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プロジェクト・デザイン・マトリックス(PDM)

作成教材リスト

セミナー・ワークショップ開催実績

機材リスト(携行分・供与分)

- 3 合同調整委員会および運営委員会
- 4 プロジェクト要員配置(評価時・終了後)
- 5 分野別プロジェクト活動報告
- 6 Annual Report in 1998, Activity Plan in 1999
- 7 The Sustainability of the Project beyond 30, June, 1999
- 8 公的融資制度
- 9 Concept Paper (Some thoughts for a Rural Economic Advancement Program)
- 10 農家および普及員による普及活動評価調査
- 11 生産グループにおけるグループファンドの現状
- 12 生産集団育成ガイドライン

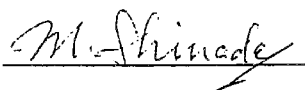
MINUTES OF UNDERSTANDING OF THE JOINT EVALUATION
ON THE JAPANESE TECHNICAL COOPERATION
FOR THE AGRICULTURAL EXTENSION IMPROVEMENT PROJECT
IN GAMPAHA
IN THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

With about two months left until the termination of the cooperation period of "The Agricultural Extension Improvement Project in Gampaha" (hereinafter referred to as "the Project") on June 30, 1999, which started on July 1, 1994, as stated in the Record of Discussions, the Japanese Evaluation Team organized by the Japan International Cooperation Agency and headed by Mr. Masamichi SHINADA visited the Democratic Socialist Republic of Sri Lanka in order to conduct a review and evaluation of the performance of the Project. In order to achieve this, a Joint Evaluation Team (hereinafter referred to as "the Team") was formed consisting of the aforementioned Japanese and a Sri Lankan Evaluation Team headed by Mr. R. D. A. Ranasinghe, Deputy Director of External Resources Department, Ministry of Finance and Planning.

The Team conducted interviews with the Japanese Experts and the Sri Lankan counterparts assigned to the Project, had a series of discussions with the Sri Lankan authorities concerned and exchanged views among themselves.

Mr. R. W. Piyasena and Mr. S. Amarasekara acknowledged and agreed with the evaluation results submitted by the Team (attached hereto).

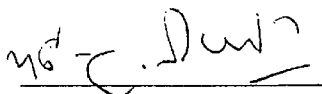
Colombo, April 27, 1999



Mr. M. Shinada

Leader

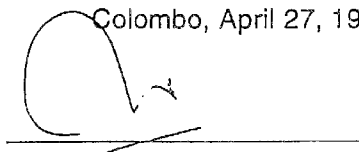
Japanese Evaluation Team
Japan International Cooperation
Agency,
Japan



Mr. R. W. Piyasena

Chief Secretary

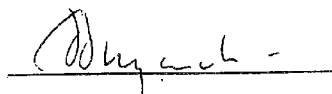
Western Provincial Council
The Democratic Socialist
Republic of Sri Lanka



Mr. S. Amarasekara

Director General

Regional Development
Department,
Ministry of Plan Implementation
and Parliamentary Affairs
The Democratic Socialist
Republic of Sri Lanka



Wittenes: Mr. J. H. J. Jayamaha

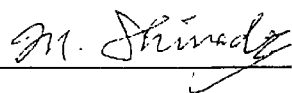
Director

External Resources Department,
Ministry of Finance and Planning,
The Democratic Socialist Republic
of Sri Lanka

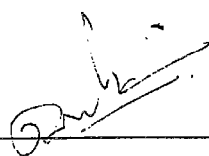
JOINT EVALUATION REPORT
ON THE JAPANESE TECHNICAL COOPERATION
FOR THE AGRICULTURAL EXTENSION IMPROVEMENT PROJECT
IN GAMPAHA
IN THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

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Mr. Masamichi SHINADA
Leader
Japanese Evaluation Team
Japan International Cooperation
Agency



Mrs. Chintha Chethiyawardene
Leader
Sri Lankan Evaluation Team
the Democratic Socialist Republic
of Sri Lanka

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本 文

1. INTRODUCTION

Based upon the Record of Discussions (hereinafter referred to as "the R/D") signed on April 6, 1994, the Government of Japan and the Government of the Democratic Socialist Republic of Sri Lanka have been implementing the Technical Cooperation Program for the Agricultural Extension Improvement Project in Gampaha (hereinafter referred to as "the Project") since July 1, 1994. The Project was scheduled to be implemented for five years and the activities of the Project were implemented based upon the Tentative Schedule of Implementation (hereinafter referred to as "the TSI"). As the Project was implemented, there was a necessity for changes to be made in the R/D and the TSI such as in the fields of Japanese Expert or change in the schedule to dispatch Japanese Experts. Both the Government of Japan and the Government of the Democratic Socialist Republic of Sri Lanka agreed to make changes in these areas and signed the changed R/D and TSI on January 15, 1998 .

With the cooperation period about to reach its termination, the Government of Japan and the Government of the Democratic Socialist Republic of Sri Lanka conducted a joint evaluation on the achievement of the Project.

2. MEMBERS AND SCHEDULE OF THE JOINT EVALUATION TEAM

2-1. THE JAPANESE EVALUATION TEAM

The member list is attached as the Annex 1.

2-2. THE SRI LANKAN EVALUATION TEAM

The member list is attached as the Annex 2.

2-3. THE SCHEDULE OF THE EVALUATION

The schedule is attached as the Annex 3

3. OBJECTIVES OF THE EVALUATION

(1) To execute a comprehensive evaluation of the achievements of the Project with regard to the contents of the R/D and other related official agreements.

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(2) To make recommendations and suggestions to the authorities of the two Governments concerned after the termination of the cooperation period of the Project.

(3) To use the results and lessons obtained from the evaluation of the Project for cooperation planning and project implementation in similar cases.

4. EVALUATION OF THE PROJECT

4-1. ITEMS OF THE SURVEY

The joint evaluation team, consisting of the Japanese Evaluation Team and the Sri Lankan Evaluation Team, conducted an evaluation survey with regard to the following items based on the R/D and the TSI:

(1) Project input

1) Japanese Input

Dispatch of Experts

Provision of machinery and equipment

Training of Sri Lankan personnel in Japan

Other

2) Sri Lankan Input

Provision of land, buildings and facilities

Assignment of counterparts and administrative personnel

Allocation of budget

Other

(2) Project activities and accomplishments

(3) Effectiveness

(4) Project impact

(5) Efficiency

(6) Relevance

(7) Prospects for Sustainability

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4-2. EVALUATION METHOD

The evaluation was conducted by means of the Project Cycle Management with the Project Design Matrix, which is attached as the Annex 4.

5. RESULTS OF SURVEY

5-1. ACCOMPLISHMENTS IN TERMS OF INPUT

5-1-1. JAPANESE INPUT

(1) Dispatch of Experts

A total of twelve Long-term Experts have been dispatched since July 1994. They include Team Leaders and Coordinators, as well as personnel with expertise in Agricultural Extension, Upland Crop Cultivation and Water Management (Annex 5).

Short-term Experts were also dispatched as necessary. At present, twelve Short-term Experts have been dispatched to Sri Lanka, and one additional Short-term Expert is scheduled to be dispatched to Sri Lanka (Annex 6).

Japanese Experts have been dispatched in accordance with the R/D and TSI. Technical transfer has been favorably carried out.

(2) Provision of machinery and equipment

Machinery and equipment were provided in order to carry out the project activities effectively. All machinery and equipment provided or brought by Experts have contributed to the development and enhancement of the of the project activities. It is also expected that they will contribute to further development.

(3) Acceptance of trainees of Sri Lankan personnel

Training of counterparts in Japan started in fiscal year 1994 (the Japanese fiscal year starts on April 1 and ends on March 31, and is hereinafter referred to as "FY"). At present, 21 counterparts have visited Japan to participate in technical training, while one additional counterpart is scheduled to visit Japan as a trainee before the end of the project period. All training has been efficiently implemented (Annex 7).

(4) Supplementary funds to cover local cost

The Japanese side provided a part of the project management cost in order to implement the project activities in a timely manner (Annex 8).

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5-1-2. Sri Lankan INPUT

(1) Provision of land, buildings and facilities

The Government of Sri Lanka provided land and facilities required for the Project, and they are maintained in good condition, only the dormitory and the lecture hall were unable to be ready for the project activities.

(2) Assignment of counterparts and other personnel

Sri Lankan counterparts and other personnel at the Project were well assigned to the Project (Annex 9), although there was difficulty in assignment of counterpart personnel in the initial stage of the Project.

(3) Allocation of budget

Sri Lankan side allocated Rs.27,488,000 for the operational cost from 1994 to 1998 (Annex 10).

(4) Supply and replacement of machinery and equipment

The machinery and equipment provided by Japan International Cooperation Agency (hereinafter referred to as "JICA") during the project period have been used efficiently and maintained properly, thus they are in good condition at present (Annex 11). A synthesis meteorological monitoring system and evaporation measuring apparatus were installed in two Agriculture Research Centers to collect and send data to the Project; they are used effectively and maintained properly.

