOIC should be:
To institutionalize The Gambia O.I.C. Rural Training and Demonstration Center into the Government structure as a viable approach to Rural Development.

D. Objectives
The objectives of GOIC should be:
1. To train rural people in basic agricultural techniques and practices.
2. To demonstrate practical, effective and useful methods of farming.
3. To redesign the training curriculum to better reflect the needs of the target population.
4. To contribute towards improved living conditions in rural areas by providing gainful employment and making agriculture more meaningful and profitable.
5. To focus training efforts on rural youth (14-50 years by Gambian official definition) who would stimulate change for more effective farming techniques in their communities.

E. GOIC Management Committee

The local Management Committee (Board of Directors) is the conduit through which OIC International will plan, develop, fund and implement the Phase II Program. The Management Committee will in turn work very closely with GOG in the further implementation and institutionalization of GOIC. The Committee is the mechanism which assures that a "people to people" technique is employed in OICI technical assistance projects. The Management Committee (MC) provides a vehicle through which diverse leadership from the private

and public sectors of the country becomes actively involved in the implementation of the development plans of that country. The GOIC Management Committee is an essential part of the program which strives to conform efficiency of operation with citizen control. This mechanism is essential for continuity of the program, participation and support by the community and assurance of high quality service. The Committee is responsible for policy making and guidance of the over all program operations. In its policy making role, the local Management Committee will be responsible for identifying the needs of the community, appraising overall program plans and priorities, determining major personnel, fiscal and program policies; approving proposals for finance assistance, assuring compliance with conditons of financial assistance, developing and implementing a plan with GOG for the institutionalization of the project.

In general the responsibilities of the Management Committee of the GOIC program are as follows:

1. To determine the objectives of the organization;
2. To determine major policies and operations;
3. To determine the organizational structure;
4. To select the major executives of the organization;
5. To appraise the performance of executives to whom responsibilities have been delegated;
6. And to authorize and approve disbursement of program funds.

F. GOIC Agricultural Advisory Committee

The Agricultural Advisory Committee (AAC) is an important feature of the overall GOIC program. It is an advisory arm to the MC consisting of key representatives from business, industry, government, parastatals, cooperatives,

education, community and labor unions, who are appointed by the Government. This body will serve to review and advise GOIC Management Committee on such matters as appropriateness and completeness of training course content, techniques, skill levels, curriculum design, employment opportunities, etc. They will also give advice on new skills needed and possible areas of existing and future job openings. The AAC will seek to provide in-kind contributions and community support to the program. It will assist the Management Committee in getting the total local community involved in the project.

G. GOIC Technical Cooperation Team (TCT)

OICI will assign three TCT staff persons to work with the project to ensure the effective implementation of GOIC program design.

1. Program Advisor/Animal Specialist

The first TCT member to be posted will be a Program Advisor/Animal Specialist (PA/AS) who will possess combined background and experience in both agricultural program management and animal husbandry/traction. Among the key duties to be performed by this position will be:

a) To provide guidance, technical assistance and management support to GOIC Management Committee, Program Director and Staff.

b) To provide training and direction in OICI philosophy, policies and procedures.

c) To aid in developing work objectives, job descriptions, performance standards, planning tools, evaluation tools, policies and procedures necessary to the needs of GOIC program staff.

d) To be official representative of OICI in all matters pertaining to GOIC program.

e) To maintain the development and implementation of an on-going evaluation system designed to measure program performance and results.

f) To aid in developing and maintaining the animal units on the demonstration farm.

g) To coordinate the design and implementation of pre-service and monthly in-service training activities targeted to the staff development needs of GOIC program.

2. Vocational Agriculture Specialist (Consultant)

The second assigned TCT staff will be a vocational agriculture specialist, who will serve periodically on a consultant basis. This person will have a working knowledge of all areas of agriculture - from mechanics to management. This person will work directly with the training and demonstration components. Among the key functions to be performed by this Consultant will be:

a) To provide guidance, technical assistance and management support to the center's teaching staff.

b) To aid in curriculum development and the development of teaching aids.

c) To develop and maintain instructional guidelines, procedures and policies which affect the GOIC training program.

d) To develop practical and demonstrative plots for training.

e) To develop an effective land use plan for the Center.

f) Work with counterparts to develop training objectives, subject content, teaching methods and instructional materials to assure relevancy and continuity between feeder courses and the agricultural training.

g) To develop relationships with the local community and relevant government departments.

3. Finance Specialist (Part-time)

The third TCT staff assigned to GOIC is the Finance Specialist. This specialist will serve only three months per year with GOIC while sharing his duties with other OICI programs. Among the key functions to be performed by this specialist will be:

a) To provide training and direction in establishing and maintaining the required OICI fiscal/administrative guidelines, procedures and system.

b) To aid in preparing fiscal MIS Reports.

c) To aid in developing a reliable fiscal record keeping system.

d) To develop standard operating procedures in respect to requisitions, purchasing, buying and selling.

e) To develop an accountable inventory system.

f) To prepare the required financial statements and reports necessary for management to make intelligent and timely decisions.

The major role and function of the TCT members assigned to GOIC are the sharing of knowledge and skills in their respective areas of expertise for

the purpose of transferring OICI concepts, philosophy and methodology to the Gambian staff counterparts.

H. Local Staff

The primary thrust of GOIC program efforts will be to successfully administer a rural non-formal training and community service program in the area of agricultural development. To accomplish this task the program will need approximately twenty-four Gambians on the local staff. These positions are shown in Exhibit I.

These positions represent the minimum personnel needed to do an effective job. The Management Committee should re-evaluate all present job descriptions. Some job descriptions, titles and duties should be changed or combined to increase efficiency. Maximum utilization of the present staff potential is not realized. The Management Committee should also evaluate and decide if some tasks can be performed by existing government agencies. A case in point involves the Community Outreach Program and GOIC recruitment/follow-up activities. The Management Committee should consider if any of these activities can be done by the existing departments such as the Extension Service or the Mixed Farming Centers? The main objective of course would be to initiate key linkages that will facilitate the institutionalization of GOIC.

The local staff is directed by the Program Director, who is the top local executive. The Director is directly responsible to the Management Committee. He is responsible for administering policies and procedures made by the Committee. OICI will provide a counterpart, the Program Advisor to work very closely with the Director.

EXHIBIT I

Local Staff Positions for GOIC

Phase II Program

Personnel	Number of Positions	Grade*
Program Director	1	17/1
Administrative Services Officer (Accountant)	1	15/1
Bookkeeper/Storeclerk	1	8/1
Clerk Typists	2	7/1
Watchman	2	4/1
Janitor/Messenger	1	3/1
Drivers/Operators	2	7/1
Training Manager	1	16/1
Technical Instructors	4	9-11
Student Services Coordinator	1	12/1
Warden/Matron	1	10/1
Laborers	4	4/1
Cooks	2	4/1
Mechanics	1	12/1
Total	24	

*According to Gambia Government Civil Service Salary Scale

The Director's key duties would parallel those of the Program Advisor except the Director is not an OICI representative. Instead the Director would represent the Management Committee.

The Director should be a person who works well with local staff, TCT staff, Management Committee and the local community. He should also be able to establish good relations with the various government components, to aid GOIC to establish effective and meaningful linkages and play a key role in the institutionalization of the center.

The Director and his staff must be committed, knowledgeable of the needs of rural people, prepared to sacrifice in terms of time and money, and possess a thorough knowledge of GOG rural development strategy. Instructors and other technical personnel should have adequate training and practical experience in their area of responsibility.

I. GOIC Training Design

The design of the training program will be to provide more emphasis on methods that are adaptable, effective, reproducible, cost effective and practical. This will be an important element of the training design.

The GOIC training program will provide basically two types of training; however, the expected linkages with other governmental departments may add additional ad hoc courses for varying periods of time. One course of training will be for the on-campus (Boarding) trainees. The other course will be the community out

reach program (Day) trainees. Each program will have its own curriculum and is expected to cater to a specific target population. Each is discussed in the following paragraphs.

1. On-Site Program (Boarding)

a) Curriculum

The on-site curriculum will be designed to cover a period of 15 months. Considering the broader base of agricultural training; additional time is needed to meet the program objectives.

Feeder - The feeder curriculum should be redesigned to meet the education levels and needs of the target population. More emphasis should be placed on numeracy since the literacy levels of this group will be low. Very little emphasis is to be given to communicative skills, computational skills, consumer education and environmental health.

The feeder curriculum should be directed toward preparing the trainee psychologically to return to the land. Thus it should be geared toward motivating the trainee to give him a sense of self-determination and confidence in the area of farming. The feeder course should also prepare the trainee for a positive attitude toward remaining in the rural area and aiding in the development of the country.

The feeder course should cover a period no longer than one month. Afterwards, the trainee will go directly into the agricultural training course.

Agriculture - The agricultural curriculum will be designed to cover a period of fourteen (14) months. The training curriculum is to be designed to be more practical and less theoretical It is expected that all trainees will spend 90% of their training in the field actually performing the required production practices. Instructors will be required to develop methods of teaching to meet this type of training.

The curriculum will be broad based using the demonstration farm as its laboratory. Trainees will be taught and participate in a variety of production practices such as: bee keeping, cereal crops, cassava, vegetable production, forestry, poultry, sheep, groundnuts, basic farm structures, intermediate technology, rice, cooperatives and marketing.

It is noted that trainees will be taught using the non-formal approach to training. The Education Department will be asked to provide direction, assistance and aid in up-grading GOIC instructional staff in this approach to training.

b) Trainee Demonstration Plots

A major component of the training design will be the trainee demonstration plots. It is

envisioned that trainees will work in groups. There will be 12 groups of trainees. Each group will contain five trainees. Demonstration plots will be designed by each group of trainees in the following areas:

Crops - A total of 8.0 ha will be allotted to each group. Crops grown will include groundnuts, maize, millet, and sorghum.

Poultry - A total of 250 chicks will be given to each group; however, it is expected all trainees will share in one project of 3000 birds.

Beekeeping - Two bee hives per group of trainees.

Gardening - Each group will have access to .2ha of irrigated land.

Cassava - Each group will be given .2ha.

Each group will work cooperatively and any profits (revenue minus operating costs) will be utilized to defray trainee support costs. support costs.

The idea behind these demonstration plots is to train by actually performing good, practical, "hands-on" approaches to farming.

Although the trainees will not have plots in rice cultivation and sheep and goat production, their training in these areas will be

done on the center demonstration farm. Revenue realized from the demonstration crops will be utilized to defray costs of resettlement. A cost analysis of typical trainee plots is seen in Exhibits II-VII.

Exhibits II-VII show the analysis of the crop production for the trainee's plots. Included in these analyses are:

- Annual acreage under cultivation for each crop (Exhibit II).
- Projected annual acreage for the 60 trainees (Exhibit III).
- Four-year crop rotation pattern (Exhibit IV).
- Projected expenses (Exhibit V).
- Projected revenue (Exhibit VI).
- Allocation of projected revenue (Exhibit VII).

Exhibits VIII-X show the analyses of the trainees' poultry project which is projected to produce 3000 broilers annually. The following data is included:

- Projected expenses (Exhibit VIII).
- Projected receipts (Exhibit IX).
- Summary of projected receipts and expenses (Exhibit X).

