

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

**COAST REGIONAL COMMISSIONER'S OFFICE
THE UNITED REPUBLIC OF TANZANIA**

**THE STUDY ON
THE SMALL SCALE HORTICULTURAL
DEVELOPMENT PROJECT
FOR POVERTY ALLEVIATION TO FARMERS
IN
COAST REGION TANZANIA**

**VOLUME - I
MAIN REPORT**

NOVEMBER 2000

**TAIYO CONSULTANTS CO., LTD.
NIPPON GIKEN INC.**

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Appendices

- A I Scope of Work (S/W) and Minutes of Meeting on S/W
- A II Minutes of Meeting on the Inception Report
- A III Minutes of Meeting on the Progress Report I
- A IV Minutes of Meeting on the Interim Report
- A V Minutes of Meeting on the Progress Report II
- A VI Minutes of Meeting on the Draft Final Report

PREFACE

In response to the request from the Government of the United Republic of Tanzania, the Government of Japan decided to conduct The Study on Small Scale Horticultural Development Project for Poverty Alleviation for Farmers in Coast Region, Tanzania, and entrusted the study to Japan International Cooperation Agency (JICA).

JICA sent Tanzania a study team headed by Mr. Shiro Hirata, Taiyo Consultants Co., Ltd. three times from November 1999 to September 2000.

The team held discussions with the officials concerned of the Government of Tanzania, and conducted field surveys at the study area. After the team returned to Japan, further studies were made and the present report was prepared.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of Tanzania for their close cooperation extended to the team.

November 2000



Kunihiko Saito
President
Japan International Cooperation Agency

Mr. Kunihiko Saito
The President of
Japan International Cooperation Agency
Tokyo, Japan

November 2000

LETTER OF TRANSMITTAL

Dear Sir

We are pleased to submit to you herewith the report on The Study on Small Scale Horticultural Development Project for Poverty Alleviation for Farmers in Coast Region, Tanzania. This Report presents the results of all works performed in both Tanzania and Japan during a total period of 13 months from November 1999 to November 2000.

In line with the project objective, namely "Poverty Alleviation to Farmers by means of Horticultural Development" and its prerequisite, namely "Participatory Development", various projects in each sector are proposed broadly.

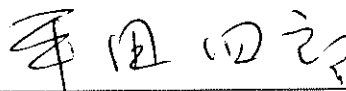
The Project is expected to contribute to the socio-economic development of the area by stabilizing and increasing agricultural production and improving living conditions of the inhabitants. By implementation of the Project, increase in farmer's income will be achieved and poverty alleviation will be promoted in the area by increased job opportunities.

It is worth to mention that all the local officials and farmers in the project area actively participate in the planning and formulation of the Project, assuring its sustainable operation and maintenance after its implementation. Hence, we wish to the Project to be implemented as early as possible.

We wish to express our deep appreciation and sincere gratitude to the officials concerned of your Agency, the Ministry of Foreign Affairs, the Ministry of Agriculture, Forestry and Fisheries of the Government of Japan for the courtesies and cooperation kindly extended to our team.