5-2. PROJECT ACTIVITIES AND ACCOMPLISHMENTS

5-2-1 Improvement of Crop Production System on Intercropping in Coconut Fields

(1) Improvement of cultivation technology (crop adaptability etc.)

In the first stage of the Project, basic study and review were conducted on the cultivation practice of farmers, and it became clear that main intercrops in Coconut fields were fruits, spices and yams. Also soil condition in the area was studied and it turned to be acid gravel (pH 5.0) with low ability to keep moisture.

With the results of these study and review, trial subjects were chosen, such as

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improvement of soil condition, improvement of Cocoyam cultivation techniques, vegetable cultivation techniques etc., and were implemented at the Trial Farm to develop cultivation techniques for intercropping in Coconut fields.

As a result, application of dolomite and coir dust were identified as an effective method to improve soil and seed selection method of Cocoyam was improved. Cocoyam was damaged by soil-born diseases, but the pathogen was identified through the project activities and the disease became able to be controlled by a fungicide. Vegetable nursery techniques (sterilization of nursery bed soil and coir dust application), fertilizer application techniques, pest control techniques (using mesh bags to prevent fruit fly's attack) were also improved.

(2) Introduction trials of suitable crops and varieties

Through the survey on cultivation of the area and marketing, Okra, Chili, Maize, Egg-plant, Gourds, Banana, Pineapple, Passion fruit, Cocoyam, Yam and Ginger were listed as adaptable crops and varieties. At the Trail Farm, Okra, Chili, Maize, Egg-plant, Gourds, Cocoyam, and Ginger were tried. As a result, Okra and Chili were identified to be adaptable among the vegetable crops for intercropping in Coconut fields.

(3) Improvement of cropping system of economic crops

Through the research of the market, it was clarified that the market price of agricultural products in Colombo and Gampaha varies widely depends on season. This result was applied to the cropping system of farmers through the extension activities using cropping calender which was built up by counterparts. Marketing survey also revealed that crops that could be used for both local and foreign market are more economical and profitable.

At the Trial Farm, combined cultivation of Banana and Pineapple was identified as suitable economical intercropping in Coconut fields, and vegetable cultivation system was improved by introducing potted seedlings.

(4) Improvement of water management technology

Through the study and review of farmers' water management, it was found that mainly

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they use simple equipment such as pot or bucket. Also farmers' wells were surveyed and water level of wells throughout a year were clarified.

In purpose of collecting and analyzing basic meteorological data for water management and cultivation, meteorological equipment was provided. Weather patterns were understood by comparing the data to other data from the Department of Meteorology and others and water management was improved. In addition, meteorological data of the project site is sent to the Department of Meteorology as reference data.

There had been a shortage of water at the project site, but it was solved by supplying water from Mahaoya River to the site during the dry season.

A perforated pipe irrigation system was used for saving water. Well water storage in tanks and delivery through a pipe system was introduced to group farmers to improve watering system. Water pumps were rented to farmers through production groups.

Terracing sloped land and adaption of soil / water conservation methods and mulching techniques were verified and demonstrated for group farmers.

(5) Demonstration of crop production system at Verification Plot

Cultivation of Pineapple, Banana, Ginger, Yam and Turmeric were demonstrated. Water saving irrigation techniques and application of power tillers were effective. A three-year crop rotation system using Okra, Chili and Bushita had difficulty maintaining stable production under the Coconut, because of rain, pests and diseases.

5-2-2 Improvement of Agricultural Extension Method

(1) Introduction of "the bottom-up extension method"

Five self-motivated production groups consisted of 75 farmers were organized by the Project in Maha 1995/96. The agricultural extension situation and problems in these production groups were clarified through the project activities. Based on the result of this survey, agricultural extension plan was improved and applied to these production groups.

The leaders of the production groups have been trained through the training courses and extension activities conducted by the project at the self-motivated production farm. The guidelines for organizing production groups have also developed.

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The capabilities of counterpart personnel have been improved, and they are preparing the extension plans by themselves.

(2) Promotion of self-motivated production groups in model areas

There are 13 production groups consisted of 126 members organized (March 1999), and they are continuing group farming. One of the groups has established an agricultural company. In particular, the groups' management of Banana production has improved significantly since the beginning of the Project.

(3) Demonstration of effective extension methods

The positive activities of the self-motivated production groups have become a good model for other farmers.

Since Maha1997/98, the subsidy of production materials has stopped in principle and the revolving funds have been established as a loan to the members for expansion of farm management. The total amount from 13 groups had reached Rs 1,323,126 as of March 1999. This system has been in good use.

In the initial stage of the Project, each production group holds demonstration farm for extending their activities to neighbors. However, individual farm which have good performance have filled a role of demonstration farms in a late of the project period. Furthermore, the special program to encourage commercial scale farming was implemented, and this program showed good results for the farmers.

(4) Evaluation of extension activities

Agriculture Instructors (hereinafter referred to as "Als")' have held mothly meeting to evaluate their extension activities using the records of teaching and group fund, and monthly and annual reports.

As the result, Als' relationship with each other have been enhanced as to share information and problems and their activities were improved.

5-2-3 Development of Training Materials

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(1) Development and preparation of training materials necessary for training and extension work

Existing training materials in Sri Lanka gave only an outline of the cultivation methods. Through the observation in Trial Farm, Verification Plot and individual farms, counterparts and AIs realized that these materials were not able to use in the actual farm levels.

Therefore, the Project prepared improved training procedure and training materials such as audio-visual aids (Annex 12). In addition, counterparts were trained in video production techniques .

The introduced video was completed in English and Sinhala editions, and 10 copies were distributed to the related organizations at home and abroad. Furthermore, guidelines on fostering production groups were formulated by the AIs.

5-2-4 Implementation of Training

(1) Training on the improved extension method for extension personnel and village officers

Detailed activities of AIs were investigated and analyzed. Based on this result, training for counterparts and AIs in the demonstration farm was conducted, and their capabilities have been improved.

Joint training was regularly held based on "On-the-job training" to AIs and farmers on cultivation, water management, group management and group funds. It had a synergistic effect with counterparts, AIs and farmers to improve their skills.

Study trips for farmers were organized to visit each groups' farm and government institutions.

(2) Training on the crop production technology and water management technology for AIs and the production groups

12 intensive seminars were held by Japanese experts. Field training for AIs and the production groups has opened, and workers from other departments who have interest in this training have also participated. This training was implemented according to their needs as well as the project needs.

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6.RESULT OF EVALUATION

6-1 EFFECTIVENESS

(1) Achievement Degree of Project Purposes

It was confirmed that effective farmland use and crop diversification have been achieved. An area of farms which was planted with semi-perennial crops such as Banana, Pineapple, Papaya and Passion fruit on the unutilized area of Coconut field has expanded in the Gampaha district since 1998.

There were 13 self-motivated production groups of 126 farmers established as of March 1999. The financial condition of these groups has been improved through the introduction of intercrops. Each group implement activities such as group-fund establishment, cooperative work for cultivation and joint marketing of products. Most of the farmers have improved their financial condition. In addition, one group has expanded their businesses investing their own capital.

The number of farmers who wish to establish a production group has also increased. This indicates that farmers are impressed with the results of the existing groups.

(2) Achievement Degree of Output

1) Crop production technology of intercropping in the Coconut cultivation is improved

This objective is achieved if the unit profit of a Coconut field increased through the introduction of appropriate crops for intercropping.

On the trial introduction for intercropping of vegetables, most of its yield decreased, because of the shady conditions in the Coconut field. It was also observed that Cocoyam had a fungus disease problem but it was overcome by identifying of Pythium and recommending suitable fungicide. The suitable land terrain for Cocoyam cultivation is also identified.

Therefore, semi-perennial crops have been introduced for intercropping in the Coconut field since Maha of 1997/98. Other minor export crops (Betel, Pepper and Ginger)

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and some vegetable (Okra and Chili) were also introduced. The counterparts prepared practical cultivation directions for the main crops that were introduced by the Project.

In connection with the water management techniques improved, several activities were implemented, such as development of a water supply system for the Verification Plot and its demonstration, and investigation of irrigation methods in the Trial Farm. The practicability of perforated pipe irrigation system and effectiveness of mulch-cultivation methods using straw were verified through these activities, and these methods were disseminated at the farm level.

In connection with the self-motivated production groups, water management methods in the dry season and water utilization methods adapted to local conditions were disseminated. In addition, construction methods of simple terraces were introduced into the field to prevent soil erosion during the rainy season.

As a result of improved cultivation and water management techniques, semi-perennial crops have been continuously harvested since July 1998. A profit of Rs. 10,000 was gained from the sales of Banana and sucker as a result of the experiment that was implemented in the Verification Plot in 1998.

It follows from these that the objective of improving crop production technology was achieved in the project period.

2) Agricultural extension methods are improved by organizing production groups and setting up model demonstration plots in the model areas

This objective is achieved if farmers are organized into production groups and introduce an intercropping system independently through the extension activities.