Exhibit XI shows a summary of the trainees' beekeeping project expenses, receipts and revenue. It is noted that beekeeping has great potential as a low investment, high profit-making enterprise. However, additional research into market potential must be done.

Exhibit XII shows the projected expenses and revenue for a group of five trainees growing cassava on a .2ha plot. During the four year period of the project, only two harvests of cassava can be expected due to its long growing cycle. It is suggested that only .1ha cassava per group of trainees be planted so that each year all trainees will be able to participate in the cassava project. The total acreage utilized would remain the same for the four-year period (4.8ha).

Revenue from the cassava project is estimated at D15,732 for the four-year period.

The vegetable training scheme has yet to be finalized. It is recommended that each group of five trainees have .1ha of irrigated vegetables for a total of 2.4ha per year. A minimum amount of revenue (i.e. D200) is expected to be generated from each .2ha plot for a total of D2400 annually.

EXHIBIT II

THE GAMBIA OIC CROP PRODUCTION TRAINING PROJECT

Accumulated Areas Under Cultivation For Each Group
(In Hectares, Per Trainee)

Crop	1982	1983	1984	1985	Accumulated Total
Groundnuts	0.8	0.8	0.8	0.8	3.2
Maize	0.4	0.4	-	0.4	1.2
Millet	0.4	-	0.4	0.4	1.2
Sorghum	-	0.4	0.4	-	0.8
Total	1.6	1.6	1.6	1.6	6.4

EXHIBIT III

THE GAMBIA OIC
Crop Production Training Project

Projected Acreage (HA)
(Per Trainee Per Crop For 60 Trainees Per Year)

Crop	1982	1983	1984	1985	Total
Groundnuts	48	48	48	48	192
Maize	24	24	-	24	72
Millet	24	-	24	24	72
Sorghum	-	24	24	-	48
Totals	96	96	96	96	384

EXHIBIT IV

THE GAMBIA OIC
Crop Production Training Project

Pattern of Crop Rotation for a Four Year Period
(Per Trainee)

Year	Area-Ha(A)*	Crop	Area-Ha(A)*	Crop	Total area cumulative Ha
1982	0.8 (2)	Groundnuts	0.8 (2)	*Millet/Maize	1.6 (4)
1983	0.8 (2)	*Maize/Sorghum	0.8 (2)	Groundnuts	1.6 (4)
1984	0.8 (2)	Groundnuts	0.8 (2)	*Sorghum/Millet	1.6 (4)
1985	0.8 (2)	Groundnuts	0.8 (2)	*Maize/Millet	1.6 (4)

* acres

** Cereals will be planted half and half (0.4 Ha of one, and 0.4 Ha of the other for each year.)

EXHIBIT V

THE GAMBIA OIC
Crop Production Training Project

Projected Expenses For A Four-Year Period*
(Per Trainee)

	Groundnuts	Maize	Sorghum	Millet	Total
Seeds					
Area Cultivated (Ha)	3.2	1.2	0.8	1.2	6.4
Seed rate (kg/Ha)	150	35	9	9	203
Price (Dalasis/Kg)	0.53	0.55	0.45	0.50	2.03
Total 4-Year Expense	254	23	3.24	6	286.24
Annual Expense Average	63.60	6	.81	1.35	71.56
Fertilizers					
Area cultivated (Ha)	3.2	1.2	0.8	1.2	6.4
Fertilizer Rate	124	247	247	247	865
Price (Dalasis/Kg)	0.11	0.14	0.14	0.14	0.53
Total 4-Year Expense	D44	D42	D28	D42	D156
Average Annual Expense	D11	D10	D 7	D10	D 39
Seeds & Fertilizers					
Average Annual Expenses Trainee	D75 $47	D16 $10	D 8 $ 5	D12 $ 8	D111 $ 69
Average for 60 Trainees	D4500	D960	D480	D720	D6660
Exchange rate D1.60= $1.00	$2813	$600	$300	$450	$4163

* Labor and implements not included

EXHIBIT V.

THE GAMBIA OIC
Crop Production Training Project

Projected Revenue For A Four-Year Period
(Per Trainee)

	Groundnuts	Maize	Sorghum	Millet	Total
Area Cultivated (Ha)	3.2	1.2	.8	1.2	6.4
Harvest Yield (Kg/Ha)	950	1350	1000	1100	
Gross Production (Kg)	3040	1620	800	1320	
Losses (15%) (Kg)	456	243	120	198	
Net Produce (Kg)	2584	1377	680	1122	
Price (Dalasis/Kg)	0.46	0.49	0.38	0.45	
4-Year Revenue	D1189 $ 743	675 $422	258 $162	505 $316	D2627 $1642
Annual Revenue (Average)	D 297	169	86	126	D 657
Exchange rate D1.60=$1.00	$ 185	$106	$ 54	$ 79	$ 410

EXHIBIT VII

THE GAMBIA OIC
Crop Production Training Project

Allocation of Projected Revenue

	Groundnuts	Maize	Sorghum	Millet	Total
4-Year Revenue (Per Trainee)	D 1109 $ 743	675 422	258 162	505 316	D 2627 1642
Annual Revenue (Average) (Per Trainee)	D 297 $ 185	169 106	86 54	126 79	657 410
Average Annual Revenue Accrued to Program* (Per Trainee)	D 222 $ 138	153 96	80 49	114 71	569 356
Total Average Annual Revenue Accrued to Program (60 Trainees	D13320 $ 8325	9180 5738	3600 2250	6840 4275	D32940* $20588

Exchange Rate
D1.60=$1.00

* This net revenue does not include labor and implements which the Center is expected to provide; i.e. labor from trainees and animal traction from the Center. One would also assume that the trainees would pay D37/Ha for land preparation per year or a total at D14,208 during 4-year period. This would yield a net profit of D18,732.

EXHIBIT VIII

THE GAMBIA OIC
Poultry Production Training Project

Projected Expenses (Dalasis)

Expenses	1982	1983	1984	1985	Four-Year Total
Broilers, 3 batches 1000/batch @D2/ broiler	D 6000	D 6300	D 6615	D 6946	D25861
Feed Cost (5.5kg/ bird x DO.51/kg x 3000*	8280	9108	10018	11018	38424
Drugs & Vet. service (DO.44/bird)	1320	1386	1455	1528	5689
Litter (bedding)	200	210	221	232	863
Fuel (DO.66/bird)	2000	2100	2205	2315	8620
Marketing (DO.20/bird)	600	630	662	695	2587
Facilities Maintenance (DO.08/bird)	250	263	276	289	1078
Building & Equipment (DO.33/bird)	4000	-	-	-	4000
Total	D22650	D19997	D21452	D23023	D87122
Exchange rate D1.60=$1.00	$14156	$12498	$13408	$14389	$54451

* Although feed cost is based on 3000 broilers for 12 weeks, considering a 20% death loss (600 chicks), an average feeding throughout this period would be 2600. 90% of the chicks will die within the first two weeks, a feed savings of D5123 during this period.

EXHIBIT IX

THE GAMBIA OIC
Poultry Production Training Project

Projected Receipts

Annual Output Marketed	1982	1983	1984	1985	Four-Year Total
3 batches of broilers 800/batch avg. 1.5kg/bird @D9/broiler x 3 batches	D21600*	D21600	D21600	D21600	D86400
Total	$13500	$13500	$13500	$13500	$54000

Exchange rate
D1.60=$1.00

* It is noted that price per bird is conservatively estimated.

EXHIBIT X

THE GAMBIA OIC
Poultry Production Training Project

Summary of Projected Receipts and Expenses
for 3000 Broilers

	1982	1983	1984	1985	Four-Year Total
Total Expenses (US$)	D22650 $14156	D19997 $12498	D21452 $13405	D23023 $14389	D87122 $54451
Total Receipts (US$)	D21600 $13500	D21600 $13500	D21600 $13500	D21600 $13500	D86400 $54000
Net Returns (Losses)	(D 1050)	D1603	D 148	(D1423	(D 722)*
Exchange rate D1.60-$1.00 (US$)	($ 656)	$1002	$ 93	($ 889)	($ 451)

* If one adds the D5123 savings on feed cost from Table 1B, a net gain on returns would be D4401.

EXHIBIT XI

THE GAMBIA OIC
Beekeeping Training Project

A summary of Annual Expenses, Receipts and Revenue

Expenses

12 beehives x D140/hive	=	D1680
Packaging/Marketing	=	500
Miscellaneous	=	500
Total		D2680

Receipts

12 hives x D600/hive = D7200

Revenue

Receipts - Expenses
D7200 - D2680 = D4520

EXHIBIT XII

THE GAMBIA OIC
Cassava Training Project

Projected Expenses and Receipts Per .2ha Per Group of Five Trainees

Expenses	Cost	
A. Recurring costs		
Land Clearance	D 10.00	
Land Preparation	10.00	
Cuttings	39.00	
First Weeding	29.00	
Second Weeding	13.00	
Fertilizer, 40 Kg	6.00	
Subtotal		D107.00
B. Fixed cost (initial investment) for fencing		
Posts	D 20.00	
Digging Holes	20.00	
Wire, barb, 2.4 rolls	144.00	
Nails, 2 Kg	9.00	
Transportation	10.00	
Gate	18.00	
Miscellaneous	20.00	
Subtotal		D241.00
Grand Total Expenses		D348.00
Receipts*		D700.00

* It is noted that cassava takes approximately 18 months to mature. Therefore, one could expect only two harvests during the four yea: period. Total expenses during this period would be D789 while receipts would be D2100/.2ha. Revenue would be D1311 per 5 train or D15,732 per 60 trainees.

c) Animal Traction

Although the Center is equipped with large scale mechanized equipment, it shall not be utilized as a part of the training curriculum. The purpose and use of the mechanized equipment at the Center will be thoroughly explained to the trainees during their orientation.

The trainees will use animal traction as their primary implements for cultivation. Each group of trainees will be assigned a set of animal traction implements including animals. This animal traction set will be used in conjunction with the demonstration plots. Trainees will be taught how to manage, care and provide good rations and health care for these animals.

d) On-Job Training

The possibility of an on job training for short periods of time should be explored. This could be done at the mixed Farming Center, research stations, or with private farmers. The time spent should be limited to a maximum of one month.

e) Specialization

The curriculum is intentionally broad based to provide a variety of options for the potential farmer. Trainees should have the option of selecting one or two areas of

specialization during the last three months of training to provide them with more knowledge and experience in their chosen areas.

f) Resettlement

The primary objective of the agricultural training program is to resettle the trainees into farming in their home villages. Previous experiences indicated that without an initial financial assistance package, resettlement is a difficult undertaking.

The following resettlement scheme is being proposed. A financial package involving a revolving loan fund is to be established. Each trainee needs will be critically evaluated and assistance given based upon the results of this evaluation. The GOIC staff and Management Committee will make these evaluations periodically. Whenever feasible, groups of trainees will be encouraged to work together cooperatively in sharing implements. This would in turn decrease the cost of the assistance package.

An acceptable proposal for administering and repayment of funds must be devised by GOIC and the Government. Existing Government institutions with experience in this area should take the major responsibility for this matter.