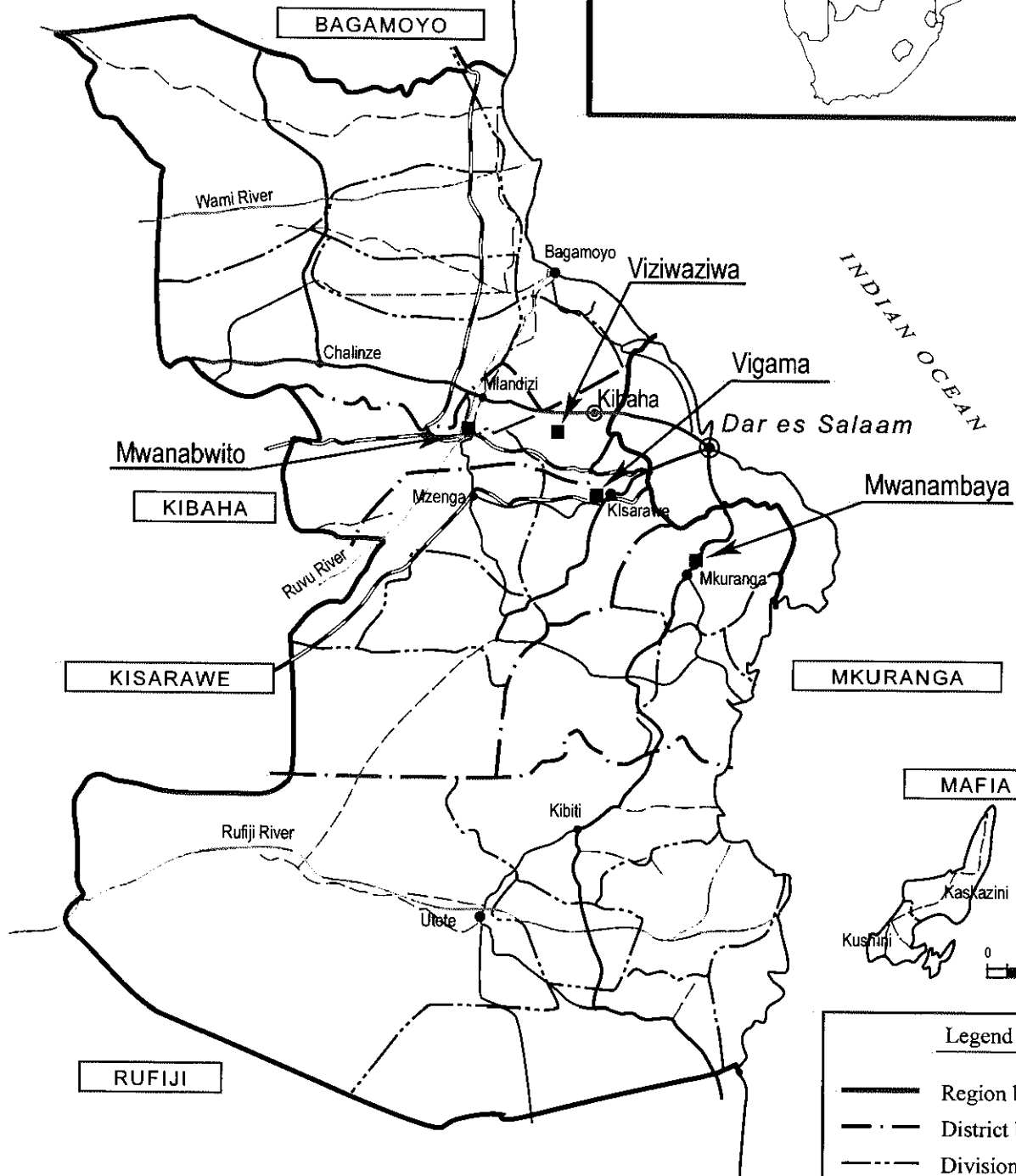
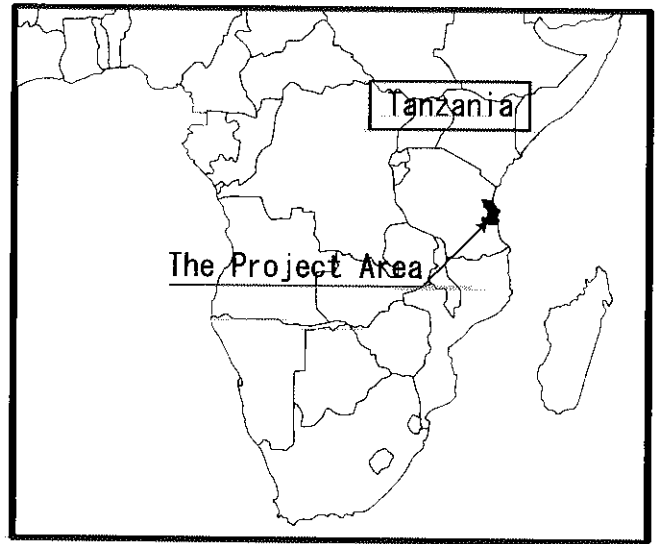
We also wish to express our hearty appreciation and gratitude to the officials concerned of Tanzania Office of your Agency, the Embassy of Japan in Tanzania, and the Authorities concerned of the Government of Tanzania such as the Coast Regional Office, the Ministry of Agriculture and Cooperative, the Ministry of Regional Administration and Local Government, the Morogoro Zonal Irrigation Office and the District Director's Offices concerned for close cooperation and assistance extended to our Team during field surveys and studies in Tanzania.