The bottom-up extension method was introduced for the extension activities. A special program was also introduced through the cultivation guidance for production groups. The purpose of this special program is that each group selects their own crop species for intercropping. The autonomy of the production groups was enhanced through this special program.

The workshop for fostering production groups was held mainly by counterparts and

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Als. Based on the results of this workshop, counterparts, Als and other line extension staff prepared the guideline for fostering production groups to promote better understanding of the extension activities.

Five of 13 production groups that were organized in Maha in 1995/96 did not understand the objective of the grouping in the initial stage of the Project. However, the other eight groups were organized independently to improve farm management through the group activities. The intercropping systems developed by the Project were introduced into these groups through the extension activities. As a result of these activities, intercrops were introduced into 126 farms that have the total of 259.25 acres of farmland by March 1999.

Most of the farmers have recognized the advantages of intercropping, and improved their farm management. One Coconut farm which introduced Banana as intercrops gained a profit of Rs. 26,390/quarter-acre/crop-season. The increases in production value were reported not only for Banana, but also for other intercrops such as Papaya and Betel leaf at the general meeting of production groups.

These groups established a group fund for purchasing the necessary materials. This fund was utilized effectively with the exception of some groups, and the total amount from 13 groups reached Rs. 1,323,125.91 in March 1999.

Therefore, it is considered that extension methods for organizing a production group and introducing an intercropping system were established during the Project period.

3) Training materials on the extension methods and crop production technology for extension staff are developed

This objective is to develop guidelines and materials for extension activities.

Extension materials such as videos, guidelines and manuals were prepared based on the results of the Trial Farm and demonstration in the Verification Plot. Moreover, cultivation calendars for main crops will be prepared at the end of the project period. Therefore, it is believed that development and preparation of extension materials have been nearly achieved.

4) Technical level of the extension staff is improved through the training

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This objective is to improve the technical level of AIs and leaders of production groups through the training on extension methods and guidance in cultivation techniques.

Trainings were carried out 45 times during the project period (Annex 13). Participatory training on crop species and technical contents were carried out for self-motivated production groups. The improved techniques spread rapidly. In addition, study trips for farmers to visit governmental institutions were also carried out. All ten production groups (95 farmers) attended the study trips in August 1998.

The monthly guidance for AIs were carried out focusing on technical subjects requiring urgent measures such as cultivation of Ginger and Cocoyam. In addition, other technical guidance on each crop consisting of lectures and activities were conducted monthly.

It was recognized that the AIs gained a better understanding of existing problems through attendance of the seminars with the farmers.

6-2 PROJECT IMPACT

6-2-1 IMPACT

(1) Technical Impact

Most of the counterparts improved their technical and observational capabilities through the project activities. The lectures conducted by the counterparts for AIs and farmers became more practical. The counterparts was able to cope with the problems in the field.

The skills of permanent and temporarily workers improved remarkably. This is expected to have ripple effect in the future.

(2) Institutional impact

Generally, the AIs managed 6,000 farms per instructor, and their instruction system was not suitable for improving farm management. By introducing the group system and

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special program through the Project, appropriate instruction for actual farm management was formulated.

District Agriculture Training Centre (hereinafter referred to as "DATC") Ambepussa was strengthened by utilizing the extension materials and other equipment of the Project.

(3) Economic impact

The financial condition of the self-motivated production groups improved through the establishment of the group funds. Because of this improvement, utilization of other funding systems was also available. In addition, one group established a private company and spread farm management aggressively.

(4) Social and cultural impact

Farmers who usually prefer to work individually became to recognize the profitability of the group activities, such as joint shipment of the product, joint purchase of the materials and management of group fund.

(5) Environmental impact

The farmers recognized the importance of effective utilization of water, and hence the water requirements of agriculture water and daily use were balanced. As a result, the living conditions of the farmers improved.

6-3 EFFICIENCY

6-3-1 TIMING OF INPUT

(1) Japanese side

Most of the inputs, such as dispatch of experts and provision of machinery and equipment, were carried out on schedule since July 1994. As for training, 21 counterparts participated, and an additional counterparts will participate in training on schedule in Japan.

The dispatch of experts was carried out effectively through the field adjustment in

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accordance with the progress of the Project. The necessary equipment was also provided, although some equipment was dispatched behind the schedule.

(2) Sri Lankan side

Three of 19 model plots of the DATC Ambepussa were used as Trial Farm in the Project. In addition, a Verification Plot was prepared in nearby DATC.

The Sri Lankan side had planned to build/renovate a lecture hall and dormitory in the initial stage of the Project. However, the dormitory was constructed in October 1998, and the lecture hall is still under construction. The delay in construction caused insufficient pre-conditions, and had an influence on the Project activities.

15 counterparts have been assigned, and eight of the 15 were full time counterparts since May 1997.

6-3-2 RELATION BETWEEN INPUT AND OUTPUT

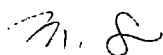
In the initial stage of the Project, a large amount of time was spent for adjusting the management of extension activities due to a lack of common understanding of the bottom-up extension method. Thus, the project activities did not get under way until the third year of the Project. All of the provided equipment has been utilized efficiently and is well maintained since the activities started along the right lines.

Because of the shady condition in the Coconut field, many vegetables turned to be unsuitable species for the intercropping. However, several crops such as Okra and Ginger were selected for intercropping based on the experiment in Verification Plot.

Considering all these, it is confirmed that most of the input were converted efficiently into the output.

6-4 RELEVANCE

6-4-1 OVERALL GOAL



The overall goal of the Project is to improve the financial situation of the farmer. This overall goal follows the objectives of the Investment Program. On other hand, the Government of Sri Lanka prepared the Investment Program 1997-2001. Major objectives of the new policy framework in agriculture are the improvement of agricultural productivity, raising farm incomes, and ensuring a continued supply of food at affordable prices.

6-4-2 PROJECT PURPOSE

Due to high population density and limited land, there is no room for new land development in the Gampaha District. Therefore, effective farmland use and crop diversification are essential subjects for increasing agricultural production and farmers income.

The Project plans to increase the farmers' income through the introduction of inter-crop and minor export crops in the Coconut fields which occupy 75% of the farmland in the Gampaha District. The achievement of the project purpose will contribute to the realization of the overall goal.

Als of the Department of Agriculture of the Western Province, the implementing agency of the Project, manages about 6,000 farms per Al. Therefore, subjects should concern not only crop diversification, but also effective extension methods. Accordingly, the project purpose fits the needs of the implementing agency.

6-4-3 PROJECT DESIGN

In consideration of logic and rationality of the project design, causal relationship is recognized between input and output. The intercropping system was developed and expanded through the project activities. All output also positively contributed to the realization of the project purpose.

6-5 PROSPECTS FOR SUSTAINABILITY

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6-5-1 PROSPECTS FOR SUSTAINABILITY

(1) Implementing agency

There are two implementing agencies of the Project; one is the Integrated Rural Development Project (hereinafter referred to as "IRDP") under the direct control of the central government, and the other is the Department of Agriculture of the Western Province under the provincial government.

The Regional Development Division of the Ministry of Plan implementation and Parliamentary Affairs is the agency responsible for implementation of IRDP. The Director of Gampaha IRDP is the person responsible for implementation of the Project.

Gampaha IRDP is the most suitable implementing agency for the Project. However, Gampaha IRDP is closing within one to two years, and the Department of Agriculture of the Western Province is taking over the project activities.

(2) Operation and management system of this Project

The project will be re-established as the Agricultural Extension Improvement Centre (hereinafter referred to as "AEIC") on July 1, 1999. This centre will be managed by the Department of Agriculture of the Western Province.

In order to implement the activities effectively, the Department of Agriculture of the Western Province has prepared the activity plan of AEIC.

6-5-2 PROSPECTS FOR FINANCIAL SUSTAINABILITY

(1) Necessary expenses

The Western Provincial Council is managing budget allocation.

(2) Stable public assistance

A total amount of Rs 1,135,000 is in the provincial budget for the year of 1999 (since 1 July).

(3) Expenses collection through a self-fund

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The group fund established in production groups will be managed as a revolving fund. It is expected that the production groups will utilize this fund for production activities.

6-5-3 PROSPECTS FOR PHYSICAL AND TECHNOLOGICAL SUSTAINABILITY

(1) Contents of technical transfer and appropriateness of a technical level

The counterparts have acquired analytical and measurement techniques which were used in the activities. The counterparts have also acquired basic techniques for water management. However, the practical application of water management techniques on the farm level is a future subject.

The bottom-up extension method and On-the-Job-Training introduced in the extension activities are difficult to adopt in the social and cultural conditions of Sri Lanka. However, the counterparts and AIs realized the importance of these methods. They prepared a guideline on fostering the production group and a crop cultivation calendar by themselves based on this experience.

It seems that the technical level and contents introduced are at appropriate and acceptable levels for the counterparts.