The Team suggested that the Commercial and Development Bank administer this Fund until such time as the Agricultural Development Bank is established. It is envisioned that a guaranteed loan fund will be initiated similar to the fund established by IBAS. The funds budgeted in the project for this purpose will be given to the Bank to hold in escrow. Follow-up visits will be required in order to complete discussions on the details of the proposed loan scheme.

g) Length of Training

A training period of at least 15 months (1 month Feeder and 14 months Agriculture) is highly recommended to adequately prepare GOIC trainees to be resettled. This would give them a broader base of training.

h) Recruitment and Intake

A new GOIC recruitment strategy should be developed in close cooperation with the Departments of Education and Youth and Sports. It should encompass a detailed, written plan of how the target population is going to be recruited; whether there will be a preselection test or pre-selection interview?

The recruitment strategy should attempt to motivate the potential trainee at this initial stage. Great care should be taken to make the potential trainee understand and be convinced that GOIC is deeply concerned

about his future development. The whole person concept should be fully incorporated.

The potential trainee should be thoroughly familiar with GOIC concepts, its goals, its objectives, its philosophy, what is expected of the trainee, condition of acceptance and length of training. The trainee should know what services in addition to training that the Center will provide such as housing, food, resettlement, and stipends. The practical aspects of training should be emphasized and the trainee made aware of what he is required to do.

Once this recruitment strategy has been accepted, then it should be the policy followed in accepting trainees at the Center. Trainees should be recruited from throughout the Gambia. Great care should be taken to ensure that trainees recruited have a sincere and honest desire to return to the land.

Since recruitment of trainees from the appropriate target group is very important, more detailed discussions will be held with the Department of Youth and Sports during the proposed follow-up visit. A logical and viable recruitment strategy will be included in the draft proposal.

i) Intake/Orientation

Intake is another important component of recruitment. It begins where recruitment and selection stop. During the intake

period, which should be a minimum of two weeks, the purpose, objectives, methodologies, and philosophies of GOIC and its Center will be discussed in detail. Here, post-training, plans and counseling support will begin. This will continue throughout the trainee's stay at the Center.

During this period the trainee's schedule will include discussions on rural and agricultural development in The Gambia, its significance, and the efforts that each trainee can contribute. The staff will play a major role in stimulating and motivating each trainee in the area of maturity and positive attitude towards farming as well as civic and National responsibilities.

After this phase, the trainees should be screened to eliminate those whose objectives are not the same as those of the Center.

It is of utmost importance that the Departments of Education and Youth have significant inputs into this area. These departments could have representatives to aid in both the recruitment and intake/orientation phases. This will greatly strengthen the program.

j) Trainee Output

It is anticipated that 240 trainees will complete the prescribed training course at the Center during the life of the Project. This is an average of 60 trainees graduating

per year. The proposed schedule of trainee output is shown in Exhibit XIII. It is noted that the 33% predicted dropout rate has been the rate experienced by the program in the past. However, the new recruitment strategy should help to greatly reduce the dropout rate.

k) Stipends

OICI believes that all constituents, including the trainees, should contribute towards the community development of the project. Thus sacrifices are required. Its policy is to provide free training to each trainee. It is not OICI's policy to provide stipends for its trainees. It is recommended that other local means of providing stipends be investigated. The various area councils should be requested to provide stipends for its constituents at the Center. This could then be counted as part of the local inputs. The local staff and Management Committee should explore other means and sources of providing stipends other than the project grant. Local fund raising activities would be an excellent means of raising funds for stipends. It would be another way of securing community involvement.

EXHIBIT XIII

THE GAMBIA OIC
Proposed Trainee Output 1982-86

	January 1982-March 1983		January 1983-March 1984	
	On-site	Off-site	On-site	Off-site
Enrolled	90	60[1]	90	60[2]
Graduates	60	60	60	60
Job Places	24	-	24	-
Resettle	36	60	36	60

	January 1984-March 1985		January 1985-March 1986	
	On-site	Off-site	On-site	Off-site
Enrolled	90	60[3]	90	60[4]
Graduates	60	60	60	60
Job Places	24	-	24	-
Resettle	36	60	36	60

TOTAL
January 1982 - March 1986

	On-site	Off-site
Enrolled	360	240
Graduates	240	240
Job Placed	96	-
Resettle	144	240

1. a. Chamen
   b. Wallan

2. a. Ballanghar
   b. Yallah Bah

3. a. Ballanghar*
   Jalato

*Two programs will be conducted in this twin village.

1) Target Beneficiaries

The ultimate goal of GOIC is to train rural farmers who will eventually resettle in the rural areas, and equip them with the modern methods and techniques acquired from the course, take up farming as a career. The graduates will be expected to spread new farming approaches which could yield better results in their community.

From the foregoing, it becomes increasingly important to make sure that the appropriate persons are trained. The category of persons aimed at in Phase I was critically assessed, considering among other things, the results of the first two groups of trainees. The feasibility team has observed that the young school leavers may not necessarily be willing to become potential farmers. Of course this view was contested by some people. Some of the local leaders consulted argued that if the school leavers are well trained to handle highly sophiscated farming equipment and provided with the means to acquire these implements, they will certainly make the grade as they are generally more innovative and responsive to change. However, it was realized that this kind of equipment could be too expensive for the current level of agricultural productivity in The Gambia.

The system of education inherited from the colonial government is such that the young

person who has a taste of it tends to look very low upon the local values and practices. He ends up developing aspirations which are sometimes rather unrealistic. Education to both parent and child in the Gambia today, is seen as a passport to obtaining white collar jobs or what is sometimes referred to as office-oriented jobs. As a result, the young person who has gone through this system can only go back to farming as a last resort after being failed by the formal system. This is always to his big disappointment. In any case, the formal school system hardly prepares him for farming or even orientates him towards farming as a career.

Based on these sad realities, the team found it necessary to recommend that more flexibility be exercised in selecting a target group for the agricultural training. This does not mean that young school leavers must not be trained anymore. In fact the Department of Youth is convinced that if it is allowed to recruit and orientate trainees, there would be no problems. What is required at this stage is to make provision for training both school leavers and adult illiterate farmers. The Department of Youth is very anxious to cooperate with GOIC in getting into the family backgrounds of the prospective trainees, identifying potential farmers and giving them intensive pre-training orientation. Furthermore, the Department of Youth anticipates

closer cooperation with GOIC in the near future, when the proposed National Youth Service Scheme is launched. It was with this in mind, that the Department proposed the inclusion of the following in its list of objectives:

> "To focus training efforts on rural youths who would resettle in their communities after training and motivate changes for better and more productive farming approaches." (Youth in The Gambia sense, 14-50 years. ref. 1st National Youth Congress).

In many cases, the management must exercise flexibility in selecting on-site trainees so that both adult illiterate farmers and potential school leavers could be catered for.

In the case of the village outreach program, GOIC would likely be dealing with adult farmers. As long as there are other extension agencies engaged in similar exercises, a very close link needs to be developed to facilitate coordination.

m) Counseling

Counseling services form an important component of OICI philosophy, and methodology. The full potential of this component was not utilized in Phase I. It is suggested that this component become an integral part of the Phase II Program. The target population should have the benefit of counseling from recruitment thru follow-up.

OICI believes that individuals should be given the opportunity to help themselves. One of the goals of the GOIC counseling unit is to help the trainee foster and nurture a sense of self-pride, giving him/her confidence in himself/herself and enabling him/her to participate with full dignity in the total society as productive farmers. Counseling will also help the trainee to adapt to GOIC training methodologies and to meet the challenge of the proposed curricula. It will seek to develop the whole person concept.

Emphasis in counseling will be on aiding the trainee to adjust as an individual to all aspects of life, including resettling in his native village. It is anticipated that this component will make it easier for the trainee to successfully resettle and give the trainee a sense of pride in becoming a self-employed farmer.

n) Follow-up

The final phase of the on-site training program will be the follow-up of trainees resettled or placed on jobs in the community. The follow-up will enable continuous contact with the trainees, as well as the community leaders on a scheduled basis. It will provide valuable back-up information to be utilized as the basis for refining the GOIC training program. It will also be able to assess trainee needs and problems and schedule visits of the technical instructors for specific concerns.

The GOIC follow-up component will feature a dual approach. First, an alumni association of the graduates will be established. It is hoped that this body will provide incentives for future and current trainees in each community by acting as a motivating force. It will provide social contacts for graduates of GOIC as well as a formal support group for continued information sharing. Second, a cooperative/extension specialist will work with the follow-up program. He will also make periodic visits to the trainee farms and villages.

!. Community Outreach Program (Off-Site Trainees)

The second important component of the training design is GOIC Outreach Program. It is designed to take instructional programs and classes into nearby villages, in order to provide relevant information and training to rural populations on topics related to practical agricultural and rural development.

The program will be involved in the overall development of each selected village. A total of two villages per year will be selected as GOIC target villages. A survey of the villages' needs will be made and village development projects will be initiated and completed with the villages supplying significant inputs from planning to implementation. GOIC will also serve as a liaison for the villages to take advantage of other rural development programs. GOIC will actively seek participation of other agencies to aid in the total development of these communities. Such projects as

vegetable gardens, beekeeping, wells, poultry production, land clearing, well revitalization and special projects at the Center will be done.

A total of 60 trainees will be selected from two villages to receive GOIC outreach training each year. The community outreach program will primarily benefit the women in the villages, as more than 60% of the village population is women. The crop production training projects proposed for the villages will focus on the crops for which women have traditionally held primary responsibility. Of the proposed 240 trainees to be trained off-site in this program, at least 144 will be women. This should have a significant impact on development of women's agricultural skills.

a) Curriculum

The curriculum will be designed for trainees who cannot read or write, who basically speak only one of the local languages, i.e. Mandinka, Wollof.

Feeder - The feeder curriculum will deal with improving the trainees' skills in numeracy, self motivation, pride in farming and basic hygiene. Assistance from the Health Department will be sought in teaching the hygiene course. The self-help philosophy of GOIC will also be incorporated into the course.

The feeder course will be very basic and the length will be a maximum of two weeks. At least one week of this period will be spent at the Center to properly acquaint

the trainees with its operations and objectives. It is important to instill in these trainees that the Center is an integral part of their communities whose purpose is to serve their needs.

Agricultural Training - This curriculum will involve similar courses as in the on-site program; however, the major difference will be the method in which it is taught. Since, each village's needs will be different, the courses and subjects taught will be different. Curricula will be designed in beekeeping, cereal production, poultry keeping, gardening, groundnut production, rice cultivation, cassava production, sheep/goat production, village development and marketing.

Each selected trainee's own farm will be used for teaching and demonstration. It is hoped that each outreach program project will be directly related at least to one of the above practices. It is expected that after training, the knowledge gained will be transferred to others thus creating a domino effect. It is hoped that at least one person from the village will be enrolled in the on-site program.

Needless to say other Government departments such as Youth and Sports, Education, Agriculture and Community Development will be requested to call upon their experiences in this area to aid GOIC in developing a non-

formal curriculum for the target population. The curriculum will be practical, easy to adopt and duplicate.