Very truly yours,



Shiro Hirata

The Leader of Study Team of Small Scale
Horticultural Development for Poverty
Alleviation to Farmers in Coast Region, Tanzania



Legend

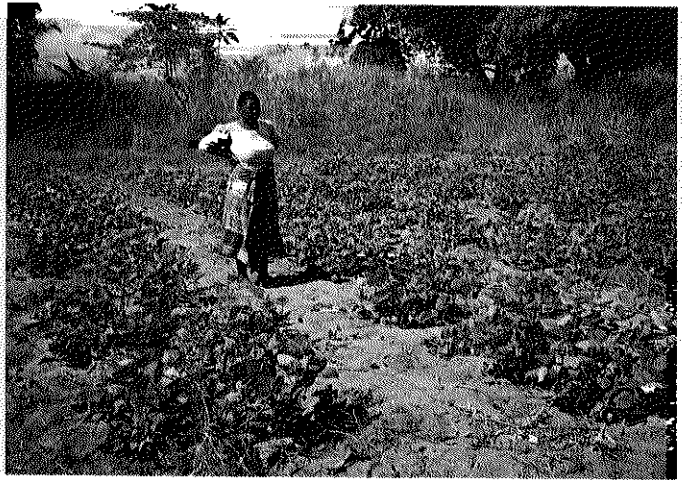
	Region border
	District border
	Division border
	Trunk road
	Rural road
	Railway
	Priority sites

Location Map of the Project Area

Coast Region



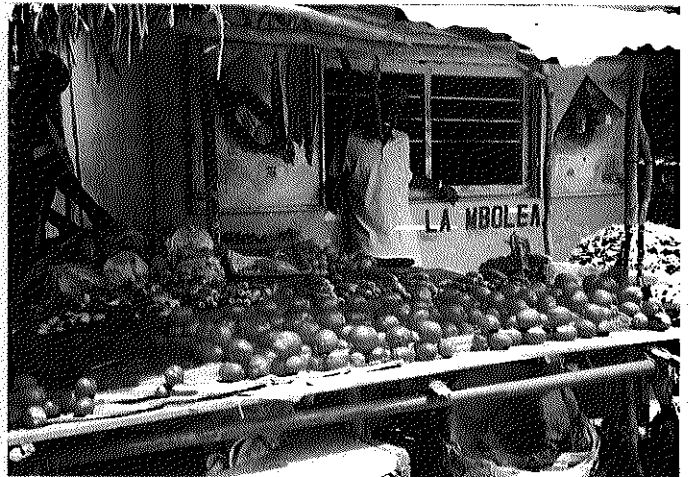
Tomato field



Cow pea field



Selection of cucumber



Market (Kibaha)