(2) Stability of transferred techniques

The developed cropping system was realized, and extended by the counterparts. Eight of the full time counterparts assigned on the Project are being transferred to AEIC, and they will continue their activities.

On the other hand, production groups are familiar with the cultivation and management techniques. It is expected that these groups would expand their activities based on the improved cultivation techniques of intercropping.

(3) Development of successors

All of the full time counterparts assigned to the Project will be transferred to the AEIC from July 1999.

The Team suggested that the staff-training program should be added to the Activity.

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Plans of the AEIC, and it should have the counterparts lead the other staff members.

Besides the daily activities, a technical exchange program with the Bohol Integrated Agricultural Promotion Centre in the Philippines was carried out in August 1998. It is expected that this kind of activity will also be continued.

7. CONCLUSIONS AND RECOMMENDATIONS

7-1 SUMMARY OF EVALUATION

The Team discussed and evaluated the efficiency, effectiveness, impact, relevance and sustainability of the Project. Through careful studies and discussions, the Team concluded that the Project would achieve its purpose during the project period. The Project accomplished the major activities laid out in the R/D and TSI, and it is expected that most of the remaining activities will be completed at the end of the project period on June 30, 1999.

The Team concluded that the Project would be closed on June 30, 1999 according to schedule. The Team hopes Sri Lankan Authorities will maintain develop and extend the transferred technologies.

7-2 RECOMMENDATIONS

The Team suggested the following items in order to succeed the Project to appropriate Sri Lankan Authorities.

(1) Future Activity Plan for AEIC

The Team recommended that Sri Lankan Government promote the crop diversification through the activities of AEIC.

In order to implement these activities smoothly, enough number of AIs and staff should be assigned to the AEIC and counterparts of the Project should be assigned to the same section as they are now for continuous extension activities to expand the results of the Project throughout the Gampaha District.

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In 1999. Rs 1,135,000 have been allocated for the annual budget (from July 1999 to December 1999) to the Centre. It is considered that the extension improvement activities can be continued with that budget, but there should be budget allocation for maintenance of the machinery and equipment provided by JICA during the project period.

The Team also recommended that the Government of Sri Lanka should allocate the appropriate amount of budget for AEIC on and after 2000.

(2) Management of the provided equipment

Most of the equipment provided by the Project will be transferred to the AEIC Ambepussa, except some equipment that were installed in other agencies. The Team confirmed that the Western Provincial Council will be responsible for maintaining and managing these equipment appropriately.

(3) Fostering the production groups

The production groups, which were organized through the project activities, continue their activities such as group-fund management. The Team recommended that the Government of Sri Lanka should monitor the activities of these production groups continuously, and guide them appropriately.

The Team also recommended that Government of Sri Lanka should take appropriate measures to promote group activities such as providing financial scheme

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Annex

- 1 Member List of Japanese Evaluation Team
- 2 Member List of Sri Lankan Evaluation Team
- 3 Schedule of the Evaluation
- 4 Project Design Matrix
- 5 List of Long-Term Japanese Experts
- 6 List of Short-Term Japanese Experts
- 7 List of Counterparts Accepted for the Technical Training in Japan
- 8 List of Supplementary Funds to Cover Local Cost by Japanese Government
- 9 List of Sri Lankan Counterparts and Other Personnel Assigned
- 10 Budget Allocation by Sri Lankan Government
- 11 List of machinery and equipment provided
- 12 List of Training Material Developed by the Project
- 13 List of training course and participants
- 14 Organization Chart

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Annex1 Member List of Japanese Evaluation Team

Japanese Evaluation Team

Name	Designation & Institute
Masamichi SHINADA	Managing Director, Japan Agriculture, Forestry and Fisheries Promotion Association
Yutaka ISHIBA	Senior Technical Officer, Technical Cooperation Division, Economic Affairs Bureau, Ministry of Agriculture, Forestry and Fisheries
Atsushi TANAKA	Educational Advisor, National Farmers Academy, Ministry of Agriculture, Forestry and Fisheries
Hiroshi TOTTORI	Staff of International Exchange Programs, Extension and Education Division, Agricultural Production Bureau, Ministry of Agriculture, Forestry and Fisheries
Shigeru KOBAYASHI	Staff, Fisheries / Environmental Department, System Science Consultants INC.
Naoko OKA	Staff, Agricultural Technical Cooperation Division, Agricultural Development Cooperation Department, JICA

Annex2 Member List of Sri Lankan Evaluation Team

Sri - Lankan Evaluation Team

Name	Designation & Institute
Mr.Bedgar Perera	Director, Agriculture Development Ministry of Agriculture & Lands
Mrs.Chintha Chethiyawardene	Deputy Director,Regional Development Division, Ministry of Plan Implementation &Parliamentary Affairs
Mr.H.M.Dayananda	Assistant Secretary, Ministry of Agriculture Western Provincial Council
Mr. D.G.Samarasinghe	Deputy Director, National Planning Department
Mr.R.D.A.Ranasinghe	Assistant Director, External Resources Department
Dr.H.A.J.Gunathilake	Senior Agronomist, Coconut Research Institute

Annex3 Schedule of the Evaluation

Schedule of the evaluation

	DATE		SCHEDULE
1	Apr.19	Mon	Japanese Evaluation team leave Japan to Sri Lanka
2	Apr.20	Tue	Japanese Evaluation team visit External Resources Department, Regional Development Division / Ministry of Plan Implementation and Parliamentary Affairs, Western Provincial Council
3	Apr.21	Wed	Field Survey to Gampaha District
4	Apr.22	Thu	Joint Evaluation (presentation of the Project)
5	Apr.23	Fri	Joint Evaluation (discussion on the project activities)
6	Apr.24	Sat	-
7	Apr.25	Sun	-
8	Apr.26	Mon	Joint Evaluation Team make the Evaluation Report
9	Apr.27	Tue	Joint Coordinating Committee, Signing the Minute of Understandings of Joint Evaluation Report
10	Apr.28	Wed	Japanese Evaluation team leave Sri Lanka to Japan
11	Apr.29	Thu	Japanese Evaluation team arrive in Japan

Annex4 Project Design Matrix

Project Design Matrix of the Agricultural Extension Improvement Project in Gampaha (1/2)

Project title : The Agricultural Extension Improvement Project in Gampaha

Duration : July 1, 1994 to June 30, 1999

Project area : Gampaha District, Democratic Socialist Republic of Sri Lanka

Target Group : Farmers in Gampaha District

Prepared by JICA Evaluation Team on April 16, 1999

Narrative Summary	Objectively Verifiable Indicators	Achievements	Important Assumption
<p>【Overall Goal】 Agricultural productivity and farmer's income are increased through the agricultural diversification.</p>	<ul style="list-style-type: none"> • Production value from coconut field in Gampaha District become higher than it before the Project. 		<ul style="list-style-type: none"> • The agricultural development policy of the Sri Lankan Government remains unchanged.
<p>【Project Purpose】 An effective farmland use and crop diversification are achieved in the coconut field in Gampaha District.</p>	<ul style="list-style-type: none"> • Farmers start to introduce intercrops independently. • Introduction system for intercrop is established through the organization of production groups. 	<ul style="list-style-type: none"> • Farmer's income is increased through the introduction of intercrop such as Banana and Pineapple. As the result, the number of farmers who wish to introduce intercrops or establish production group has increased through the results of the existing groups. • The production groups run the group funds. Total amount of the funds of 13 groups reached to Rs. 1,323,126. 	<ul style="list-style-type: none"> • The activities of the Project are continued by Agricultural Dissemination and Improvement Center. • The farmers are not transferred to other industries.
<p>【Output】</p> <ol style="list-style-type: none"> 1 Crop production technology of intercropping in the coconut cultivation is improved. 2 Agricultural extension methods is improved by organizing production groups and setting up model demonstration plots in the model areas 3 Training materials on the extension methods and crop production technology for extension staff are developed. 4 Technical level of the extension staff is improved through the training. 	<ol style="list-style-type: none"> 1 Productivity of unit farm area is increased through the introducing of intercropping. 2 Farmers organize production groups and introduce intercropping system independently through the dissemination activities. 3 Manuals, guidelines and materials for training are prepared in the each fields. 4 Technical level of C/P is improved to prepare the manuals and guidelines by themselves. 	<ol style="list-style-type: none"> 1 Rs 26,390 and Rs 17,700 are able to be gained annually from a quarter-acre of Banana planting and Pineapple planting respectively. 2-1 13 production groups (126 members) were organized during the Project period. 2-2 As the result of interview survey, 95% of farmers participated in the Project recognized the profitability of the production group. 3 Videos, manuals and guidelines were prepared, and were distributed to related agencies. 4 C/P prepared "Guideline on fostering production group" by themselves 	<ul style="list-style-type: none"> • Water resources are developed for introducing intercrop. • Farmers are able to enter to direct marketing.