Occasionally some villages may make utilization of GOIC land or other facilities such as irrigation as an extension of the village program. This will be done at no cost to the trainee.

b) Target Population

The target population will be rural villages in close proximity to the Center. There will be a total of eight (8) village programs initiated during the life of the project. In addition, 240 trainees will be trained from these villages (Exhibit XIII). These villages are chosen as a part of GOIC community outreach efforts. Logistics and financial constraints dictates that these villages have to be within a 40 km radius of the Center.

c) Length of Training

The length of the training will vary from village to village depending upon the type of courses selected and the needs of the village. It is anticipated that the length of training will be from 3 - 9 months.

d) Trainee Output

A total of 240 trainees will complete the prescribed course during the four-year period. This is seen in Exhibit XIII along with the selected target villages.

e) Follow-Up

The GOIC follow-up phase will begin after training. Periodic visits will be made to the villages by both the technical instructors and the follow-up unit staff. These visits will be made more regularly than those to the on-site program trainees. GOIC will continue to provide technical assistance to the target villages after the completion of the training programs. Therefore, it will be necessary to visit these villages periodically, since they will serve as model villages for the GOIC COP. Data collected by this component will be analyzed by the management to determine the effectiveness of the outreach program.

J. Infrastructure Development

Although significant infrastructure development has taken place, it will be necessary to increase this component in order to meet Phase II objectives and goals.

1. Staff Quarters

Some staff members definitely must live on the grounds of the Center. One staff house was 65% completed in Phase I. The design of this house was too elaborate and expensive. It is highly recommended that this incomplete staff house be subdivided into two apartments and an additional two apartments be constructed at the end of these two. This would supply four staff quarters. A minimum of six staff quarters are needed.

It is also recommended that the Management Committee consider constructing housing at the Center for the local staff. The staff could repay the Committee through payroll deductions.

2. Slaughtering/Processing House

This structure is presently incomplete. It is strongly urged that this be completed such that equipment purchased can be properly used.

3. Poultry House

Poultry rearing is a very popular and profitable enterprise in The Gambia. This is especially true for small enterprises. GOIC has been successful in its poultry operations. Another house is needed so that the Center could produce chicks for its trainees and other community needs.

4. Fencing

The Center has experienced many problems and losses due to cows, monkeys and bush pigs eating its produce. Fencing of the entire perimeter would solve this problem. Pastures need to be fenced for the oxens and donkeys used in animal traction.

5. Irrigation

An irrigation system for a maximum of 6.48Ha is recommended. Such a system will greatly increase GOIC options during the dry season. Such a system would provide plots for our target villagers and trainees, provide food for the Center

and provide the Center with an extra growing season to test a selected number of varieties of seeds for the demonstration sector.

6. Storage

The small storage house is inadequate at the Center. Another storage area is needed so that individual areas can be designed for equipment, supplies, and food. Health hazards can arise whenever food for human consumption is stored around fungicides and pesticides as is presently being done. Periodically, the Center receives large shipments of supplies from the U.S. or Banjul. Adequate space is needed for this and the storage of other farm produce.

C. Demonstration Component

The joint evaluation of GOIC in May, 1980 revealed that the production component incurred extensive losses in crop production and neglible income from animal production in 1979. The team Agricultural Economist's analysis revealed that crop production losses continued in 1980 (Appendix I). Thus it appears unrealistic to assume that the Production Unit will make any sizable profit.

Thus the team recommended that the Production Unit be de-emphasized and redesigned to make maximum utilization of the equipment and infrastructure. The farm can still serve a very useful and productive part of of the GOIC program. A totally new concept of a Demonstration/Training farm is envisioned. This Demonstration farm will make use of existing faciliti

and equipment to serve as a support unit to strengthen the training component and provide food for the training Center. It is noted that under no circumstances will the heavy mechanized equipment be used for purposes of teaching the trainees.

The demonstration/training farm will be utilized in the following ways:

1. Land

Each trainee will have 1.68Ha as demonstration plots in crops and vegetable production. For 30 trainees this will be 100.8Ha. There will be 6.48Ha for irrigation. 30-40Ha would be used in the RDP seed multiplication program. The remaining land would be used for pasture and/or developed for the village projects.

2. Large Scale Machinery

The majority of this equipment could still be used in land preparation and cultivation, keeping the grounds and pastures clipped, ploughing land in neighboring villages or used for private contracts.

3. Motorized Cultivators

The cultivators can continue to be used on loan to trainees and villagers who have garden projects. Research could be continued to try to find the best possible use of this type of cultivator in The Gambia. Particuliar interest should be directed toward their feasibility in both swamp and rain-fed rice cultivation. These cultivators

can also be used in support operations at the Center such as hauling animal feed and water, carrying implements or other small chores. Demonstration plots can be made comparing the results of animal traction with those of the cultivators.

4. Sheep/Goats

These animals should be retained as a training tool. In addition, the possibility of growing male rams and bucks for the religious holidays should be seriously considered.

5. Poultry

This unit should be increased or expanded. As more and more trainees request to go into poultry rearing, GOIC Center should serve as a clearing house for these chicks. Presently Dakar is the nearest supply point for baby chicks. Death losses are extremely high due to the severe stress that the birds experience during the journey to Banjul.

The GOIC Center should purchase a 2000 capacity incubator, purchase a good stock of eggs from the States and provide its trainees and The Gambia with a steady supply of excellent chicks. The social and economical benefits would more than offset its cost (approximately $10,000). This approach is highly recommended.

6. Beekeeping

The demonstration/training farm should have at least 15-20 bee hives for its beekeeping activities

7. Irrigation

Explained under infrastructure.

8. Cassava

The center should try to purchase disease resistant strains and varieties of cassava that will serve as a supply for its trainees.

L. The GOIC Lines of Communications

The development of the GOIC program is a partnership undertaking between OIC International and The Gambia OIC Management Committee. The intended sponsors of the Phase II program are The Government of The Gambia, GOIC Management Committee and OICI with funding support from the United States Agency for International Development. The long and short range success of GOIC program will require that effective channels of communications be established and maintained among each of these four contributors to the development of GOIC Phase II program. The relationships among each of these contributors should be spelled out in a Memorandum of Agreement to be reviewed and signed as a condition precedent to project implementation.

V. Institutionalization of GOIC

Representatives of the team agreed that the Ministry of Education should be the sponsoring Ministry for GOIC instead of the Ministry of Agriculture. Under the Ministry of Education, the Department of Youth and Sports would be directly charged with institutionalizing GOIC.

The objectives of GOIC and those of the Ministry of Education are similar. The Department of Youth and Sports has a sincere interest in the GOIC target population (youth). GOIC's goal fits well into the overall strategy of the Department of Youth and Sports.

The Ministry of Agriculture along with other relevant Ministries would provide technical assistance in their respective technical areas. It is envisioned that the Department of Youth and Sports will work very closely with the Ministry of Agriculture in developing technical programs/plans.

The Department of Youth and Sports will also work closely with the present Management Committee of GOIC in developing an institutionalization plan for the Center. This plan would detail what is expected of each party and the roles each would play. It is expected that the Management Committee's role would be similar to that of the Board of Directors of Gambia College with the Center eventually becoming a parastatal organization.

A more detailed institutionalization plan is to be included as a part of the proposal for Phase II. This plan should include linkages with other Ministries and departments. A follow-up visit will be necessary to discuss an refine this plan.

VI. Linkages

In order for the institutionalization of the project to occur, there must be effective linkages with the Government departments involved in rural development. The GOIC cannot work in isolation if it expects to meet its objectives. The staff and the Management Committee must take

the initiative in establishing these linkages. They should insist that significant contributions from these departments be incorporated into all phases of the program

The following are some suggested linkages that could be developed initially:

A. Contact Person in the Ministries Involved

The government should designate a contact person from the Ministries of Agriculture, Health and Social Welfare, Education and Local Government who would work directly with GOIC program. The staff and Management Committee of GOIC would have regularly scheduled conferences with these contact persons to keep them informed of the progress, problems and needs of the program.

B. Ministry of Education

This would be the sponsoring Ministry for GOIC and would naturally play a significant role in the linkages. This Ministry should be involved in such areas as curriculum development, recruitment/orientation/intake, training of the instructors, planning for and training of trainees. The inputs from this Ministry are essential.

C. Ministry of Agriculture

Needless to say, it is of utmost importance that a firm linkage be established in all programs and departments under this Ministry. The department heads should become more acquainted with the programs in this Ministry.

1. RDP

Linkages with the RDP seed multiplication program have already been developed. It is highly recommended that this linkage be continued and possibly expanded. Other linkages within RDP should be explored.

2. Extension Services and Mixed Farming Centers

Closer cooperation and consultation with the extension services and Mixed Farming Centers should be instituted. The work of these departments closely parallel (but do not duplicate) the work proposed at the Center. Wherever possible, resources should be combined. GOIC trainees could spend a short OJT period at the Mixed Farming Center. New methods and successes should be shared. Equipment and implements could be shared. The staff could be combined to provide training for the GOIC Community Outreach Program.

3. Research Stations

The GOIC training and demonstration Center could serve as a sub-station for agricultural research. This would also benefit the Center's trainees. They would be able to observe the results of practical and useful experiments. The GOIC facilities are ideal for this venture. The Center should become more aware of new techniques and improved practices that are constantly being developed.

D. Community Development

The GOIC could supplement community development out-

reach programs by incorporating community development workers into its outreach programs. The Center facilities could be used to supplement Community Development's agriculture related projects. The GOIC and Community Development could work cooperatively in assessing needs and planning implementation strategies for GOIC community outreach village programs.

E. Ministry of Health and Social Welfare

GOIC could provide linkages to this Ministry by cooperating in a relationship for training in nutrition, and improving the social well being of rural people. Specifically, the GOIC facilities could be used to train the Ministry's staff for the pilot program of Primary Health care in the NBD.

F. Cooperative Union

A linkage has already been established with The Gambia Cooperatives Union. It is expected that these linkages will be continued and expanded in the future. The Cooperative Department could provide short term trainers at the Center to discuss the department policies, programs, benefits and requirements for membership.

G. Private Voluntary Organizations

The GOIC should establish linkages with other PVO's working in The Gambia.

1. CRS

Linkages have already been established with this organization. The GOIC has received food for

its trainees. GOIC has a standing agreement with CRS to get all its food that is spoiled, molded or otherwise not consumable by humans to be used as feed for animals at the Center. These linkages should be continued.

2. FFHC

The possibility of GOIC using some of the FFHC reclaimed rice fields in Farafenni should be explored. Portions of this land could become a part of the Center's training/demonstration farm.

3. Save The Children Fund

The GOIC and Save The Children Fund could colloborate in the latter's food supply and quality strategies. This would be with respect to the mixed vegetable gardens, small animal husbandry and high protein crops. Demonstration plots of these type could be grown at the Center.

II. The Need For The Gambia OIC Training Program In The Gambia

The Gambia OIC Training Center is definitely needed in the Gambia. Its objectives are in agreement with those of the Government toward rural development. At the present time GOIC is the only non-formal extended agricultural training program in The Gambia for rural farmers who do not possess school certificates.