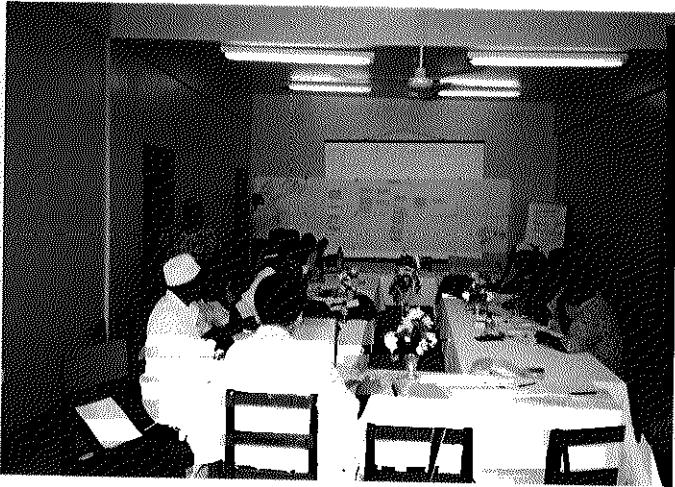


Cashew nut

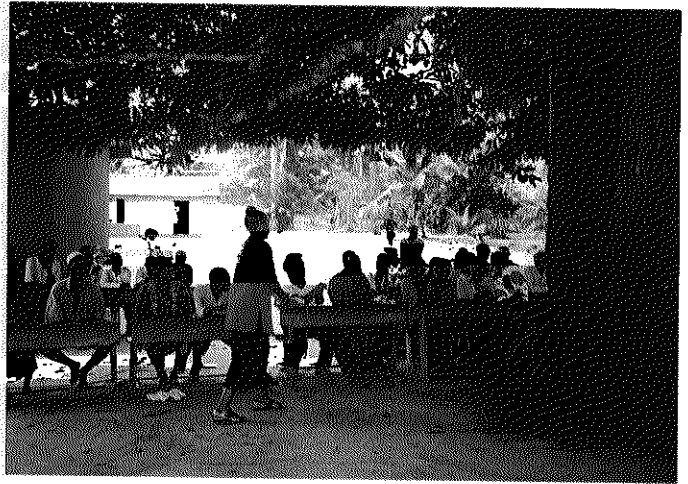


Seedling centre (Mkuranga)

Coast Region



PCM



PRA (Mwanabwito)



Group activity promoted by PRA (Vigama)



KISIMA (Shallow well)



Watering



Transport of crops

ABBREVIATION AND TERMINOLOGY

AfDB	African Development Bank
AfDF	African Development Fund
CBI	Community Based Initiatives
CBO	Community Based Organisation
CEC	Commission of the European Communities
CITES	Convention on International Trade for Endangered Species
CORECU	Coast Region Cooperative Union
CRCO	Coast Regional Commissioner's Office
DALDO	District Agriculture and Livestock Development Officer
DCC	Dar es Salaam City Commissioner
DCO	District Commissioner's Office
DDO	District Director's Office
DDS	Domestic Development Services
DEO	District Extension Officer
DO	District Officers
DSMS	District Subject Matter Specialist
DSO	Divisional Secretary's Office
EIA	Environmental Impact Assessment
ETo	Reference Evapotranspiration
GDP	Gross Domestic Product
ha	Hectare
HPI	Heifer Project International
IDA	International Development Agency
IEE	Initial Environmental Examination
IUCN	International Union for the Conservation of Nature
JICA	Japan International Cooperation Agency
LcD	Litres per Capita per Day
LS	Lump Sum
m ³ /s	Cubic Meters per Second
MAC	Ministry of Agriculture and Cooperatives
MM	Man Months
MRALG	Ministry of Regional Administration and Local Government
NAEP II	National Agricultural Extension Phase II
NALERP	National Agriculture and Livestock Extension and Rehabilitation Project
NEMC	National Environmental Management Council
NGO	Non Government Organisation
O&M	Operation and Maintenance
PBME	Project Benefit Monitoring and Evaluation
PCM	Project Cycle Management
PDM	Project Design Matrix
PDP	Partners in Development Programme
PRA	Participatory Rural Appraisal

RALDO	Regional Agriculture and Livestock Development Officer (currently changed into Agricultural Development Officer)
RAS	Regional Administrative Secretary
RCC	Regional Consultative Committee
RCO	Regional Commissioner's Office
RDC	Regional Development Committee
SACCOs	Savings and Credit Cooperative Societies
T&V	Training and Visit (System)
TTCL	Tanzania Telecommunications Limited
TSh.	Tanzanian Shilling
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
VEO	Village Extension Officer
VODP	Village Oriented Development Programme
WEO	Ward Extension Officer
WWF	World Wide Fund for Nature

Currency exchange rate: TSh.1 ¥ 0.1325 (May, 2000)

Summary

1. Project Background

Coast Region (hereinafter referred to as “the Region”) is poorer than the surrounding regions in spite of its favourable location near the trading city of Dar es Salaam. This is because it does not have any major manufacturing industries or highly profitable agriculture. Therefore, promotion of agriculture is the most important in the Region.

