

# Sustainable Crop Production



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<b>Programme</b>	<i>Annual International Training Course, Thai - Colombo Plan Secretariat Trilateral Cooperation Programme</i>
<b>Course Title</b>	<i>Sustainable Crop Production</i>
<b>Duration</b>	<i>April 30 - June 9, 2007 *</i>
<b>Closing Date for Application</b>	<i>January 31, 2007</i>
<b>Number of Participants</b>	<i>22</i>
<b>Invited Countries</b>	<i>Afghanistan, Bangladesh, Botswana, Cambodia, Colombo Plan Developing Member Countries, Cote d'Ivoire, China, Ethiopia, Fiji, Gambia, Jordan, Kenya, Madagascar, Mauritius, Oman, Palau, Senegal, Timor Leste, and Thailand *</i>

*\* Subject to change by further notifications*

## **Objectives**

**The programme is designed to:**

- provide participants with basic knowledge on comparative analysis of crop production in each environment;
- train participants in agro-ecosystem analysis and crop production under marketing and health approaches;
- provide participants with practical experience both in field crop and horticultural crop production through a series of field trips and practical exercises.

## **Qualifications**

**Participants for this course should:**

- be nominated by their respective government;
- be university graduate or have an equivalent academic background in agriculture (plant science, agronomy, horticulture or related fields);
- be under forty-five (45) years of age;
- have a sufficient command of spoken and written English;
- be in good health, both physically and mentally. Pregnancy is regarded as a disqualifying condition for participation in the course.

## **Course Content**

**The main components of the programme are:**

### **I. FORMAL LECTURES**

*Module I - Introduction to the Sustainable Crop Production*

- 1.1 Overview of the sustainable crop production issues

*Module II - Systems Approaches to Agriculture and Using Internet as a Tool to Find Relevant Information*

- 2.1 Systems approaches to agriculture
- 2.2 Using internet as a tool to find relevant information

*Module III - Agricultural Systems for Consumer Preferences*

- 3.1 Food supply chain
- 3.2 Market driven economy of agriculture
- 3.3 Traditional agricultural system
- 3.4 Contract farming: a tool for managing consumer oriented agriculture



*Module IV - Agricultural Systems in Sufficient Economy and Low Input Agriculture*

- 4.1 Water and land management
- 4.2 Soil and nutrient management
- 4.3 Plant pest management

*Module V - Sustainable Crop Production under Unfavorable Environment*

- 5.1 Sustainable crop production under unfavorable environment
- 5.2 Factors limiting crop production in the farming system
- 5.3 Tools and methods.
- 5.4 Integrated management for sustainable crop production

*Module VI - Controlled Environment Agriculture*

- 6.1 Overview of controlled environment agriculture (CEA)
- 6.2 Factors affecting production in CEA

*Module VII - Industrial Agriculture: Case Study in Sugarcane*

- 7.1 Production system
- 7.2 Sugarcane stem borers and control strategies
- 7.3 Sugarcane white leaf disease and control strategies
- 7.4 Challenges for the sugar industries

*Module VIII - Export Oriented Agriculture: Fresh Products and Seeds*

- 8.1 Fresh products:
  - Vegetables
  - Floriculture and ornamental crops
  - Fruit crops
- 8.2 Seeds:
  - Seed production
  - Seed quality testing

*Module IX - Discussion and Evaluation*

## **II. PRACTICAL EXERCISES**

- Case study on agro-ecosystem analysis
- Rapid Rural Appraisal (RRA) techniques
- Research methodology and field plot techniques
- Practical work on seed production and hybrid seed production
- Practical work on crop breeding procedures, data records and analysis

## **III. FIELD TRIPS**

- Observation trips to the royal development projects, governmental agencies and private companies involved in crop production and seed production
- Fieldwork for agricultural systems, seed and hybrid seed practical, industrial and renewable crops



#### **IV. PRE-COURSE ASSIGNMENT**

##### **Country Report**

Each participant is required to prepare and submit a country report on Crop Production for Sustainable Agriculture in his/her country. The full report including abstract should be approximately 10 pages long, neatly typed and double-spaced and should be submitted to the Office of International Agriculture (see detail at contact address). This assignment should be received at least one week before the commencement of the programme. A suggested format for the report is as follows:

- Introduction
- Present situation of economic crops in participants' country including planted area, production, yield, value and market
- Production constraints and challenges confronted by your country in promoting sustainable crop production
- Crop improvement programme (1 crop for 1 participant)
- Suggestion in your own views on workable strategies to address the challenges and issues on sustainable crop production



##### **The course will be conducted by:**

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