If a person is interested in becoming a farmer and wants training, the only source is the secondary schools and Gambia College. If the person is literate, the chances

of gaining admission to a secondary school is quite small, as only 14% of the school age population attend school and only 35% of those enrolled in Primary school find a place in the secondary school. (Education Sector Study, Education Planning Unit, December, 1980). The average chance of being accepted at Gambia College is even slimmer as only 10% of its applicants are enrolled. If this young farmer is illiterate and desires to attain some training in farming by attending a formal institution, the chances are almost zero. The only training available is at the Mixed Farming Centers, these programs are for short periods of time.

Thus from the above examples, it becomes evident that a Center such as GOIC which is involved in training rural people to become more knowledgeable in the new methods and practices in modern agriculture fills a void that no other institution in The Gambia presently fills.

It is the only Center in The Gambia that is involved in on-site, extended, period training in agricultural techniques to both literate and illiterate rural farmers from the lower economic strata.

OIC programs are unique in that they teach self-help and utilizes motivational and attitudinal development techniques to enhance the learning process. The Center seeks to develop the whole person in addition to agricultural skills.

Another unique aspect of the GOIC program is that training is only part of the program offered to its participants. The institution is equally concerned with the graduates and has a follow-up component to assist them after they have left the Center.

In addition, in the development of the total person GOIC provides group and individual counseling to assist in the proper orientation and motivation of the trainees.

VIII. OIC International Methodology, Philosophy, Role and Principles In The Institutionalization of GOIC

The essential innovations of OIC International which contribute to the uniqueness of its programs will be continued throughout the institutionalization process of GOIC. OIC realizes that as GOIC is integrated into the government structure, it will not be a solely community-based organization yet the essential features of a typical OICI program will remain predominant in the program design.

The Management Committee will still be the conduit through which OICI will implement its Phase II program. This Committee, although appointed by GOG, will serve as the mechanism which assures that "a people to people" technique is employed in the GOIC project. This Committee will also employ the traditional OICI *modus operandi* as a means of working through the local community to secure government cooperation rather than the reverse.

OICI anticipates that the Management Committee will play a large role in the institutionalization of the project. This will be done by providing proper directions and inputs to the Ministry of Education and assuring that the basic concepts and principles of OICI will be incorporated into the existing structure.

OICI feels that its basic training concepts are different and provides a viable and useful alternative to the non-formal approach to training. These concepts are:

1. Pre-vocational training (feeder)

2. Counseling/Guidance

3. Placement/Follow-up

It is expected that these essential features will be incorporated into the institutionalized program.

The Management Committee is expected to secure in a similar capacity to GOIC as the members of the Board of Directors of Gambia College. GOIC will be a parastatal organization, receiving financial support from the government, yet retaining some individual control through the Management Committee, which is composed of members from the government, community and private sectors. This Committee will be an essential part of the program which strives for participation and support from the community

OICI expects a greater participation from the local community in Phase II. It is anticipated that the Management Committee will serve as a catalyst for identifying the needs of the community and rallying community support for the Center.

The Management Committee will use the OICI philosophy of self-help as a means of marshalling support from local civic and business resources external to the target community. The self-help philosophy will also be exhibited by the commitment of the staff, Management Committee and the local community. This philosophy which was well received in Phase I will be greatly expanded to include more structured community participation.

The Agricultural Advisory Committee, another unique concept of OICI will be used to advise the Management Committee on such matters as appropriateness of training curricula, training techniques, course content, and community resource mobilization. Members of this Advisory Committee will represent a cross-section of influential citizens from both the private and public sectors.

OICI welcomes the support of GOIC by the government. It does not anticipate any major problems with incorporating its concepts into the program. OICI believes that once its concepts are institutionalized, they will serve as genuine models that other agencies will want to replicate. Throughout OICI history, these concepts have proven time and time again to be effective and beneficial as training models. Ghana and Nigeria are examples whereby in Ghana the Ministry of Labor funds 50% of the local OIC budget. In Nigeria the local OIC receives 60% of its funds from the Industrial Training Fund.

IX. The Gambia OIC Training/Demonstration Center - Its Prospects As A Self-Sufficient, Self-Sustaining or Profit-Making, Entity

During the four weeks spent by the feasibility team in The Gambia, the question of self-sufficienty of the Center's farm operations generated much concern and debate. Can it make a profit? Can it support trainee food and stipends? If not, then why? How can one justify training farmers at a Center that cannot feed itself?

On first glance, these questions appear to be relevant and pertinent, however, as one looks deeper and analyzes the situation, one sees that the questions are only cosmetic. With respect to the GOIC Training/Demonstration Center, the name itself implies that this is a center for training.

As such, students are trained to perform specific practices. The purpose of a training center or institution is not to make a profit or become self-sufficient, but to serve as a public good. There does not exist a training center or institution, college, university or school anywhere in the world that has made a profit on training individuals or trainees.

Full support for a technical staff, administrative staff, facilities, equipment, supplies and infrastructure needed to train GOIC trainees can never by realized from the "profit" of a 200 ha. farm.

Thus one must clearly differentiate between a training institution and a private enterprise, profit-making institution. It is the feasibility team's understanding that the Center is primarily a training center, the goal of which is to train young farmers to become better food producers. As such the Center is not expected to produce a profit. However, the by products of these training activities on the Center's farm will generate some revenue.

This revenue is not net income or profit. Certain fixed expenses such as staff salaries, infrastructure, training costs, labor, and training equipment and materials <u>are not</u> included. Net profits are defined as the total gross receipts minus the total gross expenditures (expenses). It is also noted for reference, that in training, more is required than just hiring someone to do a job. The GOIC trainees <u>cannot</u> be used as casual laborers; although 90% of their training is to be done in practical work. The Center and its facilities are not necessary to employ casual laborers to work on a farm. Consequently, explanations must be given, lesson plans must be prepared, comparisons must be made and at times a certain amount of discussion is required.

It is noted that the production farm lost D32,745.34 during the 1979-80 planting seasons. This happened when GOIC had a top notch local production manager.

The following paragraphs will discuss the expected revenue from the various activities proposed for Phase II:

1. Beekeeping

The Center is expected to add beekeeping as a part of its curriculum (See Exhibit XI). The estimated cost involved in setting-up 12 beehives is as follows:

12 beehives x D140*/hive	-	D1680
Packaging, marketing, misc.	-	D1000

While the estimated gross income per year would be:

12 beehives x D600*/hive	-	D7200

One could conservatively estimate a net profit of D4520 from the twelve (12) beehives or D376.66 per beehive.

2. Cassava

Exhibit XII shows estimated revenue from the cassava project is D15,732 for the four year period, or D3,933 per annum.

3. Vegetable Production

The trainees are expected to produce an irrigated vegetable garden during the dry season.

*Prices as of March, 1981

A minimum trainee plot of 2.4 hectares is envisioned. It is expected that revenue totalling D2400 will be derived from this project annually.

4. Crop Production (Groundnut, cereals)

The analysis of the trainee crop production plan (i.e. expense, revenue, acreage, and crops) is shown in Exhibit II thru VII. Each trainee is expected to cultivate a total of 1.5 Ha of groundnuts, maize, sorghum and millet each year. For 60 trainees, this will amount to 96 Ha.

Hence, one can see from Exhibit VII that the expected revenue during the four-year period is D32,940. This figure does not include labor, implements or land preparation. If one uses the tractor, the revenue from crops will be reduced to D18,732 or D4683 per year.

5. Poultry

Projected expenses and revenue for the trainees poultry component (3000 broilers) are shown in Exhibits VIII, IX and X. It is estimated that an annual revenue of D4401 could be realized from this operation. It is noted that an expense of D22,650 must be included in the first year's local operating cost.

Summary

As the above analyses have shown, the expected revenue from the training farm is indeed small. The following is a breakdown of the projected annual revenue:

Component	Amount
Crops (96 Ha)	D 4683
Poultry (3000 broilers)	4401
Beekeeping (12 hives)	4520
Cassava (2.4 Ha)	3933
Irrigated Vegetable (2.4 Ha)	2400
Total	D19937*

* Estimates are conservative. To expect or plan for revenue above D25,000 is unrealistic and will create financial shortages in the final years of the project.

X. THE GAMBIA OIC
Logical Framework Matrix for Phase II

Narrative Summary	Objectively Verifiable Indicators	Means of Verifications	Important Assumptions
Goal: To Contribute towards the improvement of economic conditions for the rural people in The Gambia	1. Increase in per capita income of rural farmers. 2. Increase in farming skills and land area put under cultivation. 3. Diversification of agricultural income including poultry, beekeeping and vegetable gardening.	1. MIS reports 2. Joint Evaluation USAID/GOG/OICI	1. Agricultural development continues to be a priority in The Gambia. 2. The Government Ministries concerned give adequate support to GOIC.

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
	E.O.P.S.:		
Purpose To institutionalize a viable Gambia OIC Rural Training and Demonstration Center in The Gambia	1. Operational linkages established with GOG Ministries concerned with Rural Development: a. Agriculture b. Community Development c. Health & Social Welfare d. Education, Youth, Sports & Culture e. RDP	1. a. MIS reports b. Letters of support from concerned Ministries	GOG continues to feel the necessity and usefulness of a program such as OIC for rural development in The Gambia
	2. GOIC operating under a Memorandum of Agreement established with the Ministry of Education.	2. Memorandum of Agreement	GOG takes initiativ and action in preparing to assume responsibility for GOIC after 1985.
	3. GOG establishes and implements actions incorporating GOIC within its parastatal structure. a. Incorporates the GOIC center in its Annual Budget Estimates b. Incorporates GOIC in its future Planning Documents	3. a. Memorandum of Agreement b. MIS c. GOG contribution to operating costs (i) in kind (ii) cash d. Annual Budget Estimate e. Long term planning schedule (Five Year Plan)	

Narrative Summary	Objectively Verifiable Indicators					Means of Verification	Important Assumptions
Outputs	Years				Total		
	1	2	3	4			
a. Management Committee	7	3			10	MIS reports	GOIC Management committee remain stable and committed.
b. Local Staff Trained	24				24	Joint Evaluation GOG, USAID, OICI	
c. Formal Staff Development Sessions	12	12	12	14	48		
d. Formal Board Development Sessions	6	6	6	6	24		GOIC management committee takes active role in monitoring achievement of program outputs
e. Community Outreach Programs (COP)	2	2	2	2	8		
f. COP trainees	60	60	60	60	240		
g. On-site trainees enrolled	90	90	90	90	360		
h. On-site graduates	60	60	60	60	240		
i. Resettlements	36	36	36	36	144		
j. Job placements	24	24	24	24	96		
k. Graduates join co-op (on-site)	30	30	30	30	120		
l. Graduate farming groups	4	4	4	4	16		
m. Curriculum redesign							
1. COP	1				1		
2. Feeder	1				1		
3. Agricultural	2				3		
n. Linkages developed with other Ministries	1	2	1	1	5		
o. Advisory Committee formed	1				1		
p. Fund raising activities	1	1	1	1	4		
q. Workshops & Demonstrations held	1	1	1	1	4		
r. External audit reports	1	1	1	1	4		
s. External joint evaluation (GOG, USAID, OICI)		1		1	2		

Narrative Summary	Objectively Verifiable Indicators					Means of Verification	Important Assumptions
Inputs		Years			Total		
OICI	a.	1	2	3	4	OICI	OICI
a. TCT (in person months)						MIS reports	a.-e. Shipping and Transportation of project equipment is not hampered by excessive delays.
1. Program Advisor	1.	12	12	12	12	48	Joint Evaluation GOG, OICI, USAID
2. Ag. Specialist Consultant	2.	1	1	1	1	4	
3. Finance Specialist	3.	3	3	3	3	12	Inflation for the 4 year period does not exceed 40%.
b. 24 Local Staff	b.	288	288	288	288	1152	
c. Short-term Consultants	c.	3	2	4	3	12	That USAID Grant funds are released on schedule
d. Equipment Vehicles	d. $73,573						
e. Infrastructure	e. $78,475						
Local						Local	Local
a. Revenue from demonstration activities	D80,00					a. Production records	a. Harsh climatic conditions do not become more severe throughout LOP.
b. Local Community Contribution	Labour, tools, animals					b. Financial MIS reports	
c. GOG Contribution	D300,000					c. Financial MIS reports	

XI. Environmental Impact

The Gambia OIC Phase II Project will not use any insecticides, pesticides, fungicides or other farm chemical that are considered dangerous or hazardous to the ecological environment. All the insecticides and seed treatment chemicals used on the demonstration farm will be those approved by and under the direction of The Gambia Crop Protection Service. It is not intended that the project will buy chemicals from the USA.