Project Design Matrix of the Agricultural Extension Improvement Project in Gampaha (2/2)

Narrative Summary	Input		Important Assumption
【Activities】	Japanese side		
1-1 Improvement of cultivation technology (crop adaptability, etc.).	1) Dispatch of Experts	1) Counterparts	<ul style="list-style-type: none"> • Trained counterparts continue working for IRDP.
1-2 Introduction trials of suitable crops and varieties.	-Long Term Experts 340.37M/M	①Project Director	
1-3 Improvement of cropping system of economic crops.	①Team Leader	②Project Coordinator	
1-4 Improvement of water management technology.	②Coordinator	③Project Deputy Director	
1-5 Demonstration of crop production system at verification plot.	③Agricultural extension	④Project Manager	
2-1 Introduction of "the bottom-up extension method".	④Upland crop cultivation (Vegetable)	⑤Agricultural extension	
2-2 Promotion of self-motivated production groups in model areas.	⑤Upland crop cultivation (Other crops)	⑥Training and development of training materials	
2-3 Demonstration of the effective extension method.	⑥Water management	⑦Upland crop cultivation (Vegetable)	
2-4 Evaluation of extension activities.	⑦Cultivation	⑧Upland crop cultivation (Other crops)	
3-1 Development and preparation of training materials necessary for the training and extension work.	-Short Term Experts 10 subjects, 34.93MM	⑨Water management	
4-1 Training on the improved extension method for extension personnel and village officers.	2) Donate Implement & Others (X1,000)	⑩Administrative personnel, Counterpart personnel for each field of short-term experts, and other necessary supporting staff	<ul style="list-style-type: none"> • Project operation committee is organized.
4-2 Training on the crop production technology and water management technology for extension personnel and the production groups.	JY 73,149	2) Land, buildings and plots	<ul style="list-style-type: none"> • Lecture hall and dormitory are build/renovated.
	Rs 33,566	- District Training Center at Ambepussa and IRDP office at Gampaha.	<ul style="list-style-type: none"> • Farmers in the Project area do not oppose the Project.
	- Equipment	- Upland model farm, Ambepussa	
	Purchased in Japan JY 73,149	- The verification plot nearby DTC, Ambepussa	
	Purchased in Sri Lanka Rs4,378	- Village model demonstration plots in model area	
	- Model infrastructure Rs 15,200	- Other land, building and facilities necessary for the implementation of the Project	
	- Local running cost Rs 9,288		
	- Enlightenment and extension Rs 4,700		
	3) Overseas Training 21 staffs, 34.93MM		
		3) Financial Inputs (x 1,000)	
		Rs. 27,487	
		- Local running cost by IDRPRs. 26,629	
		- Local running cost by Western Province Rs. 858	

Annex5 List of Long-Term Japanese Experts

Long term Expert

Name	Field	Period	Occupation
Osamu TAKAHASHI	Team Leader	'94.7.2~'97.7.13	—
Yasumasa OIZUMI	Coordinator	'94.7.11~'97.2.28	—
Hiroshi NISHINO	Up land crop cultivation (Vegetable)	'94.9.1~'97.8.31	—
Teruhiko NIBE	Up land crop cultivation (Other Crop)	'94.7.1~'96.7.1	—
Itsuro TSURUKI	Water Management	'94.7.2~'95.10.31	JALDA
Takashi HANEBUCHI	Agricultural extension	'94.7.2~'96.7.1	—
Yoshihiro YASUNOBU	Team Leader	'97.6.15~'99.6.30	—
Emi OTA	Coordinator	'97.2.1~'99.6.30	Associate Specialist of JICA
Hiroshi ONO	Up land crop cultivation	'96.6.21~'99.6.30	Japan International Cooperation System
Fumito DAIMARU	Agricultural extension (Production group)	'96.6.21~'99.6.30	Overseas Mercantile Inspection Company
Yuzo ISHIKAWA	Water Management	'97.2.1~'99.6.30	AKITECHNOS Co.
Saneyuki OKUDA	Agricultural extension (Training)	'98.1.16~'99.6.30	—

Annex6 List of Short-Term Japanese Experts

Short Term Expert

Name	Field	Period	Earlier Institute
Hiromi TOKUDA	Sosio-Economics in Agr.	'95.3.23~'95.6.22	Hokkaido Prefecture
Yukiyasu TANI	Agricultural Marketing	'95.4.9~'95.7.	Tokushima Prefecture
Yasuchika NISHIJIMA	Construction Management	'95.7.17~'95.8.15	Raymond Design
Noriyuki KOIKE	Construction Management	'95.8.25~'96.3.31	Raymond Design
Toshio HIRATSUKA	Training Plan	'94.11.21~'95.5.18	Without a designation
Sousuke HAGA	Training Plan	'96.1.9~'96.4.8	Without a designation
Kiyotsugu HASHIMOTO	Experiment Table Setting	'96.9.10~'96.9.24	DALTON Co.
Masanori KASAI	Disease Control	'96.9.29~'96.12.29	Niigata Prefecture
Tomoe ONO	Soil Structure	'97.3.1~'97.5.30	Without a designation
Yasuhiro TAKASHINA	Training Material	'97.5.13~'97.7.31	Japan International Cooperation System
Shinngo YONEYAMA	Soil Borne Disease	'98.8.31~'98.9.27	Without a designation
Masaharu TAKAO	Farming Management	'98.9.17~'98.11.17	Saga Prefecture

Annex7 List of Counterparts Accepted for the Technical Training in Japan

Counterparts accepted for the technical training in Japan

Name	Term	Special Disignation	Subject of training	Former Disignation	Date of redisignation and Present Disignation
J.Karunaratna	'94.1.5~1.25	Project Director	General Agriculture	IRDP Director	'95.1 Senior Assistant Secretary Ministry of Power and Energy
S.Ferdinandez	'94.1.5~1.25	Coordinator	General Agriculture	Deputy Secretary of W.P	'95.1 Director General Urban Development Ausrity
N.Gunawardana	'94.1.5~1.25	Project Manager	General Agriculture	Acting Director of Agricuture Department W.P.	'97.5 Deputy Provincial director of Agriculture Department
L.Somawardana	'95.5.23~8.6	Extiension	Agricultural Extension	Assistant Provincial director of Agriculture	same as former
W.Thilakaratna	'95.7.24~11.3	Water Management	Water Management	Agriculture Instructor	same as former
Wickramatilaka	'95.8.28~11.17	Crop	Vegetable Cultivation	Agriculture instructor	same as former
S.Jayakody	'95.10.4~12.21	Crop	Crop Cultivation	Agriculture Instructor	same as former
S.A.Prematilaka	'96.9.24~10.31	Extension	Agricultural Extension	Agriculture Instructor	same as former
R.M.C.Siriwardana	'96.9.24~10.31	Extension	Agricultural Extension	Agriculture Instructor	same as former
W.P.R.kumarihamy	'96.9.24~10.31	Extension	Agricultural Extension	Agriculture Instructor	same as former
G.V.S.Perera	'96.3.14~4.4	Coordinator	General Agriculture	Deputy Secretary of W.P	'98.6 U.S.A
M.Boodipaksa	'97.9.17~10.22	Extension	Agricultural Extension	Agriculture Instructor	same as former
S.Wijayasekara	'97.9.17~10.22	Extension	Agricultural Extension	Agriculture Instructor	same as former
N.Amarasekara	'97.9.17~10.22	Extension	Agricultural Extension	Agriculture Instructor	same as former
B.A.C.Somawardena	'97.9.17~10.22	Administration	Agricultural Extension	IRDP Deputy Project director	same as former
Jayawardena	'97.11.4~11.26	Administration	General Agriculture	Secretary Ministry of Agricurature W.P	same as former

Name	Term	Special Disignation	Subject of training	Former Disignation	Date of redesignation and Present Disignation
H.S.A.P.Pieris	'97.3.17~4.17	Extension	General Agriculture	Assistant Provincial Director of Agriculture W.P	same as former
K.U.M.Champika	'98.8.25~12.9	Extension	Agricultural Management	Development Assistant of IRDP	same as former
K.Ratnayaka	'98.8.25~12.9	Crop	Analysis and Fruits Cultivation	Development Assistant of IRDP	same as former
M.R.Perera	'98.9.8~12.9	Crop	Crop Cultivation	Agriculture Instructor	same as former
W.L.Siriwardena	'98.11.4~11.29	Project Director	General Agriculture	IRDP Director	same as former
Dr.T.T.Ranasingha	'99.5~	Project Manager	General Agriculture	Director of Agriculture Department W.P.	same as former

Annex8 List of Supplementary Funds to Cover Local Cost by Japanese Government

Supplementary funds to cover local costs

Extension & Enlightenment

Rs

	1st quarter	2nd quarter	3rd quarter	4th quarter	Amount
1995	37,818.50	82,237.24	827,496.32	211,922.94	1,159,475
1996	467,283.90	159,683	282,064.19	891,18.91	909,031.09
1997	348,295.75	544,502.65	237,161.30	320,040.30	1,450,000
1998	347,296.50	278,419.05	466,332.20	422,952.25	1,515,000