Owing to such circumstances, the Government of Tanzania requested the Government of Japan to formulate a development plan on horticultural development in the Region. In response to the request, the Government of Japan dispatched a preparatory study team through JICA and decided to conduct a study on Small Scale Horticultural Development Project for Poverty Alleviation to Farmers in Coast Region signing the Scope of Work.

2. Project Objectives

The main objective of the Project is poverty alleviation to farmers by means of horticultural development under the following framework:

As horticultural development brings the farmers quicker increase of incomes, the Project focuses on a small-scale horticultural development.

The Project should be as much economical as possible considering the budgetary situation of the Tanzanian Government and the capacity of the farmers.

Farmers and farmers’ groups have to be involved in the Project from planning to evaluation as beneficiaries and community participation is always prerequisite for projects sustainability.

3. Problems of the Study Area

Agricultural technique is basically low.

Investment in agriculture is low due to lack of capital.

Grouping of farmers is not progressed as it is expected.

Demand on horticultural produce is limited.

Extension and research institutions are weak.

Rural infrastructure has markedly underdeveloped.

Communication between local governments and rural communities is inadequate.

4. The Master Programme

(1) Character of the Master Programme

The Master Programme puts emphasis on community participation, as the basic concept of the Master Programme is to respect and largely rely on farmers’ self help effort. It is normal for a project to be based on community participation when an executing body of project has not enough capital. Taking community participation into account, the Master

Programme proposes certain development programmes through grasping and analysing constraints and problems on horticultural development in the study area and finding their solutions.

(2) Components of the Master Programme

Development of region specific farm management is focused on under the Master Programme, whereas strengthening farmers' capacity and improvement of the relationship between farmers and local governments are also emphasised in order to implement horticultural development effectively. Four programmes are formulated in the Master Programme as follows:

I. Community Based Horticultural Development Programme

This programme is to support targeted farmers both financially and technically. A development tool to be used on financial aspect is input credit under which farmers can obtain agricultural input such as seeds, fertiliser, pesticide, sprayer and so forth. On the other hand, methods and know-how of watering, pest control, soil management, quality control, and crop diversification are to be provided as tools in technical aspect.

II. Participatory Development Capacity Building Programme

For horticultural development in particular, improvement of farming technique only is not sufficient to achieve the goal envisaged. Farmers should be more trained and institutions concerned including farmers' organisation has to be strengthened. This programme, consisting of the following three parts, is planned to contribute to such training and strengthening.

Part 1 Training for District & Extension Officers

Part 2 Training for Group Leaders

Part 3 Community Awareness Creation

III. District Seedling Farm Programme

Certified seedling is produced and distributed under this programme in order to improve productivity and quality of produce. Introduction of new kinds of vegetable is examined as well. This programme supports Programme I regarding technique of vegetable farming.

IV. District and Feeder Roads Improvement Programme

Transport means is provided and improved. This programme is inevitable for promoting Programme I, II and III.

An implementation period of the Master Programme is planned five (5) years.

(3) Solution for the problems above

Agricultural technique is basically low.

Community Based Horticultural Development Programme contributes to strengthening agricultural technique. Farmers' ability of managing their own fields is improved through Participatory Development Capacity Building Programme and District Seedling Farm Programme.

Investment in agriculture is low due to lack of capital.

Input credit in Community Based Horticulture Development Programme solves the problem of capital deficit and contributes to sustainability of farmers' farming.

Grouping of farmers is not progressed as it is expected.

This is promoted mainly through Participatory Development Capacity Building Programme.

Demand on horticultural produce is limited.

Taking into account the limitation of the market demand, the Master Programme has been formed. The Programme I, II and III is planned to achieve quality improvement of produce.

Extension and research institutions are weak.

Participatory Development Capacity Building Programme and District Seedling Farm Programme offer several tools for enhancing ability of these institutions. Meanwhile, building close relationship between these institutions and Sokoine University is promoted.

Rural infrastructure has markedly underdeveloped.

Rural Transport Improvement Programme is planned to ease the present conditions of rural transport.

Communication between local government and rural community is not enough.

For all programmes above, good communication between them is prerequisite. Solving this problem shall be given the high priority. Participatory Development Capacity Building Programme aims chiefly at improving the communication in this connection.