XII. Proposed Budget

The proposed budget is presented in the following pages for both technical assistance and local operating cost. It is noted that 52% of this budget is to support technical assistance and OICI overhead costs while 48% is to support the local program. Government has indicated that it is considering providing D300,000 in financial inputs during the life of the project and will assume all local operating costs after 1985. The specific details of how GOG plans to contribute its financial inputs is presently being reviewed and discussed. It is expected that more details of this plan will be secured during the proposal follow-up visit.

Based on local operating costs of 1,027,109, the per trainee cost during the life of the project is approximately $1,712, however, the costs of institutional development included in this figure inflate the actual costs incurred. In subsequent years, the costs of training will decrease substantially.

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THE GAMBIA OIC FOUR-YEAR BUDGET PROPOSAL

January 1, 1982 - December 31, 1985
(Exchange Rate $1 US = D1.60)

TECHNICAL ASSISTANCE COST

Line Item	Number of Man Months	Year 1982	1983	1984	1985	Four-Year Projection
I. U.S. Salaries						
Program Advisor	48	$33,890	$37,360	$41,190	$43,250	$155,690
Finance/Administration Specialist (3 months/yr.)	12	6,639	6,970	7,319	7,685	28,613
Total US Salaries ($)		40,529	44,330	48,509	50,935	184,303
Fringe Benefits (35%)		14,185	15,516	16,978	17,827	64,506
Subtotal		$54,714	$59,846	$65,487	$68,762	$248,809

Employer's Contribution:

Hospitalization, Life Accidental Death and Dismemberment and long term Disability Insurance	14%
Pension	12%
FICA and Unemployment	9%
	35%

II. Allowances						
Post Allowances (class 25)						
Program Advisor (with 2 family)	48	$ 3,728	$ 4,110	$ 4,531	$ 4,758	$ 17,127
Finance/Administration Specialist w/o family	12	730	767	[illegible]	845	3,147
Subtotal	60	$ 4,458	$ 4,877	$ 5,336	$ 5,603	$ 20,274

THE GAMBIA OIC FOUR-YEAR BUDGET PROPOSAL

Line Item	Number of Man Months	Year 1982	1983	1984	1985	Four-Year Projection
Allowances						
Overseas Differential (25% of salary)						
Program Advisor		$ 8,473	$ 9,340	$10,298	$10,813	$ 38,924
Finance/Administration Specialist		1,660	1,742	1,830	1,921	7,153
Subtotal		$10,133	$11,082	$12,128	$12,734	$ 46,077
Housing Quarters Allowances						
Program Advisor $300 x 48 mos.		$ 3,600	$ 3,960	$ 4,356	$ 4,792	$ 16,708
Utilities Average cost/mo.- $300 x 48 mos.		3,600	3,960	4,356	4,792	16,708
Security Allowances $94/ms. x 48 mas mos.		1,128	1,241	1,365	1,502	5,236
Household Maintenance/ Repairs $60 x 1 TCT x 48 man mos.		720	792	871	958	3,341
Education Allowances						
Program Advisor away from post		$12,115	$12,115	$12,115	$12,115	$ 48,460
Finance Specialist away from post		4,038	4,038	4,038	4,038	16,152
at post		983	983	983	983	3,932
Subtotal		$26,184	$27,089	$28,084	$29,180	$110,537
Total Allowances		$40,775	$43,048	$45,548	$47,517	$176,888

THE GAMBIA OIC FOUR-YEAR BUDGET PROPOSAL

January 1, 1982 - December 31, 1985

Line Item	Year 1982	1983	1984	1985	Four-Year Projection
III. Travel and Transportation					
1. Inservice Training	$3,150	$ -	$ -	$ -	$ 3,150
2. Debriefing (USA) Per Diem: 1¼ TCT staff@ $75 day x 3 days per year (12)	-	450	-	300	750
3. Airfare: Beginning and end of contract- Program Advisor w/o dependents	900	-	-	1,500	2,400
R & R (Program Advisor w/o dependents	-	932	1,025	-	1,957
Home Leave	-	-	1,680	1,848	3,528
4. Beginning, home leave and end of contract- Finance Specialist	1,200	1,320	1,452	1,487	5,459
R & R	-	1,242	1,366	-	2,608
5. Local Travel (USA)	400	440	484	532	1,856
6. Program Adviser's Conference: Round Trip Fare	2,000	2,200	2,420	2,662	9,282
Per Diem ($100 x 10 days x 1 staff)	1,000	1,100	1,210	1,331	4,641
7. General Recruitment (4 x $300)	1,200	1,320	-	-	2,520
Subtotal	$9,850	$9,004	$9,637	$9,660	$38,151

THE GAMBIA OIC FOUR-YEAR BUDGET PROPOSAL

January 1, 1982 - December 31, 1985

Line Item	Year 1982	1983	1984	1985	Four-Year Projection
Shipping/Storage					
1. Program Advisor w/ dep.					
air shipment: 250 lbs. @ $5.03	$ 1,257	$ 1,383	$ -	$ 1,660	$ 4,300
surface shipment	8,200	-	-	10,660	18,860
car	-	-	-	5,000	5,000
2. Finance Specialist w/o dep. 500 lbs. x ¼ x $5.03 (air)	$ 629	$ 692	$ 761	$ 837	$ 2,919
surface shipment	2,050	2,255	2,480	2,728	9,513
Storage $45 per month x 84 man months	943	1,039	1,142	1,256	4,382
Subtotal	$13,081	$ 5,369	$ 4,383	$22,141	$ 44,974
3. Local Travel (In Country)					
a. Subsistence allowance 1¼ staff @ $37.19/day x 6 days x 12 mos.	$ 3,681	$ 3,681	$ 4,049	$ 4,454	$ 15,865
b. Airfare: Finance specialist round trip $250/trip x 6 trips/yr.	1,500	1,650	1,814	1,994	6,958
c. Private Vehicle 8000 mi. x 1¼ staff x 25¢	2,500	2,750	3,025	3,326	11,601
Ferry Fees	213	234	257	282	986
Subtotal	$ 7,894	$ 8,315	$ 9,145	$10,056	$ 35,410
Total Travel & Transportation/shipping	$30,825	$22,688	$23,165	$41,857	$118,535

THE GAMBIA OIC FOUR-YEAR BUDGET PROPOSAL

January 1, 1982 - December 31, 1985

Line Item	Central	TCT	1982	1983	1984	1985	Four Year Projection
			Year				
IV. Other Direct Costs							
1. Bank Charges			$ 720	$ 792	$ 871	$ 958	$ 3,341
Central $35/mo x 12	$ 420						
TCT $25/mo x 12		$ 300					
2. Postage			960	1,056	1,161	1,277	4,454
Central $70/mo. x 12	840						
TCT $10/mo. x 12		120					
3. Office Supplies			1,200	1,320	1,452	1,597	5,569
TCT $100/mo. x 12	1,200						
4. Telephone & Telegraph			4,800	5,280	5,808	6,388	22,276
Central $200/mo. x 12	2,400						
TCT $100/mo. x 12		2,400					
5. Printing & Reproduction			1,200	1,320	1,452	1,597	5,569
TCT $100/mo. x 12		1,200					
6. Resource Materials			300	330	363	399	1,392
TCT $25/mo. x 12		300					
7. Consultants		7,000	7,000	7,000	7,000	7,000	28,000
TOTAL OTHER DIRECT COSTS			$16,180	$17,098	$18,107	$19,216	$70,601

THE GAMBIA OIC FOUR-YEAR BUDGET PROPOSAL

January 1, 1982 - December 31, 1985
(Exchange Rate $1 US - D1.60)

Local Budget Summary

Line Item	Year 1982	1983	1984	1985	Total
Personnel (Salaries & Benefits	D 111139	D 113592	D 116035	D 118493	D 459259
Travel & Transportation	42440	45384	48722	53491	190037
Other Direct Costs	184405	175788	189267	205195	754655
Commodities/Equipment	60112	17823	19155	20626	117716
Installation/Infrastructure	125560	-	-	-	125560
Total Dalasis	D 523656	D 352587	D 373179	D 397805	D1647227
Total $ Dollars	$327,285	$220,367	$233,237	$248,628	$1,029,517

THE GAMBIA OIC FOUR-YEAR BUDGET PROPOSAL

January 1, 1982 - December 31, 1985
(Exchange Rate $1 US - D1.60)

Local Budget

I. Personnel (Salaries & Benefits)	Grade	No. of Positions	Year 1982	1983	1984	1985	Total
Director	17/1	1	D 9996	D10188*	D10380	D10572	D41136
ASO (Accountant)	15/1	1	7956	8124	8292	8464	32836
Training/Demonstration Manager	16/1	1	8964	9132	9300	9468	36864
Student Services Coordinator	12/1	1	5604	5724	5844	5964	23136
Mechanics	12/1	1	5604	5724	5844	5964	23136
Technical Instructors	9-11	4	17712	18096	18480	18864	73152
Bookkeeper/ Store Clerk	8/1	1	3396	3468	3540	3612	14016
Secretary/Typist	7/1	2	5928	6074	6216	6360	24578
Driver/Operators	7/1	2	5928	6074	6216	6360	24578
Warden/Housekeeper	10/1	1	4428	4524	4620	4716	18288
Cooks	4/1	2	3864	3960	4056	4156	16036
Laborers	4/1	4	7728	7920	8112	8304	32064
Janitor/Messenger	3/1	1	1644	1692	1740	1788	6864
Watchman	4/1	2	3864	3960	4056	4152	16032
Subtotal		24	D92616	D94660	D96696	D98744	D382716
Fringe Benefits (20%)			18523	18932	19339	19749	76543
Total Salaries & Benefits			D111139	D113592	D116035	D118493	D459259
Exchange Rate - D1.60 = $1.00			$ 69462	$ 70995	$ 72522	$ 74058	$287037