Technical Exchange Program

1998	Rs 925,929
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General Local Cost

Rs

	1st quarter	2nd quarter	3rd quarter	4th quarter	Amount
1994		790,961.55	683,734.67	828,561.29	2,303,257.51
1995	1,098,753.04	44,296.35	540,332.95	923,956.93	2,607,339.27
1996	1,267,850.52	940,689.59	752,101.69	1,119,627.87	4,080,269.67
1997	609,151.74	706,161.17	702,457.84	582,229.25	2,600,000
1998	479,921.13	478,761.65	473,259.72	658,057.50	2,090,000

Infrastructure

1994 Office, Training rooms, Work shop Rs 15,200,000

Annex9 List of Sri Lankan Counterparts and Other Personnel Assigned

Sri Lankan counterparts and other personnel assigned

Name, Designation and Working pattern	Special designation	Period of Training	Coordinating expert	Duration of work with AEIP
Mr.S.Amarasekara(RDD Director General)1	Project Director		Takahashi/Yasunobu	'94.7~'98.4
Mr.S.Rahubatta(RDD Director)1	Project Director		Yasunobu	'98.4~
Mr.J.A.M.Karunaratune(IRDP Director)1	Projct Deputy Director	'94.1.5~1.25	Takahashi	'94.7~'95.1
Mr.M.D.W.Ayiyawansa(IRDP Director)1	Projct Deputy Director		Takahashi	'95.1~'96.3
Mr.W.L.Siriwardena(IRDP Director)1	Projct Deputy Director	'98.11.4~11.29	Takahashi/Yasunobu	'96.4~
Mr.S.H.Ferdinandez(Deputy Secretary of W.P)1	Projct Coordinator	'94.1.5~1.25	Takahashi	'94.7~'95.1
Mr.G.V.S.Perera(Deputy Secretary of W.P)1	Projct Coordinator	'97.3.14~4.4	Takahashi/Yasunobu	'95.1~'98.6
Mr.Nandana K. Jayasiri (Deputy Secretary of W.P) 1	Projct Coordinator		Yasunobu	'98.6~
Mr.N.A.Gunawardana(Director of Agricurture Department W.P.)1	Project Manager	'94.1.5~1.25	Oizumi/Ota	'94.7~'97.5
Dr.T.Ranasingha(Director of Agricurture Department W.P.) 1	Project Manager	'99.5.7~5.29	Ota	'97.5~
Mr.B.A.C.Somawardena(IRDP Deputy Project Director)2	Administration	'97.9.17~10.22	Oizumi/Ota	'94.7~
Mr.L.M.Somawardena(Assistant Provincial director of Agriculture)2	Extension	'95.5.23~8.6	Hanebuchi/Daimaru	'94.7~
Mr.S.A.Prematilaka(Agriculture Instructor)3	Extension	'96.9.24~10.31	Hanebuchi/Daimaru	'94.7~
Ms.K.U.M.Champika(Development Assistant of IRDP)3	Extension	'98.8.25~12.9	Hanebuchi/Daimaru	'94.7~
Ms.A.P.Mangarika(Development Assistant of IRDP)3	Extension		Hanebuchi	'94.7~'96.5
Mr.H.S.A.P.Peris(Assistant Provincial Director of Agriculture,W.P)2	Extension	'98..25~12.9	Daimaru	'96.9~
Mr.K.W.S.Wickramatilaka(Agriculture Instructor)3	crop cultivation	'95.8.28~11.17	Nishino/Ono	'94.7~
Mr.R.J.K.N.Kularathna(Development Assistant of IRDP)3	crop cultivation		Nishino	'94.7~'96.3
Mr.S.Jayakody(Agriculture Instructor)3	crop cultivation	'95.10.4~12.21	Nibe/Ono	'94.7~

Name, Designation and Working pattern	Special designation	Period of Training	Coordinating expert	Duration of work with AEIP
Mr.B.K.K.Jayamewan(Agriculture Instructor)3	crop cultivation	'98.8.25~12.9	Nibe/Ono	'94.7~'95.8 '96.9~
Mr.R.M.W.K.Rathnayaka(Development Assistant of IRDP)3	crop cultivation		Nibe/Ono	'94.7~
Mr.R.K.K.Rathnayake(Development Assistant of IRDP)3	crop cultivation		Nibe	'95.4~'95.10
Ms.Ranjeni Perera(Agriculture Instructor)3	crop cultivation	'98.9.8~12.9	Nishino/Ono	'96.12~
Mr.W.M.Tilakaratna(Agriculture Instructor)3	Water Management	'95.7.24~11.3	Tsuruki/Isikawa	'94.7~
Mr.B.A.P.K.R.Bamuna Arachehi(Development Assistant of IRDP)3	Water Management		Tsuruki/Isikawa	'94.7~'97.5

*A Labor Manager and A Store Keeper were assigned.

*Working Pattern

- 1----Part time counterpart
- 2----Half time counterpart
- 3----Full time counterpart

Annex10 Budget Allocation by Sri Lankan Government

Budget allocation by Sri Lankan side(IRDP,Western Province)

		Rs				
Year		1994	1995	1996	1997	1998
Budget		510,000	5,700,000	5,833,000	1,406,190	2,755,000
Expenditure	Materials			23,750	1,785	
	Fertilizer and chemical		8,200	17,505	13,680	6,998
	Electricity		30,101.50	68,324	65,000	30,946.19
	Fee of Verification			16,016	16,590	18,045.50
	Allowance		13,902.01	182,441.71	185,600	230,983.75
	Fuel		50,565	131,254	149,000	204,931.70
	Maintenance of vehicle					114,460.99
	Insurance		50,718	101,973.09	97,798.46	96,538.59
	Tax			18,622,103.10	2,741,787.11	
	Renovation		289,810	700,000	993,950	1,343,079.11
	Labor Cost (from W.P)	7,278	134,040	199,228	290,235.00	227,330
	other		8,825			2,522
Amount			586161.51	20062594.9	4555425.57	2275835.83

Annex 11 List of machinery and equipment provided
Machinery and equipment provided(Over 500,000 Yen)

Year of order	Name of Equipment, Company	Quantity	Amount	Purchasing Place	Storing Situation	Using situation	Remark
94	RECORDER C645(Meteo)	2UNITS	1,400,000	J	A	A	
	SUSSHIN SENSORK37(Evapo)	3PCS	1,125,000	J	A	A	
	EVAPORATION D-211(Evapo)	3UNITS	2,011,800	J	A	A	
	MITSHUBISI PICK UP TRUCK	4UNITS	6,000,000	J	A	A	
	TENSIONMETER DIK-3100	36SETS	680,400	J	A	A	
	SUBARU IMPREZA STATION WAGON	2UNITS	2,400,000	J	A	A	
	SHADING NET NO.610	10ROLLS	670,000	J			Depreciation
	MICROSCORPE X2F-21	1SET	735,000	J	A	A	
	ACCESSORY	1SET	612,000	J	A	A	
	STEREO MICRO SCORPE SMZ-2T-2	1SET	637,700	J	A	A	
	CANON PLAIN PAPER COPIERS NP3020	2UNITS	Rs548,000	S	A	A	
	SUPERFAX COPY PRINTER 6700	1UNIT	Rs410,000	S	A	A	
IBM PERSONAL COMPUTER 350	3UNITS	Rs396,129	S	A	A		
95	MICROBUS NISSAN URVAN	1SET	2,030,000	J	A	A	
	Sprinkler	1SET	1,680,000	J	A	A	
	LABORATORY TABLE GA-315	3UNIT	1,170,000	J	A	A	
	LABLRATORY TABLE SIDE WT-126	12UNIT	2,280,000	J	A	A	
	CONTRUCTION PARTS FOR PIPE HOUS	1SET	4,800,000	J	A	A	
	TRENCHER KAWABE C-45LH,SPARE PAR	1SET	2,600,000	J	A	A	
	WORKING TABLE	6UNITS	600,000	J	A	A	

*Purchasing Place J--Japan S--Sri Lanka

Year of order	Name of Equipment, Company	Quantity	Amount	Purchasing Place	Storing Situation	Using situation	Remark
	EDITING RECORDER SR-S368E	2SETS	500,000	J	A	A	
	THERMOGRAPH,RECORDING 3-3146-05	10SETS	700,000	J	A	A	
96	SPECTROPHOTPMETER	1SET	1,078,000	J	A	A	
	FLAME PHOTPMETER	1SET	561,800	J	A	A	
	DAYLIGHT THEROMOSTAT SU-12	1PC	850,000	J	A	A	
	INCUBATOR SHAKER AT-12R	1PC	730,000	J	A	B	
	AGGREGATE ANALZER DIK-2000	1PC	600,000	J	A	A	
97	TATA Track	1UNIT	Rs872,000	S	A	A	

*Purchasing Place J--Japan S--Sri Lanka

Annex12 List of Training Material Developed by the Project
Activity result of training material