5. Selection of Priority Sites

In order to enhance horticultural development, some demands have to be met in several relevant aspects, which include adequate road network for transport, available water for

irrigation and so forth. With the aim of identifying more significant factors of development potential in horticulture, correlation analysis was conducted between actual horticultural data and different independent variables.

According to the potentiality of horticultural development in the Divisions, high potential Divisions (Target Divisions) were picked up as shown in the following table. The priority sites were selected among villages investigated in the farm interview survey carried out during Phase I field survey taking into consideration characteristics found from the Study.

Priority Sites for Horticultural Development

Horticultural Zone	High Potential Divisions (Target Divisions)	Priority Sites
High Input Vegetable	Kibaha	Viziwaziwa
Low Input Vegetable	Ruvu, Mzenga	Mwanabwito
Fruits with Vegetable	Sungubweni, Mkuranga, Sungwi	Vigama, Mwanambaya

6. Action Plans for the Priority Sites

Several tools for horticultural development have been proposed in the Master Programme. These tools are available to farmers in a community according to their needs. The Action Plan for each priority site has been formed in order to meet needs of each site, which consists of a set of required tools identified in the Master Programme. These Action Plans for the four priority sites are the model cases for the small-scale horticultural development. Therefore, other areas are supposed to form their own action plan and to implement it by referring to the model plans.

Each Action Plan is divided into two parts; agricultural development and social infrastructure improvement, and the agricultural development is further divided into two parts; vegetable development, fruit development.

The vegetable development consists of yield improvement, quality improvement, crop diversification, strengthening on watering practice, proper use of agro-chemicals, strengthening on marketing and so forth. The fruit development includes introduction of advanced seedlings, proper orchard management and strengthening on marketing. The improvement of rural transport means is included in social infrastructure improvement.

7. Benefits and Project Impact

It is expected that the Project will generate indirect benefits and socio-economic impacts, in addition to direct improvement effects such as increase of income, better supporting services, improved transport and others, though not fully quantified at this stage. Some of effect often ignored in ordinary project evaluation are briefly explained below:

- (1) Improvement of Farmers' Farming Technique
- (2) Farmers' Self-reliance

(3) Village Invigoration

8. Recommendations

The manpower and financial supports by the Districts are inevitable to implement the Project effectively and efficiently. Adequate allocation of manpower and budget is highly recommended even though taking into consideration the present budgetary conditions of the Districts.

Collection of basic data by the Tanzanian Government itself is recommended as such data are inevitable not only for this Project but also for various studies and their evaluations that may follow.

The Verification Study is believed highly required and the results of the Verification Study have to be reflected to the whole of project planning and execution. On the job training is to be carried out through the verification studies, and the counter parts are provided with the excellent opportunity for the technical transfer. It is recommended that the verification studies will be fully utilised for technical transfer.

Improvement of district and feeder roads is very important for rural development. However, implementation of road rehabilitation is beyond this Project, and a new project for the rehabilitation, consequently, is recommended to be drawn up separately in accordance with the results of the Study.

9. The Verification Study

The Master Programme proposes new development ideas such as input credit, introduction of new produce and formation of groups under the Project. It is important for policy makers and donors to examine and confirm their technical and financial viability and sustainability before final decision-making especially for new development ideas that may include some unforeseeable factors.

Under such circumstances, it is recommended to carry out a sort of verification study. The Verification Study is expected to prove the viability of individual project components and reveal unforeseeable constraints, if any, for finalisation of the Master Programme and the Action Plans for the priority sites, providing in-depth study results. The study team proposes the following eight (8) study items as major key components of the Verification Study and urges necessity of administrative and financial arrangement for their implementation.

Community Based Horticultural Development Programme

- 1) Input Credit
- 2) Improvement of water facilities
- 3) Application of bund water harvesting for agriculture

Participatory Development Capacity Building Programme

- 4) Collection of basic village data
- 5) Training for PCM moderator & PRA facilitator
- 6) Promotion of group activities by means of community facilities

District Seedling Farm Programme

- 7) Seedling production and distribution
- 8) Farmers' training