* 2% increase annually

THE GAMBIA OIC FOUR-YEAR BUDGET PROPOSAL

January 1, 1983 - December 31, 1985

	Year 1982	1983	1984	1985	Total
II. Travel & Transportation					
Local Travel	D 2400	D 2640	D 2904	D 3191	D 11135
Fuel & Lubricants	10000	11000	12100	13310	46410
Vehicle Maintenance	24000	26400	29040	31944	111384
Per Diem/Subsistence	1600	1760	1936	2130	7426
Operational Shipments	3000	2000	1000	1000	7000
Ferry Fees	1440	1584	1742	1916	6682
Total Travel & Trans.	D42440	D45384	D48722	D53491	D190037
(Exchange Rate - $1 US - D1.60)	$26525	$28365	$30451	$33432	$118773
III. Other Direct Costs					
Operational Cost - Beekeeping	D 3595	D 1007	D 1107	D 1218	D 6927
Operation Cost - Animal Feed Medicine & Labor	3000	3300	3630	3993	13923
Operational Cost - Crop seeds & Fertilizers	8000	6600	7260	7986	29846
Poultry (3750 chicks)	6000	6600	7260	7986	27846
Poultry (feed/medicine/labor)	9600	1650	1815	1996	15061
Community Outreach Prgm.	6000	6600	7260	7986	27846
Building Maintenance/ Renovation	3500	3850	4235	4659	16244
Animal Traction/Attach.	13000	4000	3000	3000	23000
Janitorial Supplies	1200	1320	1452	1597	5569
Printing & Reproductions	2400	2640	2904	3194	11138
Office Supplies	4800	5280	5808	6389	22277
Telephone & Telegraph	2000	2200	2420	2662	9282
Postage	360	396	436	480	1672
Kitchen & Dorm Suppls.	1200	1320	1452	1597	5569
Trainee Living Expense (60)	36000	39600	43560	47916	167076
Graduate Resettlement (40)	80000	85300	91130	97544	353974
Other Support Services	3750	4125	4538	4992	17405
Total Other Direct Costs	D184405	D175788	D189267	D205195	D754655
Exchange Rate D1.60= $1.00	$115253	$109868	$118291	$128247	$471659

THE GAMBIA OIC FOUR-YEAR BUDGET PROPOSAL

January 1, 1982 - December 31, 1985

Line Item	Year 1982	1983	1984	1985	Total
IV. Commodities/Equipment					
Farm Supplies	D 2500	D 2750	D 3025	D 3328	D 11603
Training Supplies	7212	7933	8726	9599	33470
Training Equipment	9000	4500	4500	4500	22500
Equipment Maintenance	2400	2640	2904	3199	11143
Peugeot 504 (9 Passenger)	24000	-	-	-	24000
Toyota 4-Door Pickup	15000	-	-	-	15000
Total Commodities/ Equipment	D60112	D17823	D19155	D20626	D117716
Exchange Rate - D1.60 = $1.00	$37570	$11139	$11972	$12891	$ 73572
V. Installation/ Infrastructure					
Completion of Manager's House	D 5810	-	-	-	D 5810
Construction of Asst. Manager's House x 2	10000	-	-	-	10000
Poultry House	4950	-	-	-	4950
Completion Slaughtering/Processing House Fencing	4800	-	-	-	4800
Storage House	8000	-	-	-	8000
Irrigation System (10 acres)	42000	-	-	-	42000
Pumps, Sprinklers, Pipes & Tank	50000	-	-	-	50000
Total Installation/ Infrastructure	D125560	-	-	-	D125560
Exchange Rate - D1.60 = $1.00	$ 78475	-	-	-	$ 78475
Total Budget	D523656	D352587	D373179	D397805	D1647227
	$327285	$220367	$233237	$248625	$1029513

APPENDIX I

AGRICULTURAL-ECONOMIST'S ANALYSIS OF GOIC PRODUCTION COMPONENT 1979 - 1980

Acres Planted

In 1980, land used to produce crops by GOIC totaled 216.49 acres, compared with 252.83 used in 1979 (Table 1). This was a 14 percent decline in the land area utilized for crop production in 1979.

TABLE 1

LAND ACTUALLY USED FOR CROP PRODUCTION BY GOIC PROJECT 1979 - 80*

Crops	Land Area (acres) 1979	1980
Groundnuts		
Senegal 28-206	67.50	60.24
Philippine Pink	45.45	21.55
Yellow Maize (NCB)	55.70	75.30
Sorghum		
Samba Jobo (Red)	17.50	25.40
Early Variety (White)	5.00	-0-
Millet (Early Variety)	7.68	-0-
Sweet Potatoes	11.00	-0-
Cassava	9.00	-0-
Training Farm**	34.00	34.00
Total Acreage	252.83	216.49

* Acres due to poor germination are not considered in crop totals.
** Total acreage given the trainees for producing their crops.

Source: GOIC

A close examination of the data presented in Table 1 show that only 34 acres of land were used to grow trainees' crops in 1979 and again in 1980. This means that most of the land area was used by the Production Farm as a means of generating revenue for the project.

Although on a per crop basis the major portion of the land area used by the Production Farm goes into groundnut production, due to the lack of height, the groundnut requires more frequent weedings than other crops grown by the Production Farm. These weedings require an extensive amount of farm labour which is cost increasing. This makes groundnuts more costly to grow compared to other crops (Table 2).

TABLE 2

COST PER ACRE OF MAJOR CROPS PRODUCED
BY GOIC 1979 - 80

Crop	Cost Per Acre 1979	Cost Per Acre 1980
Groundnuts		
Senegal 28-206	D149	D190
Philippine Pink	152	175
Yellow Maize	164	105
Red Sorghum	153	80

Source: GOIC

Given the fact that in Phase I the bulk of the land used for cropping by the production farm went into groundnut production, and the cost of producing is higher relative to other crops, from a management standpoint this suggests that a shift of resources is needed from the production of groundnuts to other enterprises. This was a point of great concern in Phase I, and will be elaborated in a later section of this manuscript.

Yield Per Acre

Yield per acre for the crops grown by the GOIC Production Farm spanning two production seasons are summarized in Table 3.

TABLE 3

YIELD PER ACRE FOR GOIC PRODUCTION FARM
1979 - 1980*

Crop	Cost Per Acre (lbs.) 1979	1980
Groundnuts		
Senegal 28-206	235 (1,104)	489 (1,236)
Philippine Pike	272 (1,104)	518 (1,236)
Maize	380 (1,666)	412 (1,866)
Red Sorghum	652 (1,669)	109 (1,570)

* National averages are shown in parentheses.

Income and Expenses

In 1980, as in 1979, the Production Farm realized a net loss of D6,321 or $3,511 (Table 4). Erratic weather conditions have been cited as one of the reasons for the non-production or failure of some crops. In other instances the inability of some crops to generate income (vegetables for an example) has been attributed to the unavailability of hired labour during the production season. It should be pointed out that a large percentage of the cost (over 60%) of the operating cost appearing in Table 4 are for groundnut production. In this regard, planting/fertilizing and seed bed preparation were major cost items.

In respect to income, it should be noted that income from the sale of groundnuts was only slightly higher than the income from the Production of maize.

It is noted that all expenses for production in 1979 have not been included in this analysis. This is especially true in respect to fuel cost. These costs will need to be separated from other fuel costs. These records are at OICI Central Office. The 1980 program evaluation reports that the 1979 production losses were as follows:

1.	Field Crops	- D22,216.21
2.	Small ruminants	- D 1,859.60
3.	Vegetables	- D 8,669.53
	Total Loss:	D32,745.34

The same evaluation reported a net profit of D934.32 from the poultry enterprise.

Considering the cost of producing the mentioned crops and the income from these crops, it would appear that 1979 and 1980 were very unprofitable years for the GOIC Production Farm.

TABLE 4

CROP PRODUCTION EXPENSES AND INCOME
FOR GOIC PROJECT, 1980

Operating Expenses	Amount (Dalasis)
Seed Preparation	D 812.51
Seed Bed Preparation	7,470.04
Seeds and Fertilizers	-0-
Custom Services (ploughing)	-0-
Farm Fuel*	2,873.00
Planting and Fertilizing	7,764.41
Tillage	4,676.99
Harvesting & Threshing	3,936.45
Storage & Protection	378.00
Marketing	156.98
Total Operating Expenses (Dalasis)	D28,068.38
	$15,593.00

Income	
Groundnuts	
Senegal 28-206	D 6,019.56
Philippine Pink	2,624.24
Corn	6,795.00
Red Sorghum	-0-
Vegetables	-0-
Other Cereal crops	-0-
Other Crops related incomes	6,308.00
Total Income from Crops (Dalasis)	D21,746.80
Net Income from Crops (Dalasis)	6,321.58
	$ 3,511.00 *US)

* This is not included in the figures prepared by the GOIC Crop Production Unit.

(Dl.60 = $1.00)

Source: GOIC

Animals

Poultry

An analysis of the poultry enterprise using two batches of chicks is seen in Tables 5 and 6. It is noted that there was a 47% mortality rate yet a net return of D797.99 was gained on an investment of D4780.40. This represented a 17% return on investment. The cost of buildings was not included. It is also suspected that some of the feed received free from CRS was not included as a part of the operating costs (expenses). Thus it appears that the poultry enterprise (broilers) can produce a net profit. Phase II should consider expanding this operation.

Livestock and Poultry Production in Phase I

Sheep and Goats

Table 7 presents sheep and goat numbers for the project between September, 1979 to January, 1981.

Based on the mentioned statistics, there was an overall decline in the total number of animals (sheep and goats) in 1981 compared to 1979. While the 1979 - 81 numbers were almost identical for goats, there was a decline in the number of sheep (-5) in 1981. Since death loss was not included in the statistics, the decline in inventory is assumed to be due to disposition. However, there appears to be a problem in the care and management of pregnant and furrowed animals, specifically those related to proper facilities. It is the general concensus that this has contributed to a high death loss among the sheep and goats owned by the project, although this was not reflected in the statistics presented in the Table.

With respect to revenue and cost, gross revenue of D465.00 was realized from the sale of animals between 1979 - 1981, with operating costs (primarily labor) in the amount of D2001. This meant that there was a loss of D1536 from sheep and goat production in Phase I.

TABLE 5

Cost and Return from GOIC Broiler Production
August, 1979 - January, 1980

Cost	
Cost of 250 chicks	D 275.20
Feed	502.53
Drugs	68.58
Labor	216.00
Fuel (Heating & Lighting)	75.84
Transportation	85.00
Total	D1223.15
Gross Returns	
210 broilers @D7.56/broiler	D1588.40
Net Return	D 355.24

TABLE 6

Cost and Return from GOIC Broiler Production
December, 1980 - February, 1981

Costs	
Cost of 1250 chicks	D1591.00
Feed	450.03
Fuel	106.88
Drugs	141.34
Transportation	150.00
Labor	140.00
Contingencies	740.00
Total	D3557.25
Gross Revenue	
500 Broilers @ D8/broiler	D4000.00
Net Revenue	D 442.75

TABLE 7

Sheet and Goats Numbers for the GOIC Training Farm
1979 - 81

	1979	1981
Sheep		
Rams	8	2
Ewes	20	11
Lambs	0	9
Total	28	22
Goats		
Billy Goat	4	3
Does	13	6
Kids	0	9
Total	17	18

Source: GOIC

At the outset it should be stated that in Phase I income projections from the Production Farm were grossly exaggerated; hence a realistic look needs to be taken of the farm in light of its past track record. Given the present conditions that GOIC is operating under, no profit can be expected in 1981 or 1982 and a minimal profit can be expected in 1983 - 85 (Table 8). How these projections are achieved depends on the following conditions being met:

1. Favorable weather conditions during each production season.
2. No escalation in the price of inputs used by the production farm.
3. Favorable prices for crops sold by the production farm.
4. Absence of any other exogeneous factors which would in any way affect the production/marketing process.