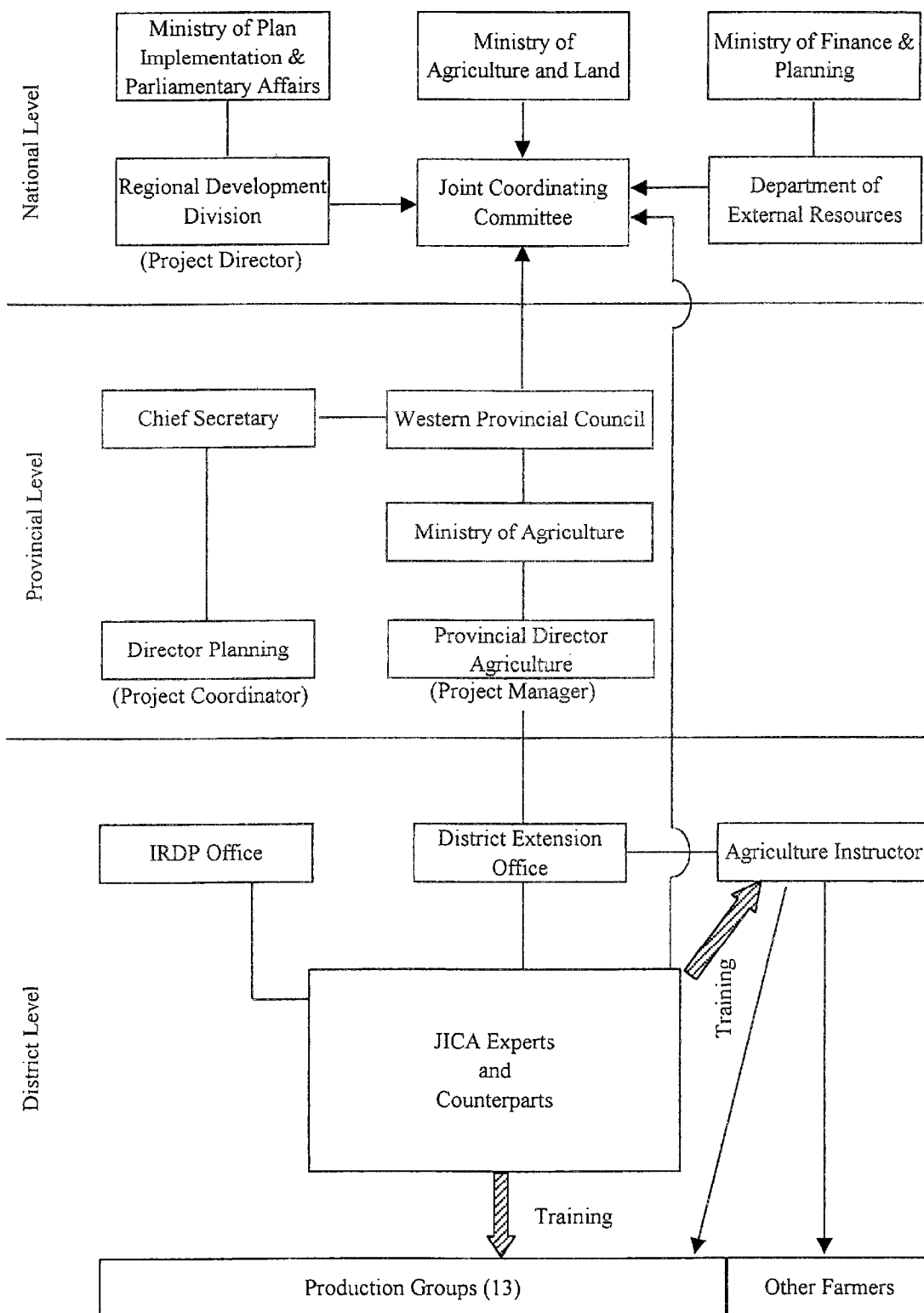
Year	Title	Section
1995	1. Set of slides on vegetable cultivation practices.	Vegetable
	2. Set of slides on marketing.	Other crop
	3. Hand out on well capacity -DATC farm	Water mgt.
	4. Set of slides on Banana root and stem weevil.	Extension
1996	5. Posters for general meetings.	Extension
	6. Preparation of group article	Extension
	7. Hand out on nursery preparation of Cocoyam	Other crop.
	8. Hand out on safety use of water pumps and sprayers.	Water mgt.
1997	9. Hand out on Compost making	Other crop.
	10. Hand out on Vegetable crop rotation plan and cropping map in verification farm.	Vegetable
	11. Hand out on Vegetable nursery preparation.	Vegetable
	12. Hand out on evaluation sheet for Cocoyam cultivation.	Other crop.
	13. Hand out on remarks on water management survey.	Water mgt.
	14. Hand out on Sweet potato cultivation.	Vegetable
	15. Hand out on desirable soil pH range for vegetable cultivation.	Vegetable
	16. Hand out on Simple heap method of compost making.	Other crop.
	17. Hand out on fertilizer application on chilli and capsicum.	Vegetable
	18. Hand out on Audio visual seminar work shop.	Extension.
	19. Hand out on basic operation of compact camera.	Extension
	20. Hand out on farmers self seed production manual.	Vegetable
	21. Hand out on book keeping.	Extension
	22. Hand out on Banana cultivation.	Other crop.
	23. Hand out on pest & disease control on Banana.	Other crop.
	24. Video films on Simple heap method of compost making and Razing of Cocoyam nursery.	Extension
	25. Set of slides on rapid nursery bed soil making	Crop section
	26. Set of slides on treatment of pineapple suckers grading and transplanting.	Crop section
1998	27. Hand out on Dioscorea cultivation including nursery management and diseases	Crop section
	28. Hand out on Dioscorea cultivation in Gampaha district	Crop section
	29. Hand out on Banana cultivation including cultivation calendar in wet zone.	Crop section
	30. Hand out on guideline on fostering of production groups.	Crop section
	31. Reference paper for the workshop to make out guideline on fostering production group in the AEIP	Extension
	32. Hand out on moisture behavioral pattern	Water mgt.
	33. Video films on introduction of AEIP in English and Sinhala edition.	Extension
	34. Cropping calendar for Banana cultivation	Extension & Crop