The above conditions seem to be outside the control of the Production Farm, therefore, since none of these conditions are likely to prevail, the farm could end up realizing losses in all five years in question. In short, it seems virtually impossible for the production farm to be self-sufficient from a profit making standpoint and any reports to the contrary are misleading.

For the period 1981 - 1985, costs can be expected to rise, thereby making crop production very costly. The cost of planting/fertilizing, tillage, and harvesting/threshing should increase in the face of uncertain produce prices. Therefore, the ability of the Production Farm to produce these crops, given the limited financial resources of GOIC would only amount to misallocation of resources in an enterprise which is unlikely to make a profit in the immediate time period.

In light of the above presentation, a likely course of action would be to de-emphasize the production of crops as a source of revenue from which GOIC can be financed over the years.

TABLE 8

PROJECTED PRODUCTION EXPENSES AND INCOME FROM CROPS FOR GOIC PROJECT[1]

1981 - 1985

Operating Expenses	1981	1982	1983	1984	1985
Seed Preparation*	D 820	D 828	D 836	D 844	D 852
Seed Bed Preparation	3500	3535	3570	3605	3641
Seeds & Fertilizers	3000	3060	3121	3183	3246
Custom Service (ploughing)	-0-	-0-	-0-	-0-	-0-
Farm Fuel	3016	3156	3324	3490	3664
Planting & Fertilizing	8152	8396	8647	8906	9173
Tillage	5377	5403	5430	5701	5729
Harvesting & Threshing	4723	4723	4723	4770	4817
Marketing & Storage	668	668	668	668	668
Labor, Fungicides, Insecticides	____	5955	6063	6233	6347
Total Operating Expenses Dalasis	D29256	D35734	D36382	D37400	D38244
Income					
Groundnuts					
Senegal 28-206	D 7228	D 8673	D10407	D12488	D14985
Philippine Pink	2912	3232	3587	3981	4418
Corn	8833	12366	13602	14962	16458
Red Sorghum	500	600	700	700	800
Vegetables	400	500	600	700	800
Other Crops (Related Income)	6371	6498	6627	6759	6894
Total Income from Crops	D29256	D31869	D35523	D38690	D44455
Net Income From Crops**	- 3012	- 3865	859	2290	6211
($)	- 1882	- 2415	536	1431	3881

* Cost of seed decortication
** Operating Expenses minus Total Income
(Exchange rate compared at D1.60 - $1.00)
1. 33.7 Ha Groundnuts
40.8 Ha Cereals

TABLE 9

LABOR EXPENSES CALCULATIONS FOR GROUNDNUT AND CEREAL PRODUCTION USING MECHANIZATION

(Source: GOIC Center)

Expense: (1) Groundnuts

Permanent Labor and operators (D6000 for 200 acres)	D 30/acre
Casual Labor:	
Field-clearing	4/acre
Seed Decortication	13/acre
Weeding (2 weedings - 3 might be required but we assume that the herbicides will help) D20/acre	40/acre
Harvesting & Threshing	20/acre
Total labor/acre:	D107/acre
Minimum	D107/acre

Harvesting could be done by machine, but the field and soil conditions do not permit it, it could be ineffective as it was in the 1980 crops.

Maximum Labor Costs:

Permanent Labor: (More laborers are to be employed)	D 40/acre
Casual Labor:	
Field-clearing	6/acre
Seed Decortication	13/acre
3 Weedings @ D20/acre	60/acre
Harvesting & Stacking	25/acre
Maximum Cost:	D144/acre

Corn & Other Cereals

Permanent Labor	D 30/acre
Casual Labor:	
Field-clearing	4/acre
Weeding (1)	20/acre
Harvesting	25/acre
Total Cost	D 79/acre D195.13/Ha
(Excluding Permanent Labor)	D 49/acre D121/Ha

(Shelling & Threshing will be done with the machine)

TABLE 10

CROP YIELD ESTIMATES FROM VARIOUS SOURCES FOR GROUNDNUTS AND CEREALS GROWN IN THE GAMBIA

Source		Yield in Kg/Ha			
		Groundnuts	Maize	Sorghum	Millet
A.	Central Statistics 1979/80 Report	1474*	3208	2023	2744
		1236**	1866	1869	1570
		842***	1433	762	1070
B.	Agric. Sample Survey 1973/74 Report	2286	N/A	771	1116
		1519	N/A	708	710
		927	N/A	317	446
C.	Dept. of Agric. Technical Bulletin	2240"	1680	1684	1120
		1008'	672	896	560
D.	GOIC Farm 1979 Season	353@()	427()	732	nil()
		263@@	427	732	nil
E.	GOIC Farm 1980 Season	752	904	122()	nil
		548	462	122()	nil
Estimate based on above information for 1982 - 85 (Kg/Ha)		950-	1350-	1000()	1100()

* Maximum
** Average
*** Minimum
" Maximum
' Minimum
@ Maximum
@@ Average
() Exceptionally low
\- Based on the past two years of experience for the production farm, these projected estimates for 1982 - 95 are very liberal and conditional.

SUMMARY OF THE PRODUCTION UNIT IN PHASE I

As per 1979, the production unit suffered a loss in its cropping operation in 1980. While erratic whether conditions contributed to this dilemma other problems also surfaced. A major problem with the production farm seems to be over optimism regarding its ability to be self-supporting. In the short run this seems an impossible task and in the long run this is highly questionable. Data presented earlier shows the production farm suffering a loss in its cropping operating in 1981 and 1982 and making marginal returns between 1983 - 85, given certain conditions hold true (ceteris paribus). Since most of these conditions are unlikely to prevail, loss could result in all five years.

In regards to operating expenses for the period 1981 - 85, planting and fertilizing; tillage and harvesting will be major cost items. Farm fuel, seed bed preparation, seeds and fertilizers are other items reflected in operating expenses.

Although corn in expected to provide some revenue, poor performance by groundnut and other crops (vegetables and sorghum) could easily cancel this out. The performance of vegetables and sorghum in 1980 leaves much to be desired as crops with a future in the operation of the production farm.

From the standpoint of yields per acre, crops produced by the production farm are generally below the national level of yield for the seasonal crops. Poor yields in the face of low produce prices does not guarantee its viability, the data seems to suggest that it has been very costly and that costs will likely to increase with the produce prices uncertain.

Based on its performance in Phase I, it is possible for the livestock aspect of the Phase II program to function as a source of food for

the on-site trainees. The sheep and broilers units should be enlarged, so as to increase the present number. However, goats should be deleted from the program in Phase II. A point worth making is that better management is needed with respect to the care of the animals. Only by doing this can the death loss be reduced. In the care of the broiler chicks a death loss of between 50 - 60% is very alarming. This needs to be reduced to a minimum of 20%. For sheep better care is needed with respect to the offspring, only by doing so will the death loss be reduced.

In Phase I, there seems to have been very poor inventorying of farm animals. Guess work seems to have been the rule of thumb instead of precise head counts of the number of farm animals. In Phase II, accurate inventorying of all farm animals is needed. These records should be done monthly, with correct accounting done to include additions to the herd or flock, numbers sold or otherwise disposed of, and death loss. Only by keeping these records will an accurate count of the number of farm animals be possible.

With respect to the sale of farm animals,one day per week would be set aside for this. A single individual should be responsible for the sale instead of a number of individuals. This makes for better accountability.

A more detailed account of the animal husbandry in Phase II is presented in the Phase II design.

APPENDIX II

THE GAMBIA OPPORTUNITIES INDUSTRIALIZATION CENTER, INC.

To Head of Compound - a Graduate's Father and Mother or Influential Adult

A. Name: B. Land area:

B. Population of compound: D. Oxen:

1. What benefit do you see since your child has gone to OICI?
2. Has your child put new land into cultivation? How much?
3. Do you support your child's efforts to be a farmer?
4. Do you want your child to be a better farmer than you?
5. Did your child learn ideas which you yourself did not know about farming from OIC? Examples? Did you adopt some yourself? Which Ones? Was the result good?
6. Do you see any advantage to the OIC Center in your area?
7. What is happening at GOIC Center?
8. In your opinion what service does GOIC do for you or your village?
9. What hopes do you have for the future - for your land? For your children?
10. Do you think farmers in your village can afford a tractor?
11. Which is best for you - a tractor or animal traction?
12. Does anyone in your village have a tractor or hire a tractor to prepare the land?
13. How much does it cost to hire a tractor to prepare the land?
14. Are you pleased the GOIC is in your area? Why?
15. Do you mind if the GOIC Center is changed to another area? Why?
16. What crops did you grow on your land this year?

No. of ha.		
groundnuts	-	your yield?
maize	-	was it less than last year?
rice	-	do you plan to change next year? (croping pattern)
millet	-	
sorghum	-	
vegetables	-	

17. How many people have left your compound to live in the city? Have they found work?
18. Are there many strangefarmers in the village? Do you need them to work on your farm?
19. Do you hire out your equipment to other farmers for a fee? How much?
20. Do you belong to a cooperative? Which one?
21. If your child had oxen and a plow, would you expect your child to use them to work on your land?
22. How many days a week does your child work on your land? On his/her own la
23. Do you use fertilizer on your fields? What kind? How much do you apply?

APPENDIX II

THE GAMBIA OPPORTUNITIES INDUSTRIALIZATION CENTER, INC.

Questionaire to Village Alkali

Name

Land area of village

Population of village

No. of farmers in village

No. oxen in village

No. of donkeys in village

No. of compounds in village

Crops grown in village - % groundnuts 1980 Harvest/Yield

% cotton

% maize

% rice

% sorghum

% millet

% other

Questions:

6. Do you see any advantage to the OIC Center in your area?
7. What is happening at GOIC Center?
8. In your opinion what service does GOIC do for you or your children?
9. What hopes do you have for the future - for your land? For your children?
10. Do you think farmers in your village can afford a tractor?
11. Which is best for you - a tractor or animal traction?
12. Does anyone in your village have a tractor or hire a tractor to prepare the land?
13. How much does it cost to hire a tractor to prepare your land?
14. Are you pleased the GOIC is in your area? Why?
15. Do you mind if the GOIC Center is changed to another area? Why?
17. How many people have left your village to live in the city? Have they found work?
18. Are there many strange farmers in the village? Do you need them to work on your farm?
19. Do you belong to a cooperative? Which one?
20. How many farmers in your village belong to a cooperative?

APPENDIX III

THE GAMBIA OPPORTUNITIES INDUSTRIALIZATION CENTER, INC.

List of Contacts

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