Annex13 List of training course and participants

Training at Project site

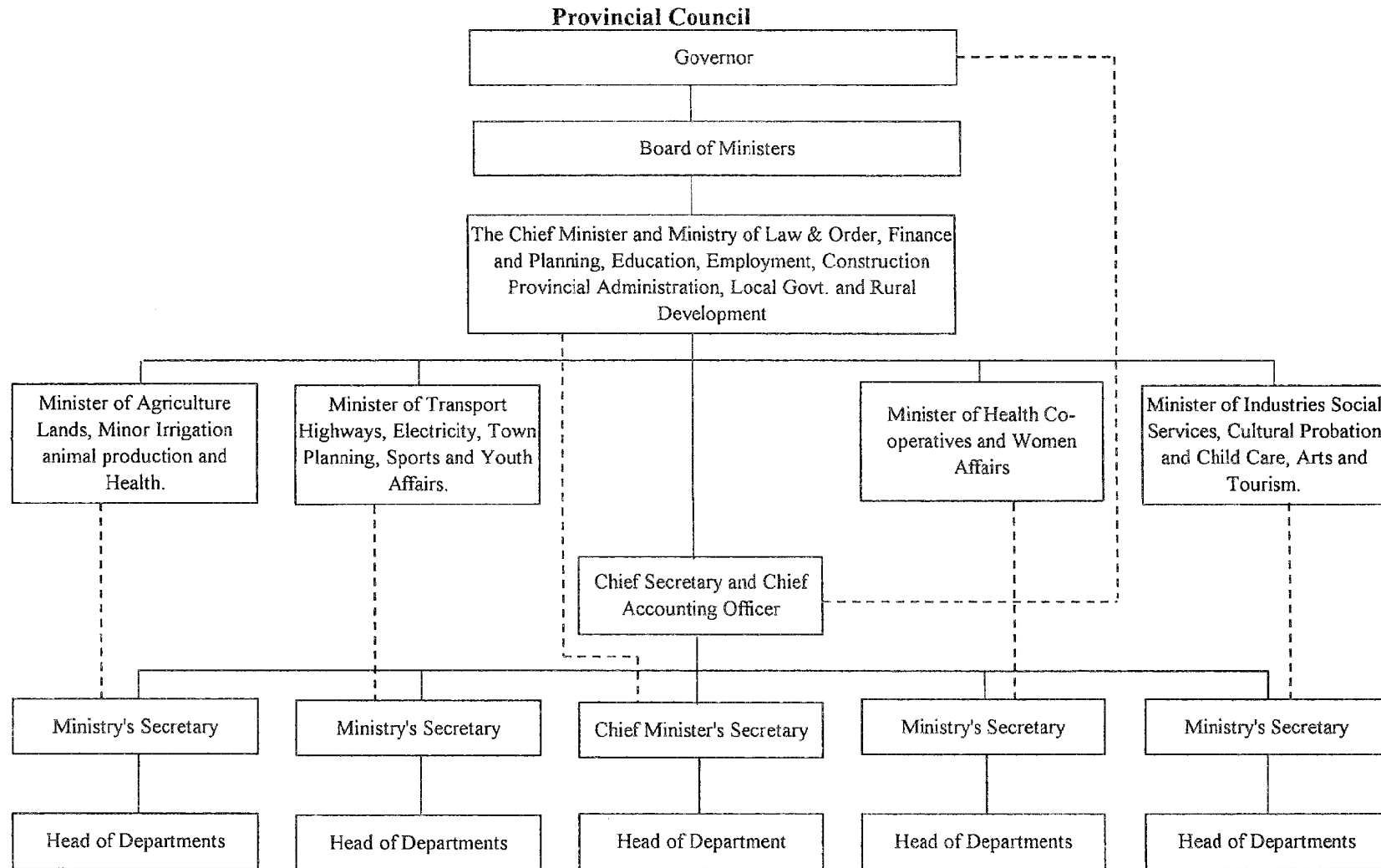
Date	Contents	Participants
June, '95	Seminar on the socio-economic condition on the model groups and development of "Sanchi" in Gampaha by Mr. Tokuda(short term expert)	A.I
June, '95	Seminar on present marketing practice of Gampaha farmer and future prospects by Mr. Tani (Short term expert)	A.I
June '95	Seminar on training system at AEIP by Mr. Hiratsuka (")	A.I
Mar. '96	Seminar on training plan making by Mr. Haga (")	A.I
April '96	Vegetable cultivation, other crops cultivation and water management	A.I
May '96	Vegetable cultivation, other crops cultivation and water management	A.I
July '96	Vegetable cultivation, other crops cultivation and water management	A.I
July '96	Seminar on market survey and crop selection by Mr. Nibe (long term exp.)	A.I & C/P
July '96	Seminar on extension methodology by Mr. Hanebuchi (long term expert)	A.I & C/P
Aug. '96	Vegetable cultivation, other crops cultivation and water management	A.I
Sept. '96	Vegetable cultivation, other crops cultivation and water management	A.I
Oct. '96	Vegetable cultivation, other crops cultivation and water management	A.I
Nov. '96	Practice of pH measurement	A.I
Nov. '96	Cocoyam cultivation and Camera control method	A.I
Dec. '96	Seminar on disease control by Mr. Kasai (Short term expert)	A.I
Jan. '97	Practice of Compost making	A.I
Feb. '97	farmer's day	A.I & farmer
Feb. '97	Cocoyam cultivation and plant protection on vegetable	A.I
Mar. '97	Ginger and yard long bean cultivation and nursery bed soil making	A.I
Apr. '97	Mixed crop of chili and cocoyam, sweet potato seedling production, corn cultivation	A.I A.I
May '97	Compost making, passion fruit cultivation, chili seedling production	A.I
May '97	Seminar on soil structure improvement by Mr. Ono (short term exp.)	A.I
June '97	Practice of Compost making, fertilizer application methods	A.I
July '97	Seminar on audio visual handling methods by Mr. Takashina(short term)	A.I
July '97	Seminar on project management by Mr. Takahashi (long term exp.)	A.I & C/P
Aug. '97	Pineapple sucker control, vegetable seeds seed production	A.I
Aug. '97	Seminar on vegetable production in coconut field by Mr.Nishino	A.I & C/P
Sep. '97	Role of group leader, fund book keeping, and nursery management.	A.I & farmer
Oct. '97	Visiting project site from Kurunegala Agricultural Instructor	A.I
Oct. '97	Banana cultivation and its extension.	A.I
Nov. '97	Passion fruit and betel leaf cultivation and its extension.	A.I
Dec. '97	Banana cultivation and its extension.	A.I & farmer
Jan. '98	Ginger and <i>Dioscoreaceae</i> crops cultivation and its extension.	A.I
Feb. '98	Chili cultivation and its extension.	A.I & farmer
Feb. '98	Cocoyam cultivation.	A.I
Mar. '98	Water pump control and maintenance.	Pump holder
June. '98	Work shop on guideline making for the fostering of production group.	A.I
July. '98	Agricultural products market, its capitals and subsidies.	A.I & farmer
July. '98	Work shop on guideline making for the fostering of production group.	A.I
Aug. '98	Work shop on guideline making for the fostering of production group.	A.I
Sep. '98	Seminar on cocoyam disease protection by Dr. Yoneyama (short term exp)	A.I
Nov. '98	Group fund book keeping method.	A.I
Nov. '98	Seminar on farm management by Mr. Takao(short term expert)	C/P, A.I.
Jan. '99	Group fund book keeping method.	A.I
Mar. '99	Group fund book keeping method.	A.I & farmer

Annex14 Organization Chart
Organization Chart of the Project



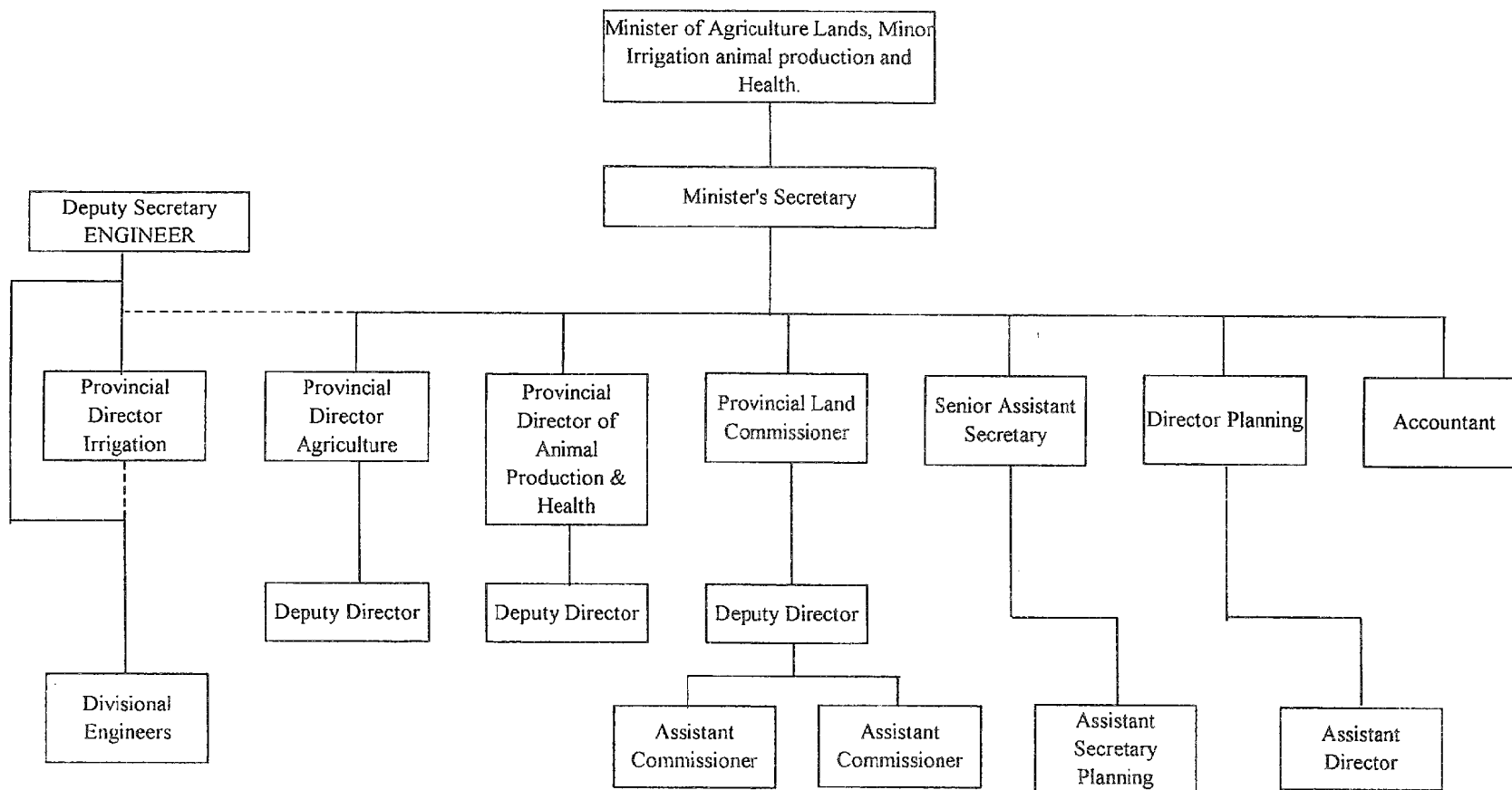
Organization Chart of Institutions Set Up of Western Province

Annex 14



**Organization Chart of The Ministry of Agriculture, Minor Irrigation & Lands,
Animal Production and Health
Western Provincial Council**

Annex 14



Provincial Department of Agriculture

Annex 14

